

STUDIES IN POVERTY AND HEALTH
DURING THE NINETEENTH CENTURY IN BRITAIN AND EGYPT

by

Kamal El Din Shawky, D.P.H.

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V O L U M E I

<u>Chapter</u>	<u>Page</u>
I THE EARLY EVOLUTION OF THE IDEA RELATING POVERTY AND HEALTH: WILLIAM PULTENEY ALISON	1
The Two Schools	2
Analysis of the Trends of Thought of the Time	46
The New Language	61
The Anti Poverty Movement	79
The Influence of Alison	102
Factors that Inspired and Influenced Alison:	
The Background and Environment	145
Other Influences On Alison	208
II THE IRISH FAMINE - A GREAT TEACHER	227
The Background of the Famine	228
The Story of the Famine: Poverty and Disease	252
The Famine Lessons Reflected in the Irish Medical Thought	292
The Influence of the Famine Lessons on Legislation....	322
The Change in Trends Later in the Century and its Relation to the Irish Famine:	
The Cotton Famine	352

III STATE PUBLIC HEALTH RESEARCH - IN POVERTY,

SIR JOHN SIMON 384

 Some Sidelights on Simon 432

 Factors that Inspired and Influenced Simon 459

BIBLIOGRAPHY OF VOLUME I 471

V O L U M E II

I "POVERTY AND HEALTH" IN EGYPT

STUDIES DURING THE RULE OF

MOHAMMED ALY, 1805-1848 487

 The Holocaust During the Digging of

 Mahmoudiah Canal 488

 Poverty and Disease:

 Portrayals by European Writers 512

 Comparative Study with Britain 551

II THE LAND OF POVERTY AND DISEASE UNDER

THE NEW MASTERS, ABBAS, SAID and ISMAIL,

1848 - 1879 574

 The 1878 Famine 575

 The Condition of the People under the Khedives... 589

 Repercussions of "the Condition of the People"

 on Health 605

BIBLIOGRAPHY OF VOLUME II 640

<u>Table</u>	<u>Page</u>
I	Result of an Investigation into the Degree of Unemployment in a Sample Area in Edinburgh in 1840 171
II	Proportion of the Population of Edinburgh, Glasgow, and Dundee Attacked in the Epidemic of 1835-39 183
III	Number of Fever cases Treated at Public Expense in Edinburgh and Glasgow in the Epidemics of (1817-19), (1826-28) and (1836-39) 184
IV	Proportion of the Population of Edinburgh and Glasgow attacked in the 1843 Epidemic 193
V	Number of Cases and Rates of Mortality in the 1847-48 Epidemic in Edinburgh and Glasgow 197
VI	Deaths from All Causes in Scottish Towns in the Years 1846, 1847, 1848 and 1849 199
VII	Trend of Death Rate per 1,000, Edinburgh, 1780-1849 202
VIII	Trend of Death Rate per 1,000, Glasgow, 1781-1849 203
IX	Annual Death Rate per 1,000, Glasgow, Before, During and After Years of Economic Distress 206
X	The Numbers and Percentages of Families Belonging to Different Classes both in Ireland as a Whole and in the Rural Districts alone, 1841 Census 247

XI	Registered Deaths from Starvation in Ireland, 1844 - 1850	253
XII	Deaths from All Causes and from Fever and Dysentery, and the Average Price of Potatoes and Oatmeal in Ireland, 1844 - 1850	276
XIII	Number of Patients Admitted Monthly in Temporary Fever Hospitals, from July, 1847 to August, 1850	278
XIV	Deaths among British Emigrants to Canada in 1847	282
XV	Mortality Rates per 1,000 in Union Workhouses, Ireland, in April - June, 1847	287
XVI	Numbers of Patients Admitted into the Temporary Fever Hospitals and the Average Price of Potatoes during the Years 1845 - 1850	308
XVII	Yearly Number of Deaths from Fever in Liverpool, 1847 - 1866	380
XVIII	Deaths from Typhus in Liverpool in the Whole Community and in the Weekly-Wages Class, 1862 - 1866	381
XIX	Male and Female Pulmonary Death Rates in Colliery Districts, with the Population Density, and the Proportion of Paupers and of Men Engaged in Agriculture and Coal Mining	394

XX	Deaths in the Provinces of Girgeh,	
	Kenneh and Esneh, 1877 & 1878	585
XXI	Birth Rates and Infant and Child Mortality	
	Rates in the Towns of Egypt, 1886-1890	612

INTRODUCTION

This thesis is an attempt to study the evolution of the idea relating poverty and disease during the 19th Century. The interest in the welfare of the people, and the improvement in public health owe much to the recognition of the injurious effects of want on the health of the nation. That is why I was interested in following the growth of understanding on this subject. The study of the evolution of this idea naturally involved an investigation into the health and social conditions which had inspired it, and allowed society to conceive it. It also entailed a study of the prevalent economic and political trends of thought, and how they had influenced the reaction and the response to this idea. Further, it was requisite to ascertain how far the growth of understanding of the dangers of destitution on the public health had helped in the gradual change in the outlook and attitude towards the problem of poverty.

The study of the evolution of this idea in the first half of the Century impressed me strongly that it owed its early development to the Scottish medical school. This line of thought seemed to be a character that distinguished this school since the first decades of the Century.

Professor William Pulteney Alison was the one that exhibited that trend of the Scottish School most markedly. Alison might not have been the first to suggest the idea relating poverty and disease but he was the pioneer who long tried to impress society with its implications in the social and political fields, and who endeavoured to stress how it implied a change in the

social policy of the State. In studying the work of Alison in this respect, it was necessary to analyse first the general attitude of the whole culture of the time to poverty, and the influences that had determined that attitude. I then tried to give an account of the movement instigated and created by Alison in Scotland for raising the standard of living of the poor, the movement whose strongest argument for the prevention of poverty was the health of the community. The next step was to find out whether the early development of public health and social legislation in Britain had been affected by this movement. This naturally involved a study of the early public health movement in England, its response to Alison's views, and its different lines of thought. Further, I was interested in ascertaining the influence of Alison's teachings on medical thought, and how far it had succeeded in the creation of a public opinion on that subject. The next question was the factors that had influenced Alison, inspired him, and directed his thought. It seemed to me that the greatest influence that inspired him was the conditions of poverty and disease in the Scottish towns at that time; and therefore it was necessary to make a study of these conditions.

The work which had been begun by Alison was carried on by another teacher. This was not a scientist this time, but was a great social cataclysm: the Irish Famine (1846-47). I tried to show that this Famine had been responsible for a further growth of understanding of the connection between poverty and disease, and had markedly influenced the cultural and political

attitudes towards these problems. In studying this Famine, it was necessary first to understand the state of Ireland in the preceding years, and inquire into the socio-economic conditions which had precipitated this great disaster. The next step was to tell the story of poverty and disease during the Famine years. Further I attempted to show how the Famine lesson was reflected in Irish medical thought and how the Irish doctors became peculiarly impressed with the relationship between the poverty of the people and their health. The next question was to ascertain the influence of the Famine lesson on politics and thought, and how far the recognition of the hazards of want had helped in producing a change in the outlook and attitude towards poverty and the poor. It appeared to me that the impression the Irish Famine had on the whole generation was so deep that it had outlasted its time, and that the emphasis it made on the idea relating poverty and disease was long remembered. This was ascertained by tracing the general trend of thought on similar occasions in the following decades, especially during the Cotton Famine.

The next part of the study was directed towards tracing the further evolution of the idea relating poverty and disease in the second half of the Century. The credit for this phase of development should go to Sir John Simon and the young public health administrative body in England. When this department began to carry out research into the different public health problems, it was soon found out that poverty was the greatest of these problems, and inquiries were made into the different ways in

which poverty affected the public health. I tried to follow these researches and to record any new developments or new ideas on the subject. Moreover, I attempted to ascertain whether this growth of understanding in this respect had been reflected to any degree in the economic and political trends or in the policy of the State. I was naturally led in this part of my work to try to study Sir John Simon and the different factors that had influenced him.

The second volume of the thesis dealt with Egypt. Egypt during the 19th Century was an impressive example of the connection between privation and disease. I made a study of two instances, which were chosen to illustrate the conditions of extreme poverty in Egypt at that time, and their disastrous effects on health. The first was the digging of the Mahmoudiah Canal in (1819-1820), and the second was a famine in Upper Egypt in 1878. It appeared to me, from the circumstances of these two instances and from the evidences of many witnesses, that the State, far from taking any step for the prevention, or the relief of poverty was in fact following a policy that could only lead to the impoverishment of the people, and the deterioration of public health. This suggested a comparative study between Britain and Egypt, and how in the former there had been a gradual realization of the evils of poverty including those endangering the public health, and a gradual appreciation of the necessity to relieve it, while in the latter, the idea had not at all occurred to the rulers. Naturally, one could not expect in a backward and an undeveloped country like Egypt, at that time, any appreciable

medical or social thought on the connection between poverty and disease. However, some of the European medical men who had visited Egypt at that time could not be but strongly impressed with this connection which had stared them in the face. The reports and writings of these medical men are the only available records of the health of the country at those times. They are the only corresponding substitutes in Egypt for the comprehensive detailed reports and works on public health in Britain during the same era. However, although they lacked detail, yet they could convey a picture of the poor diseased generation that lived in Egypt during the last Century, and could give a vivid illustration of the relationship between the health of the people and their material well-being.

CHAPTER I

THE EARLY EVOLUTION OF THE IDEA RELATING

POVERTY AND HEALTH

WILLIAM PULTENEY ALISON

THE TWO SCHOOLS

In the foreword to the General Report on the Sanitary Condition of the Labouring Population of Great Britain, 1842, the Poor Law Commissioners enumerated the names of the contributors to the two local reports about England and Scotland. When referring to those of Scotland, they mentioned the names of all the contributors except one. That was not a name that could be forgotten or overlooked on account of its unimportance or insignificance, as it was the name of a distinguished professor in the University of Edinburgh. So it can only be supposed that the Commissioners or he, who was writing in their names, had specially intended to omit it. This name was that of Professor William Pulteney Alison.

I suppose the reason why the dominant figure in Somerset House omitted to mention Alison's report was that it did not conform to the pattern to which he required all the reports to conform. One can see from the way he framed the circular letters he directed to the Assistant Commissioners, to Boards of Guardians, to Medical Officers of Unions, to Provosts of Burghs in Scotland and to medical practitioners, what kind of answer he wanted to get. With his very suggestive questions he showed that he was looking forward for answers to corroborate his views. His queries were full of leading questions impressing with and dictating the belief that fevers were caused by the effluvia emanating from putrescent animal and vegetable matter, and from filth and dirt. Taking that theory

for granted, he was asking in his letters for observations and evidences to illustrate it. That is why he did not naturally welcome Alison's report, which instead of furnishing him with more data about the drain's and sewer's responsibility for disease, spoke in another language which Chadwick was not predisposed to like. Instead of joining the drains campaign, Alison declared that it was "poverty" and not the effluvia of putrescent matter which was mainly responsible for the spread of contagious fever. ⁽¹⁾ He subtly criticised that the Poor Law queries had been "framed very much in accordance with" ⁽²⁾ the "malaria" theory and had been based on the belief that by removing causes of vitiation of the atmosphere, fever would be prevented. He describes this view as erroneous and declares that "the destitution and irregular mode of life, connected with the destitution, of many of the lower ranks in this (Edinburgh) as in others of the great towns in Scotland, are the chief cause of the frequent diffusion of epidemic fever in them, and that this is not merely owing to the filth which is always found in connexion with such a mode of life". ⁽³⁾

Alison further foresees the danger of the one-sidedness of the Poor Law Commissioners and other advocates of the sanitary idea and cautions from it saying,

(1) N.B., The terms "contagious fevers", "continued fevers" or "epidemic fevers" were then used to describe mainly what we recognise now as Typhus fever and Relapsing fever; and it is in this sense that these terms are going to be used in this thesis.

(2) Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament, July, 1842, p.25.

(3) Ibid., p.13.

"those who believe continued and contagious fever to proceed originally from a malaria, formed in the way above stated, will naturally think that they do enough for its ultimate prevention in any community, if they carefully remove all such causes of its supposed production; and may therefore suppose that nothing is incumbent on them in regard to the condition or mode of life of the inhabitants of towns infested with such fevers, excepting only to remove from them by all means in their power putrescent animal and vegetable matters; in which case, I am confident that experience teaches that their labours will be in vain; as long as the condition and habits of the poorest of the people, and their resources when reduced by any cause to destitution, in this city and in the other parts of Scotland, continue as at present".

"I consider, therefore, that I shall not at all transgress the limits of the inquiry which the Poor Law Commissioners have set on foot in stating the grounds of my belief, first, that the contagious fever of Edinburgh does not originate in a malaria generated in the manner above stated; and secondly, that there is a much better prospect of preventing the introduction, and checking the diffusion of a disease, to which a large portion of the lower orders in Edinburgh are particularly liable, by other means of improving their condition, and particularly by a more liberal and better-managed provision against the destitution of the unemployed, or partially or wholly disabled poor, than by any measure directed merely to the

(1)
removal of those nuisances".

The subsequent history of Public Health during the 19th Century shows that Alison was justified in his cautions and his fears from the obsession of the Sanitary school with the idea that disease originated from insanitary conditions alone. Public health workers during the greatest part of the Century thought they would do enough for preventing disease if they could remove all nuisances, and that is what Alison predicted would result from their erroneous beliefs on the origin of disease. He cautioned that their labours would be in vain unless they would raise the material standard of the poor at the same time; but the public health workers needed the hard experience of a whole century in order to be able to appreciate the great value of his warning. Those who had influenced greatly the development of public health during this period were such fanatic advocates of the "Sanitary Idea" that they had lost sight, or did not try to recognise the prime importance of poverty in the causation of disease. Or may be the time was not suitable and the society pattern was not favourable to the adoption of such ideas! May be it was the political and social trends of the time which unconsciously determined the kind of theory to be adopted even in such a purely medical subject. But whatever the reason might have been, it is a fact that the theory of "effluvia" dominated medical thought in England at

(1) Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament, July, 1842, p.13.

that time. And as typhus and relapsing fever epidemics were among the very first problems that Public Health in its early beginnings had to meet, and therefore it naturally developed in accordance with this theory. It was the theory that dominated the early legislation of Public Health in England, and dictated the pattern of its evolution.

The Scottish school of medical thought seems to me, at this period and even for a long time before, to have a prevalent different trend of thought in the etiology of epidemic fever. The Scottish medical schools seem, since the first decades of the century, to have abandoned this theory of malaria and to have recognised the phenomenon of contagion. Thus, Alison, as early as 1821, in his lectures on Medical Police in the University of Edinburgh, discusses the subject of the origin of continued fever and gives his many reasons "for thinking that continued fever is never generated either by the two circumstances of vitiated and impure air which have been mentioned";⁽¹⁾ i.e., the contamination in consequence of the putrefaction of animal and vegetable substances, - and contamination in consequence of a condensation and accumulation of the effluvia arising from the healthy human body.

He states that "the circumstances of contamination already described have never been shown to generate contagious fever, and that they are so common, so abundant, that if such fever

(1) Alison, W.P., Lectures at Edinburgh on Medical Police and Jurisprudence. M.S. lectures, 1821, Roy. Soc. Med. Library. Vol. I, p.276.

could be generated by them, it is hardly possible that we should not have decided proof that this is the case long ago". (1)

That was what the Edinburgh University was teaching as early as 1821. In fact, in his answer to the "Sanitary school", Alison just repeated almost the same evidences and quoted the same references which we find in his lectures in 1821. That was not the opinion of Alison alone. The Scottish medical literature shows that this had been a prevalent trend for a long time.

In his answer to the Poor Law Commissioners, Alison says that he was confident he was expressing the opinion of a great majority of the medical men in Scotland, in considering the "effluvia" theory erroneous. I can give many quotations from Scotland to prove that he was entitled to say so.

For example Dr. Perry of Glasgow says to the Commissioners for Inquiry into the Scottish Poor Laws "I have read with some attention the report on the sanitary condition of the poor by Mr. Chadwick. It is founded altogether upon error. Much is attributed to want of cleanliness, want of sewerage, effluvia of stagnant marshes, and similar causes, which I believe have no influence whatever on contagious disease." (2)

Again, even in the reports published by Chadwick about Scotland, we encounter this trend of thought exhibited by many Scottish writers. Thus in Dr. Sym's Report on Ayr, we

(1) Alison, W.P., Lectures at Edinburgh on Medical Police and Jurisprudence. M.S. lectures, 1821, Roy. Soc. Med. Library. Vol. I, p.276.

(2) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844. Appendix, Pt. I, B.P.P.1844 (563) XX, p.429.

read, "I cannot from the investigation I have made into the localities and progression of fever, connect its ravages with the nuisances which are exterior to the houses of the poor. It seems to be the offspring of their poverty itself, which renders their constitution susceptible of attacks, especially when exposed to contagion". (1)

"Whilst therefore the malaria of animal and vegetable matters in a state of corruption is unquestionably detrimental to general health, I consider its influence in predisposing the system to fever is utterly insignificant in comparison with the effects of protracted semi-starvation and the other evils which have poverty for their immediate source". (2)

"In fact, poverty, when it attains to a certain pitch, seems to me to reduce all other predisposing causes of disease to insignificance in comparison with its direful influence". (3)

Again in the same report about the sanitary condition of Scotland, another medical man, Alexander Miller, says in answer to a question, whether filth influences the state of health, "I agree with Dr. Alison and many other physicians in thinking that deficient nourishment, want of employment, and privations of all kinds, are much more powerful than any other cause external to the human body itself in diffusing it". (4)

Another example is the report about the city of Glasgow by Charles B. Baird, who agrees with Alison and quotes his opinions exclaiming "assuredly no man's opinion on such a

(1) (2) (3) & (4) Reports on the Sanitary Condition of the Labouring Population of Scotland, Presented to Parliament July, 1842, p.235; p.236; p.232; p.157.

(1)
point is entitled to more weight".

A further example is the report about Aberdeen, which is really interesting. The committee, which was appointed in this town to manage the inquiry and furnish this report, noticed that the forms of suggestive leading questions sent by the Commissioners, contained no reference to poverty as a cause of fever. Therefore they said "It appeared advisable to us ... not to adhere, in all points, to the form of questions transmitted by the Poor Law Commissioners of England (it being in many respects not applicable to this town)".

"The Queries of the Commissioners contain no reference to these causes of epidemic diseases (poverty and intemperance); but as several of the medical gentlemen seemed to place much stress on these, we add them to the other supposed causes of fever in the blank form we issued"; (2) and then they enumerated the names and the words of the many medical people who held that poverty was a predisposing cause to epidemic diseases.

However, in spite of the fact that this trend of thought which considers poverty a very important cause of disease was strongly represented in the local report on Scotland, yet this trend was not expressed in the General Report on the Sanitary Conditions of the Labouring Population of Great Britain, presented to Parliament. This latter report, as appears from the introduction, was supposed to be an analysis and a faithful

(1) & (2) Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament, July, 1842, p.173; pp.286 and 298.

precis of all the views. However, its writer, Chadwick, did not allow the concept of the relationship between poverty and disease to be fairly represented and expressed in the report. He totally ignored it, as if nobody had suggested it at all. In the table of contents at the beginning of the report, one finds all kinds of headings of supposed causes of contagious fever to which Chadwick had devoted some pages in his report ... except one, which he did not care to include; and that was "poverty". One finds among these headings, "The employer's influence on the health of work people by promoting respectability in dress" (1) .. "The employer's influence on the health of the work people by modes of payments which do not lead to temptations to intemperance" ... "Effects of noxious agencies in preventing frugality and promoting intemperance"! ... "Effects of the overcrowding of private dwellings on the morals of population, instances of, in ___" etc. One finds similar headings but will not encounter a heading showing that he had devoted any space to express the views of those who believed in the influence of poverty on health, although this view was strongly represented in the local reports by Alison and others. Chadwick did not think it worthwhile quoting any of Alison's ideas although he devoted many pages to discussions and quotations like the following ones:

(1) Under this heading, Chadwick quoted, approvingly, the following statement of an employer, "It is always, an indication of looseness of character and a low standard of moral conduct, to see a mechanic in dirt or in his working clothes on Sunday. Thirty years' experience leads me to draw a very unfavourable conclusion as to the future usefulness to me, and of success to himself, of any workman whom I see in dirt on Sunday; ... if I see any workman in a dirty condition and in his working clothes in the streets on Sunday, I do not, perhaps, speak to him then, but on the Monday", p.261.

Having been told that the houses of the working classes in Whitechapel contained no food or stored provisions, and were bare of everything, he comments saying,

"In answer to the inquiry how this was to be accounted for, inasmuch as with agricultural labourers who earned little more than half the sum, and paid nearly as much for their food, in visiting their cottages with their ministers, I had commonly observed some store of provisions; Mr. Liddle stated that in such places as those in his district, in such atmospheres, a store of provisions would not keep: everything decayed rapidly and the work people consequently lived from hand to mouth.

On inquiring as to this fact from a respectable butcher, accustomed to sell meat to persons living in such situations, he stated that "Meat sold on a Saturday night, in hot weather, to poor people, who have only one close room, in which they sleep, and live, and cook, will certainly turn before the Sunday morning; when if it were kept in the butcher's shop, or in a well-ventilated place, it would be in as good a condition on the Monday morning. There is a great deal of loss of meat in consequence of the want of ventilation and bad condition of the dwellings of the poor classes. The butter kept in such places sooner becomes rancid, and the bread dry and disagreeable". (1)

In other words, Chadwick is suggesting that the poor in Whitechapel, unlike the agricultural labourers, have no provisions at home because their huts are ill-ventilated!

(1) General Report on the Sanitary Condition of the Labouring Population of Great Britain. Presented to Parliament, July, 1842, p.130.

That is how far he can go in maintaining his view that nothing is needed to be done to the poor, more than preventing vitiation of air. All the misfortunes of the poor, even their shortage of food, must be due to lack of ventilation! It is not poverty which makes them short of food .. but it is the bad ventilation of their huts. And that is not the only social phenomenon he explains by ill-ventilation. Ill-ventilation causes everything, and explains everything! Thus it is also the cause, he suggests, of the addiction of workers in unventilated shops to drink. He explains that by assuming that ill-ventilation results in nervous exhaustion which leads eventually to intemperance. He devoted many pages to this subject of "the effect of bad ventilation on the moral habits" of the tailors, and he gave in evidence the details of the answers of some tailors. One can see from some of these academic learned answers that they were suggested to them by his views and ideas. Anyway they all tended to show that intemperance was due to ill-ventilation. The following is an example:

"Are gin and beer the only stimulants which you conceive are taken in consequence of the want of ventilation and the state of the place of work when crowded? — No, Snuff is very much taken as a stimulant".

"What would be the effect of an alteration of the place of work, a ventilation which would give them a better atmosphere? —

"It would, without doubt, have an immediately beneficial effect on the habits. It might not cure those who have got into the habit of drinking, but the men would certainly drink less, and

the younger ones would not be led into the habit so forcibly as they are".⁽¹⁾

Further, Chadwick begins to calculate with the tailor the hours of productive labour lost by the habit of drinking during work. From his calculation we understand that the average daily time of work was 12 hours! and Chadwick suggests that by improving ventilation and thus preventing drinking, the tailor could do another extra two hours, i.e., on the whole 14 hours daily! And, strangely enough, it did not occur to him that working daily for so long might have been as strong a cause of nervous exhaustion as ill-ventilation. He was quite disposed to regard ill-ventilation as an evil, but not too long hours of work. He could conceive that the society should do something about insanitary conditions, but he could not conceive anything to be done about long hours of work. Since he did not like to attribute the sufferings of the poor to poverty and to their unjust treatment, he attributed so many of their conditions to bad ventilation. His belief in this theory of vitiated air and ventilation, was so blind that it almost amounted to a fixed idea or obsession. In his inquiry, he made everything speak in its favour and for its support.

This belief in the effect of vitiated air also made him, in addition, devote a whole volume of the Report on the Sanitary Condition of the Labouring Population of Great Britain

(1) General Report on the Sanitary Condition of the Labouring Population of Great Britain. Presented to Parliament, July, 1842, pp. 100 - 101.

to the Practice of Interments in towns. Extending his theory about the origin of fever from the effluvia of putrefying matter, he supposed that the emanations from human dead bodies inside towns must be a great important cause of visitations of epidemics. That was what made the subject of interments assume such importance to him. He therefore carried out an inquiry to try to connect epidemic fevers with putrefying dead bodies. In this inquiry, as would be expected in any inquiry carried out by Chadwick, all the answers included in his report, were those which all unanimously agreed that the dead bodies were usually kept by the poor in the same room or the same bed for weeks, and that the poor ate and slept beside them all this time. Besides, all the witnesses, in the language of medical men, spoke about the fevers resulting from the emanations and effluvia from such dead bodies. I wonder what the answers of the inquiry would have been, if Chadwick believed in another theory about the origin of fever.

(1)

(1) M.D. We can have an idea about the suggestive way in which Chadwick used to carry out his inquiries from the narrative told by Dr. Daniel Noble of how he was approached by Chadwick in order to furnish one of the reports in the sanitary inquiry. Dr. Noble describes the long conversation between them and how Chadwick was enunciating his views regarding the origin of fever, and his earnestness and zeal in getting material from Dr. Noble to support his theory, although Dr. Noble is stating that the theory had not previously occurred to his mind.

[Noble, D., "On Certain Popular Falacies Concerning the Production of Epidemic Diseases", Transactions of the Manchester Statistical Society, 1859-60, pp. 8 - 10.]

I have tried to throw some light on Chadwick, and to show the obsession of the "Sanitary school" to their theory. My aim is to show the type of soil to which Alison's seeds were sown. I am concerned with exhibiting the way his ideas were received, and the reaction of those who determined the evolution of Public Health to these ideas. I must say they were prejudiced against his views, and that is why these had not influenced at all the lines of early development of public health. To illustrate this prejudice, I have shown that Chadwick, in the general report, although entrusted to analyse the different views "to exhibit the principal results of the inquiry" did not allow Alison's trend of thought to be fairly expressed and exhibited. I am, further, going to show that, not only did he ignore to include poverty as a cause of disease, but he also tried to ridicule and disprove this idea. Under the heading of "Irrelevancy of controversy on the generation of fever, in respect to practical means of prevention", he says without mentioning Alison, "The false opinions as to destitution being the general cause of fever, and as to its propagation, have had extensively the disastrous effect of preventing efforts being made for the removal of the circumstances which are proved to be followed by a diminution of pestilence". ⁽¹⁾ "The more closely the investigation as to the causes of epidemic disease is carried, the more have the grounds been narrowed on which any presumption can be raised that it is generally occasioned by

(1) General Report on the Sanitary Condition of the Labouring Population of Great Britain. Presented to Parliament, July, 1842, p. 149.

extreme indigence, or that it could be made generally to disappear simply by grants of money".

"In the great mass of cases in every part of the country, in the rural districts and in the places of commercial pressure, the attacks of disease are upon those in full employment; the attack of fever precedes the destitution, not the destitution the disease".⁽¹⁾

In evidence, he quoted from a "Treatise on the sources and propagation of continued fevers", by Dr. William Davidson of Glasgow. In order to prove that destitution is not responsible for fever he called to witness a table⁽²⁾ in this treatise about the physical stoutness or emaciation of decided cases of typhus in Glasgow fever hospital during the period of six months in 1839. Among 429 of these patients, there were only 10 who were described by Dr. Davidson as "emaciated" on their admission, while 101 were full or plethoric and 209 were moderate. Among the whole number only 17% were spare and unhealthy and almost all of them, according to Dr. Davidson, were engaged in their ordinary occupations at the time of their seizure.

Chadwick, further, to corroborate his claim that fever attacks mainly those in full employment as a result of bad ventilation in factories, refers to the answers of the medical officers in Poor Law Unions in England. He claims that the preponderant evidence by the great majority of these is of the tenor of a quoted evidence of one of them, the medical officer

(1) & (2) General Report on the Sanitary Condition of the Labouring Population of Great Britain. Presented to Parliament, July, 1842, p.144.

of Whitechapel. This evidence is summarised in that during the year 1838 there was an unusual rise in the number of fever cases in Spitalfields and Whitechapel, although he could not remember that there was a marked or an unusual distress during that period. On the other hand at the time of the inquiry there was a prevalent distress to the extent that half the looms were out of work. In spite of that the number of fever cases was below the average of 1838. ⁽¹⁾

The following is a part of the evidence:

Q. "Do you find that fever attacks in greatest number those who are out of work?"

A. On the contrary, the greatest number of the cases of fever we have are those who fall ill during the time they are in employment. I think they are more attacked, when in work, when the windows are closed, and there is no ventilation".

Q. "Do you find in the course of your experience that the diminution of food is followed by fever?"

A. Not as a general cause I should say In my experience, however, intemperance is a much more frequent antecedent to fever than destitution or want of food". ⁽²⁾

Chadwick, further, claims that those medical men who ascribe fever to destitution are led to that error by their misconceptions as the extent of destitution. They are deceived by the dirty appearance of working classes and the wretched

(1) N.B. However the Medical Officer states "there has been an increase of fever cases in the last month".

(2) General Report on the Sanitary Condition of the Labouring Population of Great Britain. Presented to Parliament, July, 1842, p.147.

conditions of their homes, and think these evidence of real destitution. While, he claims, these wretched conditions are only their own fault, and the result of their mismanagement and depravity. This error, he asserts, of "too hastily adopting as evidence of the fact of destitution such (deceiving) prima facie appearances", is an error, "which non-professional experience may correct"! (1)

He refers to corroborating remarks by Dr. Scott Alison and adds "In general, medical practitioners and benevolent individuals are extremely liable to deceive themselves and to deceive others, by what they call the evidence of their own eyes. The occurrence of severe destitution is denied as a general cause of fever, not as a consequence. The evidence shows that the best means of preventing the consequent destitution are those which prevent the attacks of fever and other epidemics upon all the classes of the community." (2)

Alison answered this last argument of Chadwick's in a foot note in one of his pamphlets saying, "I reply, *that* the question before us is not, What are the causes of destitution, but whether destitution is a cause of fever? Supposing all the destitution which the medical practitioners and benevolent individuals alluded to have seen, to have been the effect of misconduct, still, if they have seen fever spread with unusual rapidity in such families, they are entitled to infer,

(1) & (2) General Report on the Sanitary Condition of the Labouring Population of Great Britain. Presented to Parliament July, 1842, p.149.

that destitution (caused by misconduct) is a cause of fever; and if so, why not destitution caused by misfortune? - of the still more frequent existence of which with us, I have given, and shall give, more than sufficient evidence".⁽¹⁾

Again Alison answered Chadwick's other argument saying, "I am aware that Mr. Chadwick, in his valuable Report on the Official Inquiry into the sanitary condition of the labouring classes, lately published, gives a decided opinion, as the result of that inquiry, that 'attacks of fever are most frequent in full employment and ordinary health'. We might object to that statement, as a hasty inference from a limited induction (limited both as to time and place) and as opposed to the conclusion drawn from a much more extensive experience, by many physicians of various countries".⁽²⁾

It was not only Chadwick that expressed himself against the idea that poverty is the source of disease but other advocates of the "Sanitary Idea" also did. Thus Dr. Neil Arnott opposes strongly the concept of the relationship between poverty and disease, in an answer which is published directly after Alison's report in the volume about the sanitary conditions in Scotland. Again in 1844, in his interview by the Health of Towns Commission, he adopts the same line of argument begun by Chadwick in his general report, i.e., he tries to prove that it is full employment which leads to fever epidemics while distress is accompanied by good public health. He says "Dr. Alison about that time strongly expressed an opinion that we had attributed too much to

(1) & (2) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.3; p.2.

the emanations of decomposing animal and vegetable substances and too little to distress, as exciting causes of fever".⁽¹⁾ In reply *Arnott* repeats again the same evidences quoted by Chadwick in the general report, i.e., that of Dr. Davidson and that of the medical officer of Spitalfields and Whitechapel. He then gives a further similar evidence by the experience in Paisley. He states that in this town, in 1832, when there was an "almost entire cessation of work", the medical men were "surprised" by an extraordinary drop in the number of fever cases, but when the labour market was restored, a new epidemic broke out.⁽²⁾ He also gives in evidence the case of Liverpool and Manchester. He compares the deaths in these towns in 1833-43, and says that the death rate in Manchester had decreased in the year 1841 and further in 1843 although there was an increasing distress during these years; whilst in Liverpool, which he describes as "a commercial city where the labouring population had suffered little comparatively from distress", there was an increase in deaths during the respective years.⁽³⁾ Further Dr. Arnott mentions in evidence of his argument, that in the American towns, the average age of death is much worse than in England, although the population there, he claims, is "a population amongst whom distress can be scarcely said to exist in such forms as in the

(1) & (2) First Report of the Commissioners for Inquiry into the State of Large Towns and Populous Districts, 1844. B.P.P.1844 (572) XVII, Vol. I, pp.45-47

(3) This instance may be open to the objection that Liverpool had then special circumstances of poverty which might account for these figures; for example the immigrant Irish who were extremely poor and were not allowed Poor Law relief.

British towns". He, therefore, assumes that the health of the American towns is lower "because the sanitary condition of a (1) large proportion of many districts is even lower than in England!"

The impression one gets from reading Dr. Arnott's evidence, is that he is trying to prove that unemployment and distress are the secrets of good health. That is probably what the Health of Towns Commissioners had felt, and therefore they asked, "Does the remark upon the facts cited by the medical officer of Spitalfields appear to you just, when he says ... that distress in itself cannot be a cause of good health, but that some of the consequences, such as absence from the crowded and ill-ventilated work-rooms, or from ill-ventilated and ill-drained houses, and the inability to gratify hurtful and costly propensities, may, for a time, be more influential in preventing disease than the scanty supply of food and clothing in inducing it?" (2)

It is interesting to notice that this question to which Dr. Arnott answered affirmatively, would infer that they all agreed that "scanty supply of food and clothing 'was influential' in inducing fever". And this is exactly what Alison was advocating.

I would like to remark, that although Dr. Arnott in 1842 wrote a special reply to Dr. Alison's report, which was printed immediately after it in the local volume about Scotland,

(1) I wonder if he was justified at all in making such sweeping statements about the differences between America and England in the extent of poverty or in the sanitary condition.

(2) First Report of the Commissioners for Inquiry into the state of Large Towns and Populous Districts, 1844. B.P.P. 1844 (572) XVII, Vol. I, p.49.

yet in this reply he did not resort to the argument that "attacks of fever are most frequent on workmen in full employment". ... It is only after Chadwick later on had published such an argument in the General Report, that Dr. Arnott repeated and extended it. This shows that they formed a united front, and demonstrates Chadwick's forcible intellectual influence.

Alison's answer to Chadwick's argument as being a "hasty inference from a limited induction (limited both as to time and place)" hold good about Arnott's evidence too. This way of arguing by mentioning limited instances of a town or a district, where there was an epidemic of fever during periods of relative employment ... this way of arguing had unfortunately lingered for some time and was often resorted to whenever the question of the relationship between poverty and disease was discussed (for example during the Cotton Famine). I need not refer to modern knowledge to answer this argument as I can find an answer to it in the teachings of Alison about fever. He says "the relation which I maintain to exist between destitution and fever is not simply that of cause and effect, but that of predisposition, favouring the effect of another cause, which is essentially variable. Where destitution exists, it prepares victims for fever, but the fever 'bides its time'. It springs from a specific contagion, ... which rises and falls in intensity from various causes, known and unknown, but when, in the course of these fluctuations it invades a community where there is a large amount of misery and destitution, its extension there is

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ceteris paribus , much greater than elsewhere".

He also says, "When I say, that I consider the repeated recurrence of extensive epidemic fever, as a clear indication of great previous suffering among the poor, I am perfectly aware that the assertion may be open to some objection. We all know that contagious fever may exist, and spread to a certain extent, where there is no destitution; and we know also, that destitution may exist (although I believe never for a length of time, and in a large town) without fever showing itself. I believe also, that fever extends much more rapidly, or possesses a stronger contagious property, in some seasons than others, in all ranks of the community. It is not asserted that destitution is a cause adequate to the production of fever; nor that it is the sole cause of its extension. What we are sure of is, that it is a cause of rapid diffusion of contagious fever, and one of such peculiar power and efficacy, that its existence may always be presumed, when we see fever prevailing in a large community to an unusual extent. The manner in which deficient nourishment, want of employment, and privations of all kinds, and the consequent mental depression, favour the diffusion of fever, may be a matter of dispute; but that they have that effect in a much greater degree than any cause external to the human body itself, is a fact confirmed by the experience of all physicians who have seen much of the disease".

(1) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Conditions of the Poor, Edinburgh and London, 1844, p.4.

(2) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns.

1st Edition, Edinburgh and London, 1840, p.18.

The Idea Relating Poverty and Health In Literature Published In England

I have described the attitude of the "Sanitary school" in England towards that trend of thought characteristic of Alison and of many of the Scottish school. That was the general attitude of those who mainly directed the early development of English Public Health, and perhaps it was also the attitude of the majority of the English school of medical thought in the early decades of the Century. However, I must say that, in England too, there were many medical men who conceived the importance of poverty on health, and were aware of its role in the spread of disease. Among the most famous of these is Simon, but there are many others. Even in the Local Report on the Sanitary Condition of the Labouring Population of England we find instances in which the writers show more or less clearly that they were aware of the relationship between poverty and disease. Thus

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Richard Baron Howard, in his report about Manchester, although he agrees with the theory of the origin of fever from the effluvia of decomposing animal and vegetable matter, yet he adds, "I should be concealing a conclusion to which all my observations and all my experience have led me, and of the truth of which I am firmly convinced, if I did not distinctly avow my belief, that whatever the essential cause or causes of contagious fever may be, poverty and want are the most influential causes of

(1) Richard Baron Howard (1807-1848) was graduated M.D. at Edinburgh in 1829. In Manchester he held successive medical appointments in different institutions dealing with the sick poor, i.e., Manchester Infirmary, Manchester Workhouse, Ardwick and Ancoats Dispensary, and Haydock Lodge Lunatic Asylum. He was also appointed Lecturer at the Manchester College of Medicine. His extensive work among the poor made him deeply interested in their condition and the relation of their poverty to their diseases. (Dictionary of National Biography, Oxford, 1921-22).

its prevalence and extension amongst the labouring classes in Manchester.....I am extremely anxious to express my opinion on this point in the most decided and explicit manner, because I am satisfied that, as long as the poor are in a state of great destitution, and are not provided with adequate nourishment, clothing and shelter, no sanitary regulations, with regard to the cleansing, draining, and ventilation of the streets, and the removal of sources of malaria, will effectually check the spread of fever. Until the labouring classes are supplied with the common necessaries of life, and relieved from the state of extreme wretchedness and destitution in which great numbers habitually exist, fever and disease generally will continue to prevail extensively amongst them, and it must be equally the duty of a Government to endeavour to devise means for insuring them these necessaries". (1)

Howard quotes Alison "to whose opinions on all medical questions", he remarks, "great weight is deservedly attached". (2) He points out how Alison had shown the clear connexion between periods of scarcity and distress and the severe epidemics of fever which had occurred in Scotland and Ireland. On the same pattern Howard connects the periods of distress in Manchester with the epidemic visitations in this town during the 19th Century.

Richard Baron Howard is also the author of a very interesting pamphlet titled "An Inquiry into the Morbid Effects of Deficiency of Food with Reference to their Occurrence amongst

(1) & (2) Local Reports on the Sanitary Condition of the Labouring Population of England. Presented to Parliament, July, 1842, p.330; p.299.

the Destitute Poor", 1839. I regard this pamphlet one of the remarkable works in the history of evolution of the concept relating poverty and disease. In it, the different connections between poverty and all kinds of disease are fully explored and developed. This was the fruit and the inspiration of Howard's extensive experience among the sick poor during periods of distress in Manchester, a town which was at these times prone to recurring periods of depression with subsequent general unemployment. I shall quote some lines from this pamphlet to give an idea about its trend. He says, "The public, generally, have a very inadequate idea of the number of persons who perish annually from deficiency of food; ... every medical man, whose duties have led him much amongst the poor - who is familiar with the extreme destitution which often prevails amongst them, and the diseases thereby occasioned, is too often a witness to fatal results from gradual and protracted starvation. Although death directly produced by hunger may be rare, there can be no doubt that a very large proportion of the mortality amongst the labouring classes is attributable to deficiency of food as a main cause, aided by too long continued toil and exertion, without adequate repose, - insufficient clothing, exposure to cold, and other privations to which the poor are subjected. This is a melancholy truth and is equally to be regretted whether it arises from the high prices of provisions, the low rates of wages or the improvidence of the poor themselves".⁽¹⁾

(1) Howard, R.B., An Enquiry into the Morbid Effects of Deficiency of Food Chiefly with Reference to their Occurrence amongst the Destitute Poor, London, Manchester, 1839, p.3.

Again Dr. Howard wrote a chapter in which he expressed these views, in a very interesting pamphlet published in 1842 about distress in Manchester. This pamphlet, "Evidence on the State of the Labouring Classes in 1840-42" by Joseph Adshead was an investigation into the degree of poverty in Manchester. It was inspired by the teaching of Alison as evidenced by the fact that a quotation from Alison was printed on the title page of the pamphlet. In the chapter about the physical effects of destitution written by Howard in this pamphlet, he said, "I think every medical officer of a public charity ... must be fully convinced of the existence of extreme and widely-spread distress; he must feel satisfied that a very considerable proportion of the diseases he is called upon to treat is the result of poverty and destitution, and he must be painfully sensible that his efforts to relieve them will probably be fruitless, simply because his patients cannot obtain that salutary food and clothing which are essential to their recovery and permanent restoration to health".⁽¹⁾

I would like to remark that Howard was graduated M.D. at Edinburgh in 1829. Naturally, therefore, he was a disciple and a student of Alison, who was then Professor of Institutes of Medicine in the University of Edinburgh.

(1) Adshead, J., Distress in Manchester. Evidence on the State of the Labouring Classes in 1840-1842, London, 1842, p.49.

Adshead's pamphlet throws some light on the poverty of the working classes in Manchester in 1840-2. During these years (the Hungry Forties) there was extreme distress all over the manufacturing districts in the North of England. It was a grim, long-standing distress, which had aroused great concern in Parliament and in Government circles, and affected greatly the political thought and trends of the time. It gave a great stimulus to the Chartist Movement at that time. It was this distress which inspired the moving portrayals of working-class poverty in the two famous classics "Sybil" by Disraeli, and "Mary Barton" by Mrs. Gaskell. In addition, it stimulated a great deal of thought and publication about the working classes.

During this period, the idea of relating poverty and health was echoed in Parliament. This was in 1841 during the debate on the distress in Bolton. In this town, there was such a depression that "the work people in iron and machinery were only employed half time, that engineers were nearly in the same situation, that masons, bricklayers, and joiners were only one-third employed, and that tailors, shoe-makers, and hand-loom weavers were even worse off than that".⁽¹⁾ In evidence of this distress, it was stated in Parliament that houses were abandoned by the people to an extent that 1,400 houses were then unoccupied in the town. A moving description of the distress was read in the House. It says, "the distress was universal ... It pervaded every class; it had made large properties small, and

(1) Hansard's Parliamentary Debates, 1841, Vol. LIX, p.1021.

small properties had become extinct. Many had sunk from one class to another, until they had become paupers. The cheerful and good-tempered citizen had become sullen and suspicious; they were driven from the markets, and almost from the streets, to hide their poverty and their wretchedness in some corner, the resort of misery, removed from the public eye. It had driven many from the House of God. They had parted with, or worn out, the decent clothing in which it was once their pride to appear, and they could not obtain other clothing in its place, for it required all they obtained to maintain existence". (1)

Dr. John Bowring, LL.D., M.P., for Bolton described to the House the effect of this distress on the health of the people. He stated that it results in the deterioration of health and the spread of typhus fever. He referred to the Registrar General's reports and stated that in 1839-40 in the Metropolis there was a 16 per cent decrease in the deaths than in 1837-38. In England and Wales as a whole there was an increase of 4 per cent. While the return for Lancashire showed that there was in this period an increase in the deaths of 40 per cent. He concluded that, "there could be no doubt that many of these localities had been visited by pestilential and mortiferous diseases, but was it not evident that these diseases were the companions of and the testimonies to the great misery and excessive distress of the people - that this continual increase of mortality was an evidence of still existing sufferings". (2)

(1) & (2) Hansard's Parliamentary Debates, 1841, Vol. LIX, pp.1022 & 1024.

He again compared the infant mortality in Lancashire and shows that it is much higher in this period in Lancashire than in London and connects that with the prevailing distress. In his speech he referred to reports made on the subject by Mr. W. Naisby. In one of these reports which were ordered to be published by the House we read, "I was convinced, whilst I was a guardian, from what I saw at the Board, and by visiting the poor, that deaths were occurring nearly every week in Bolton for want of the necessaries of life, or, perhaps more properly speaking, from sickness produced by want and ending in death, which amounts to the same thing".

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Charles Murchison, was another well-known medical man in England, who followed the same trend of thought connecting poverty with disease. In his classical "A Treatise on the Continued Fevers of Great Britain", 1862, 2nd Ed. 1873, he told the history of epidemic typhus and relapsing fever in a way connecting the different visitations of these fevers with the periods of depressions and distress. All over his long story of epidemics, he showed a firm conviction of the responsibility of

(1) Copies or Extracts of Correspondence ... on the Subject of Distress in Bolton, with the Report of the Assistant Commissioner sent by Her Majesty's Government to Inquire into Alleged Cases of Destitution and Death, 1841. B.P.P. 1841 sess. 2 (58) II, p. 7.

(2) Charles Murchison (1830-1879) studied medicine at Edinburgh University and graduated M.D. there in 1851. After holding appointments in Edinburgh and Calcutta, he finally settled in London in 1855, when he commended a long series of medical appointments in this city. The most important of these, was the post of Physician to the London Fever Hospital (1861) and that of Physician and Lecturer in Medicine at St. Thomas's Hospital (1871) (The Dictionary of National Biography, Oxford, 1921-22.)

poverty for the spread of disease.

He showed this trend of thought as early as 1858 in a paper he wrote to the National Association for the Promotion of Social Science in its meeting in Liverpool. The paper was not published in full, but even from the summary made for it, we can see clearly his trend. A part of this Summary runs as follows, "Dr. Murchison, in a paper on 'Continued Fevers considered as diseases which may be prevented', investigated the causes of the two great divisions of this subject, epidemic and endemic fevers ... He said epidemic fevers were essentially diseases of the poor and destitute... Moreover, all the great epidemics of fever had been observed to originate during seasons, or ... under circumstances of scarcity and of famine. Such has been observed in this country with regard to the great epidemics of 1723, 1739-41, 1771, 1797-1803, 1817-19, 1826-29, and 1846-49. No evidence could be clearer than that which proved that famine and destitution had an immense influence over the prevalence of epidemic fevers, and constituted their most powerful predisposing causes".⁽¹⁾

I would like to remark that Charles Murchison too was a student of Alison. He studied Medicine at Edinburgh University and was graduated M.D. there in 1851, when Alison was Professor of Practice of Medicine at this University.

(1) Transactions of the National Association for the Promotion of Social Science (Liverpool meeting) 1853, p.543.

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Even much earlier, in 1818, Thomas Bateman physician of the public dispensary and fever hospital in London, clearly conceived the responsibility of destitution for epidemic fevers. In his "Succinct Account of the Contagious Fever of this Country", he says, "The (epidemic) which I am about to describe, has arisen, like its predecessors, in a season of scarcity among that portion of the community who principally suffer under such a calamity, and whose situation and habits contribute to the nature and propagation of the infection thus generated. The deficiency of nutriment is the principal source of epidemic fever". He also says that, "It seems probable that the influence of deficient nutriments is rather a predisposing than an exciting cause of fever, producing that condition of the system, which is liable to be thrown into fever by the slightest disturbing cause, as by anxiety, fatigue, exposure to cold, intemperance, etc."

(2)

He further says, "It might have been expected, indeed, that the present epidemic would exceed the last in the extent of its course, since it occurred at a period of unparalleled distress among the labouring poor, when the loss of employment, occasioned by the termination of the war and the general suspension of the manufactories, concurred with the failing harvest of 1816 to increase the difficulties of procuring subsistence". "In some

(1) Bateman, Thomas, (1778-1821) M.D. Edinburgh, 1801. Became physician to public dispensary and to fever hospital (London) in 1804. He was much connected with the Edinburgh Medical and Surgical Journal. He was the principal authority in London on Skin diseases. (Dictionary of National Biography, Oxford, 1921-22)

(2) Bateman, T., Succinct Account of the Contagious Fever of this Country, London, 1818, pp.4 & 11.

crowded cities, indeed, in which poverty and want prevail more extensively and continually among the lowest classes of the people than in London, as in Dublin, Cork and some of the populous towns of the sister kingdom, contagious fever is generally prevalent, and in seasons of distress, rages to an extent unknown in this metropolis".⁽¹⁾

Bateman had even gone too far and supposed that deficient nutriment can originate fever independent of contagion in a part of the cases. However, he conceived the role of contagion in the majority of cases.

It is significant to remark that Bateman again was a student of the Scottish medical school. He was graduated M.D. in Edinburgh 1801. He was also much connected with Edinburgh Medical and Surgical Journal. His pamphlet gives ample evidence of the effect of the Scottish school in determining his line of thought. For example he opposes the idea that fever is generated from the mere accumulation of animal matter in a putrescent⁽²⁾ state and he gives in evidence Dr. Chisholm's paper in the Edinburgh Medical and Surgical Journal and Dr. Bancroft's Essay on Yellow Fever. These two papers were the references always given by the Scottish school in discussions on this subject.

(1) & (2) Bateman, T., Succinct Account of the Contagious Fever of this Country, London, 1818, pp.156 & 7.

Again the same trend of thought is exhibited in
 Dr. Henry Clutterbuck's ⁽¹⁾ work in 1819 on Epidemic Fever. In
 this work he says, "The origin most generally assigned to the
 present epidemic is a deficient supply of food to the poorer
 classes, owing partly to unfavourable seasons, partly to
 political circumstances of an extraordinary kind, which are
 too well-known to require being here particularised. History,
 indeed, shows, that famine and pestilence are generally found
 in combination or at least in immediate succession and many
 of our epidemic fevers, as well as the present, have arisen in
 times of scarcity. ..."

"It is true, that the disease has been far more
 prevalent among the poorer classes of society; and, in some
 measure, in ratio corresponding to the degree of privation
 endured".

"Supposing the disease to be capable of being
 propagated by contagion, as I think cannot be reasonably doubted,
 it is obvious that the poor are peculiarly obnoxious to every
 circumstance favourable to the operation of this cause. The
 close and crowded state of their dwellings, their general
 disregard of cleanliness, increased, as it is, by that
 indifference to the common decencies of life, which extreme

(1) Clutterbuck Henry, (1767-1856). Began Practice in London in 1790. From 1795-1807 published "the Medical and Chirurgical Review". In 1802 proceeded to Edinburgh and Glasgow to study Medicine. Graduated M.D. at Glasgow in 1804. His practice in London was one of the most successful. Gave lectures in Materia Medica and in the Practice of Physic. (The Dictionary of National Biography, Oxford, 1921-22)

poverty is so apt to generate, and the depression of mind with which this state is necessarily accompanied, are all circumstances favourable to the operation and spreading of contagion, and from which the higher orders are exempt".⁽¹⁾

Dr. Clutterbuck's work gives evidence that he conceived clearly the exact role of nutrition and contagion in the spreading of fever. He does not agree that epidemic fever is generated by defective nutriment. He thinks that malnutrition is only a predisposing cause and that it "merely acts by rendering the body prone to fall into the disease".

It is interesting to notice that Clutterbuck too was a student of the Scottish medical school. He studied Medicine in Edinburgh and Glasgow and was graduated M.D. at the latter in 1804.

I shall mention again another example of that trend of thought in England. In 1825 Dr. P.M. Latham published in London a very interesting pamphlet about an outbreak of disease in Milbank Penitentiary. In this pamphlet the responsibility of malnutrition for predisposing the person to disease was clearly recognised. According to this pamphlet the prisoners in Milbank Penitentiary were put upon an impoverished insufficient diet. This was succeeded after some time by a great deterioration of health and the prevalence of diseases.

(1) Clutterbuck, H., Observations on the Prevention and Treatment of the Epidemic Fever at present Prevailing in the Metropolis, and Most Parts of the United Kingdom to which are added Remarks on some of the Opinions of Dr. Bateman and others on the Same Subject, London, 1819, p.32.

Among these diseases were scurvy, fevers, dysentery and affections of the brain and nervous system. P.M. Latham and P.M. Roget, the two medical men who investigated the matter, stated that the disease was contagious, but they accused the impoverished diet for weakening the constitution and predisposing to the contagion. They supported this idea by the striking fact, that the officers of the prison and their families who resided on the same spot and were living on a better diet, completely escaped, and so also escaped twenty of the prisoners who were working in the kitchen and having an ample supply of meat and food. The pamphlet speaks strongly on the effect of malnutrition on health and the susceptibility to disease. For example, it says, "Cold and scanty nourishment, are among the causes of disease with which medical men are best acquainted. Among the poor of large towns, they are known to be productive of complaints at all times, and in seasons of scarcity, ... they are even capable of engendering epidemic diseases".⁽¹⁾

And again, "Whatever would debilitate must render the prisoners more obnoxious to disease generally".⁽²⁾

I am especially interested in this pamphlet because it was largely quoted for a long time. It was one of the events which had a strong impression on the medical thought of the time, and it was often referred to in many discussions about

(1) & (2) Latham, P.M., An Account of the Disease Lately Prevalent at the General Penitentiary, London, 1825, p.200; p223

poverty, malnutrition and disease. Besides, the inquiry made into the subject by Dr. Latham had been ordered originally by Parliament and the result of the inquiry was reported to it.⁽¹⁾ A Select Committee was also appointed to investigate and report on the subject of the diet and the prevailing disease in the Penitentiary.⁽²⁾ Thus the idea connecting malnutrition and disease was echoed to the legislators.

Further, I have tried to look through the purely medical literature dealing with the diseases, their pathology, etiology, and treatment, during the 30's and 40's in England, in order to see how "poverty" does figure in the etiology as a cause of some maladies. I came through a few cases in which the authors clearly pointed the effect of poverty in the etiology of the diseases they were dealing with.

An example of these is in one of the lectures of the famous Dr. J. Elliotson, delivered at St. Thomas's Hospital. These lectures were very popular, and the Lancet used to publish them successively. In this lecture about "Phthisis", he says "In many cases the disease would not take place but for deficiency of good food and clothing, and, when it is taking place, I believe it may frequently be impeded from proceeding with rapidity, by well supporting the system ..., and when

(1) Papers Containing Report of the Physicians on the State of Disease in the Penitentiary at Milbank, 1823. B.P.P.1823 (256) V, p.379.

(2) Report from Select Committee on the State of Discipline, Diet, and Prevailing Disease in the Penitentiary at Milbank, 1823. B.P.P.1823 (533) V, p.403.

suppuration is going on, good nourishment is absolutely required". (1)

Another example is a treatise by Dr. Thomas West. This treatise was dealing with that disease, called at that time "Pyrosis Idiopathica" or "Water Brash". The author attributes (2) this disease to privations and calls it "the offspring of poverty, cold and wretchedness". He declares that "our pills and (3) potions, our chemicals and our galenicals will be a miserable mockery, and a wretched satire", unless the poor are supplied with sufficient animal and vegetable food, with clothing and with the "peace of mind which is the attendant upon ... a good hope of a continuance of a comfortable daily bread". (4) He asks what use is it to fill the stomachs with bismuth and bark and send the sick back to beggary. He says, "The majority of a population chewing nux vomica because they have no animal food is a (5) circumstance that may well demand the consideration of statesmen". He connects the disease with the irregular habits of feeding of the working classes enforced upon them by the master manufacturers who give them no time, and rush them over their meals, and also with the mental anxieties and worries of poverty.

Although it may be questioned whether the diseases he meant, are really connected so much with poverty, yet I consider this treatise one of the pioneer works of social medicine as regards the spirit and the method of the author. He was absorbed in studying the social aspects of the malady, and of

(1) Elliotson, J., Lancet, 1829-30, Vol. II, p.441.

(2) (3) (4) & (5) West, T., A Treatise on Pyrosis Idiopathica or Water-Brash, London, 1841, p.79; p.79; p.92; p.92.

its prevention and treatment. He, moreover, clearly urged that Medicine should take a new trend and study the social conditions occasioning disease.

He thinks that the contemporary medical writings are of no value, as they are taking no consideration of the social aspects of the disease. They are taking the same trend of Celsus, who was only writing about and for the favoured class of society. They, too, are only "engrossed in framing precepts exclusively adapted to the relief of the pampered valetudinarian".⁽¹⁾

He states that prevention of disease can only be achieved by raising the condition of the people, and that, the state and legislation should be guided and directed by the knowledge and experience of medical men in misery and resultant disease. He complains "I know of no period in the annals of civilized Britain at which medical men have merited to enjoy so much of the confidence of the State, none at which they were entrusted by the Legislature with so little, none in which they were capable of using it to such extensive advantage to the community".⁽²⁾

Answering those who think "it is the business of a physician to take society as he finds it, and not to trouble himself to rectify or equalize its conditions", he asks what hope they can have in curing disease "without amending the condition of the people".⁽³⁾ "No one", he says, "who has expended much of his time in watching and palliating the effects of grinding poverty

(1) (2) & (3) West, T., Op. Cit. p.80; p.99; p.91.

on the lower classes can fail to appreciate the difficulty of the position".⁽¹⁾ He feels he was treading on a dangerous ground but he stresses that it is the duty of the State to watch over and protect the industrious millions. He further thinks that we medical men should guide the State in this respect, and "it is no less our fault than it is our disgrace if we calmly look on at the defective condition of their dietary, deficient ailment, on the unequal operation of laws intended for their benefit, without respectfully presenting our opinions and suggestions to the authorized servants of the State".⁽²⁾

I would like again to mention that Thomas West also was a student of Edinburgh University. He received his medical education in Middlesex, Guy's, and Edinburgh University. So he must also have been one of Alison's students. Four years after publishing his treatise he was also graduated M.D. in Edinburgh (1845).⁽³⁾

The above instances in England of the trend regarding poverty the mother of disease are not exhaustive. There must be some others. Besides I was only looking for instances in the first half of the Century, as later on I am sure there will be a great many more, especially among those who were carrying on public health research with Simon like Dr. Edward Headlam Greenhow⁽⁴⁾ for example. I shall refer to these later on. I want only to say now that even in the first half of the Century, there was a number of medical men who recognised the importance of poverty on public health.

(1) & (2) West, T., Op. Cit. p.78; p.106.

(3) The London and Provincial Directory, 1860.

(4) Dr. Edward Headlam Greenhow, who showed a strong understanding of the relation between poverty and disease was also a student of the Scottish medical school [see Chapter III].

Explanation of the Attitude of the Sanitary School

However, these medical men who attributed the breeding of disease to poverty were not the dominant figures in the medical scene in England. The general trend was dominated by the Sanitary school, and the prevalent idea in vogue was the "Sanitary Idea". Those who directed the evolution of Public Health and determined the lines of its early development were those who were obsessed with the "effluvia theory", and thought that sanitation is all that was needed to be done to the poor. I am far from underestimating the great achievements of this Sanitary school in the field of health and prevention of disease, and I am fully aware that Public Health in Britain and in the world owes much to Chadwick's school. I am conscious, too, of the great need that existed at these times for a sanitary movement, and I am apt to appreciate that more than others, because I come from a country which is nowadays suffering greatly from insanitary conditions. However, I cannot help being moved by the misery and disease which the working classes suffered during the last Century, and which could have been lessened if the "Public Health Movement" did not persist in overlooking the real source of disease. I also know how effective could have been the argument that "disease is bred by poverty" in influencing the social trends of the State. That is why I can see the great influence the medical thought could

have had on the attitude of the State towards social welfare, if they had attacked the real mother of disease. Again, the general health of all classes could have been much more improved if the efforts and legislation were not concentrated only on the environmental side of public health, and if more had been done towards raising the standard of living of the people.

However, I must say that the attitude of the Sanitary school was the only attitude that could be expected at that time. It was not accidental, but it was the natural echo of the political and social trends at the time. It was concordant with the pattern of thought and it was determined by the attitude of the whole culture of the period. In other words one can find in the life of this generation many factors that would explain and account for the attitude of Chadwick and his friends.

Among these factors is the type of scientific knowledge of the time. Science had then very little to say about the origin of disease. There was no exact definite knowledge about the role of nutrition or about the mode of propagation of infectious fevers. This lack of definite, exact knowledge gave everybody the choice to select the idea he was predisposed to like more. Science then had not yet said its last word, and so one could follow the theory that would meet his purposes and suit his political and social inclinations; and for every theory he might choose, he could find in the literature masses of evidence in its support.

This indefiniteness of knowledge allowed Chadwick and his friends to find enough evidence in the current literature to make them feel convinced with their theory, and to make them refuse to believe that poverty was the mother of disease.

But it was not the scientific data that really determined their attitude in this problem which seems a purely medical one. To my mind, this was mainly determined by their way of thinking about poverty, and by the attitude of the whole culture of the period towards this problem. It was the political and cultural currents of the time and the general trend of thought on the subject of poverty which actually decided their direction. They were full, I am sure, of enthusiasm for reform, but they could not conceive that anything could be done to poverty. They could easily conceive that much reform could be done in sanitation as this could be a subject for legislation and State interference, and they could imagine that the society should relieve indigence and infirmity by the machinery of the Poor Law, but they could not conceive how the State could do anything about poverty. Poverty might be deplored, yet they could only think that it had to be borne as an inevitable social phenomenon. That is why they did not like to believe that the real cause of disease was poverty. If they were to accept this view, it would mean that disease could not be prevented too, and that no reform would be possible.

This is the idea behind their prejudice to Alison's views. We can have a clue to this in a speech of one of their

leaders, the Marquis of Normanby, on 26th July, 1844. That was when the controversy between Alison and the Sanitary School was echoed in Parliament on the occasion of introducing the Report of the Health of Towns Commission to the House of Lords. After giving data about the prevalence of disease, the Marquis of Normanby says,

"I am aware that many look upon the dreadful results (disease): I have been describing as the necessary consequence of poverty, and therefore to be deplored, but still to be borne" (1)

In other words he was afraid that some might regard disease as the result of poverty as this would mean that nothing would be done about it. That is why he wanted to make sure that nobody would attribute disease to poverty, and for this purpose he proceeded to tell the House all Chadwick's and Arnott's evidence against Alison's views. He repeated all the evidences that I had cited in former pages and which were given in the General Sanitary Report and the Report of the Health of Towns Commission.

This speech gives us some insight into the real explanation of their prejudice towards Alison's theory. The Sanitary school, in common with the general trend of thought at the time, could not conceive that poverty could be, or should be, the field of legislation and administration. This was a reflection of the attitude of the whole culture towards poverty and an echo of the political and economic voices of

(1) Hansard's Parliamentary Debates, 1844, Vol. LXXVI, p.1220.

the time. Chadwick and his friends were naturally wearing the specific clothes of their generation. They were thinking about poverty in the same way any Englishman living in the early decades of the last Century would be thinking. And it was with this characteristic frame of mind that they looked at Alison's views. To accept these views, it was necessary to look at "poverty" with completely different eyes from those of the period; and this was impossible for them. That is why I consider that their response towards the concept of poverty and disease was the reaction of the whole culture of the time, and that it was the prevalent political and economic trends of thought which really determined their attitude. In the next part I shall try to analyse these general prevalent trends and to picture them in more detail.

ANALYSIS OF THE TRENDS OF THOUGHT OF THE TIME

I am next going to analyse the general trends of thought towards poverty during the early 19th Century and try to explain their evolution. Britain at that time was in the phase of a big revolution which was creating a new type of life and of society.

The Industrial Revolution was in its most active stages and it was quickly changing the whole structure of life in the country. It was a revolution everywhere, in the economic life, in the politics as well as in the culture and thought. Everything was re-shaped according to its needs and adapted to suit its conditions. It reacted with every aspect of the life and left its impressing effect everywhere.

Wealth and power became the great objects of the new world and the new mottoes of the period. This necessitated the evolution of new ideologies and new philosophies to suit these objects. Thus the industrial revolution, remoulded the culture and thought of the period and evolved them along new lines that would suit its aims. It developed a new religion which reflected the competitive ruthless ambitious spirit of the new world. The new life was in need of new special characters, qualities and powers and this necessitated the setting forth of new special ethics to serve its purpose. In such a competitive life, there would naturally be a big stress on the individuality, the toughness and the endurance of the individual, and this accordingly would set new concepts of morals, of virtues and of vices.

The new economic life had also its repercussions in the politics of the country and there evolved new political trends, required for, and adapted to the new developments. Everything was adopted that would favour that industrial progress, and nothing was allowed to interfere with the development of this gigantic machine.

This revolution in the life, culture and politics of Britain during the early 19th Century naturally influenced the general trend of thought towards poverty. A competitive world, which was in great need of individual achievements required the individual to strive hard, and to push his way to the front. No virtue could be more important to such a society than the virtue of independence, and nothing more despicable than the lack of ambition and impetus for progress. Independence, competition and ambition were the morals and the ethics of the new world, and this implied the condemnation of poverty and the depreciation of the poor. Poverty became the vice of the new life. That was the origin of the prevailing impression at these times that the poor were responsible for their poverty. That is also why the general trend of thought supposed that the best way to deal with poverty was to strengthen the morality and independence of the poor by moral and religious education, and that this would be enough to get rid of poverty. The spirit of the time was a competitive, ruthless, pitiless spirit, and this implied that those who were left behind were supposed to be lazy and unfit. It was supposed that it was their own mistake that they could not compete with other members of the population. A generation with

this competitive attitude of mind, and with these new ethics, could hardly conceive that poverty was the fault of the new economic orders. It could not envisage that poverty was an inevitable social evil of the new industrialisation and the creation of vast urbanised communities. It could only think that poverty was a symptom of the moral weakness of the poor.

We can find illustrations of this trend of thought everywhere in the life of these times. The "fear of destroying the independence of the people" was perhaps the most common and prevalent argument in all discussions about poverty. And on no view did the public agree more than the view that the main assistance to the poor by the higher ranks should be moral and religious education. In this way, it was generally thought, that the independence and the prudence of the poor would be strengthened and that this would be enough to get rid of poverty.

A factor which gave an impetus to this trend of thought was the great increase in pauperism and poor rates before the new Poor Law of 1832. The system of paying rates in aid of wages tended to increase the burden of poor rates and the number of paupers. This increase in pauperism was taken to indicate that liberal relief of poverty had destroyed the characters of the poor and had pauperised the population. As a natural reaction to this, there prevailed a general jealousy about the virtue of independence, and a general apprehension that the sympathetic attitude towards the poor would create more poverty.

One of the factors that helped to strengthen this way of thinking was the fact that the poor used to be more

indulged in habits which were regarded as vices by the industrious, religious, disciplinary Victorian society. As a result, this strict, ethical society tended to identify poverty with vice and to relate it to the weak morals of the poor. This is only natural as human beings are always inclined to attribute all disasters to what they consider most evil. This explains why the prosperous classes thought only that poverty was due to the intemperance, dissipation, and laziness of the poor, and lost sight of the other roots of the problem. And it is most significant that the men of religion were strong supporters of the view ascribing poverty to immorality and that they were mostly on the side of Chalmers and not on that of Alison.

Again the trend of thought that "poverty being the vice of the poor" was quite convenient to the growing industry. It was in the interest of the new industrial masters, and that explains why it attained such strength and sacredness. The political trends were against anything that would interfere with the new industrial development or would frighten Capital. That is why they closed their eyes to the real causes of poverty and insisted on the belief that it was the fruit of the indolence, improvidence, and slothfulness of the poor. The adoption of an opposite trend of thought would have implied that they would interfere and protect the poor. This would mean more taxes on Capital, more interference with wages, more rights to the workers against the employers etc., and all these measures were naturally thought most incredible.

A science that developed much at that time to serve

the purposes of the new world was the science of political economy. Its new trends were inspired by the needs of the new revolution, and they reflected the spirit of the new life. In turn, the new doctrines of this science greatly dominated the general trends of thought and the cultural life of the period to an unexampled astonishing extent. That is possibly because it was in harmony with the new minds and that it expressed faithfully the new spirit. Like any revolution, the Industrial revolution needed philosophers to translate the vague inclinations into words, to draw for it new ideals and new doctrines, and to meet the problems of the new world; and this need was satisfied by the political economists of the period. One of the most important of these was Malthus. His theory on the principle of population had a general overwhelming popularity in these times, and it influenced to a great extent the general views and attitudes towards poverty. His theory maintains that the natural tendency of the human species is to increase and multiply much more quickly than the food of man, and that therefore the population, if unchecked, must necessarily sooner or later press on the means of subsistence, and that it is prevented from increasing beyond these limits only by the positive checks of misery and vice and by the preventive check of moral restraint. He accordingly believes that the community should leave the preventive checks of poverty and misery to act on the population. He holds the view that the community should not provide for the poor and should leave them to their own fate, so that every man would be careful not to marry and raise a

family unless he is able to procure for it the means of subsistence. He claims that if, on the other hand, society will provide for the poor and assure every individual of subsistence, no prudential motives can be expected to prevent early marriages among the poor, and this will swell their number and increase the population beyond the limits of the means of subsistence. Therefore, he advocates that the community should not offer security against poverty, if the population is to be restricted. Thus, he is against poor laws, as they are giving "direct, constant and systematic encouragement to marriage, by removing from each individual the heavy responsibility which he would incur by the laws of nature for bringing beings into the world which he could not support".⁽¹⁾ Even, he is against private benevolence as it "has the same direction as the poor laws and almost invariably tends to encourage marriage".⁽²⁾

Nothing is more symbolic of the general trend of thought about poverty at that time than his words "The quantity of provisions consumed in workhouses, upon a part of the society that cannot in general be considered as the most valuable part diminishes the shares that would otherwise belong to more industrious and more worthy members, and thus, in the same manner, forces more to become dependent".⁽³⁾

This typifies the prevalent idea that poverty is the fault of

(1) & (2) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. 1st. Edition, Edinburgh and London, 1840, p.70.

(3) Malthus, T.R., An Essay on the Principle of Population. 6th Edition, London, 1826, Vol. II, p.82.

the poor, and that they were less industrious and thus unworthy of more shares of the resources of the country. Malthus also embodies the competitive, ruthless spirit of the period in his words "The mass of happiness - cannot but be diminished when one of the strongest checks to idleness and dissipation is thus removed; (the check he is referring to is fear of starvation) and positive institutions, which render dependent poverty so general, weaken that disgrace which, for the best and most humane reasons, ought to be attached to it".⁽¹⁾

Malthus is also speaking in the language of the politicians and industrialists of the time when he says "My intention is merely to shew that ... the common declamation on the subject of the poor,--namely, that the market price of labour ought always to be sufficient decently to support a family, and that employment ought to be found for all those who are willing to work, is in effect to say, that the funds for the maintenance of labour in this country are not only infinite, but not subject to variation; and that, whether the resources of a country be rapidly progressive, slowly progressive, stationary or declining, the power of giving full employment and good wages to the labouring classes must always remain exactly the same, - a conclusion which contradicts the plainest and most obvious principles of supply and demand, and involves the absurd position that a definite quantity of territory can maintain an infinite population".⁽²⁾

(1) & (2) Malthus, T.R., An Essay on the Principle of Population. 6th Edition, London, 1826, Vol. II, p.84; p.94.

Again Malthus repeats a very prevalent idea in saying "The Poor Laws are strongly calculated to eradicate this spirit (spirit of independence). They have succeeded in part".⁽¹⁾

He also holds that the Poor Laws interfere with the profitable application of Capital and that is another reason why provision for the poor should be stopped.

One cannot over-emphasise the effect of Malthusian theories and ideas about poverty on the general trends of thought and the general attitude towards the problem of poverty. Alison says, "So strongly has the opinion of the injurious effects of relieving poverty, and of the importance of teaching the poor to depend on their own resources taken hold of the "public mind" in Edinburgh, that those who appear to feel much anxiety about their sufferings, seem to be usually regarded as well-meaning, weak-minded men, who are incapable of comprehending the 'principle of population' and do not understand that the sufferings of one part of the community are the proper corrective to restrain the tendency to undue increase of numbers in the rest".⁽²⁾

Malthus's theory strongly dominated the political, social and economic thought in the country. It had a strong impression on the culture of the time and the prevailing thought. And in this way it influenced even the outlook of those who, like Chadwick, did not agree with its reasoning in detail, although they might not have been fully conscious of this influence.

(1) Malthus, T.R., An Essay on the Principle of Population. 6th Edition, London, 1826, Vol. II, p.82.

(2) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns, 1st Edition, Edinburgh and London, 1840, p.39.

Some Reflections of These Trends of Thought

I have tried to analyse in short the general trends of thought and the attitude of the culture of the period towards poverty. I think that it is these trends which were behind the prejudice of the sanitary school to Alison's concepts. It is these trends too, which were behind the insistence in Scotland, during the first half of the Century in keeping the system of voluntary contribution for the relief of destitution. They were behind the prevalent prejudice there against legal assessment and legal rights of relief for the poor. The prevalent system of poor relief in the greater part of Scotland was the old system of church collections and voluntary contributions which could only raise very scanty funds for the parochial relief of the destitute. There was a prevalent tendency to keep that system, although, according to Alison, this was in contradiction to the spirit of the old Poor Laws in Scotland. There was a strong resistance to any attempt to introduce the English system of Poor Laws. A great many believed that "No greater curse could befall a country than the establishment of a legal provision for its poor",⁽¹⁾ and that if they could dispose of the charitable institutions in Scotland, they would abolish them all, except hospitals and dispensaries, and leave the poor to their own resources.⁽²⁾ Chalmers, one of the famous leaders of that trend of thought says "A provision for general indigence, if regular and proclaimed will be continued on, and be sure to

(1) & (2) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. Edinburgh and London, 1840, p.39.

multiply its own objects, to create in fact, more of general want than it supplies". That is why Alison was met with great resistance in trying to convince the people of the necessity for a legal right for relief and for legal assessment in Scotland. He had to be involved for a long time in discussing and answering the prevailing beliefs and the economists' doctrines about poverty.

Again, the cultural attitude towards poverty, and the general trend of thought about it were also behind the Poor Law Commission of 1832 and the Amendment Act of 1834. Behind the idea of "Less eligibility", and behind the "Workhouse test" was the prevailing conviction that the poor were responsible for their poverty; and the apprehension of weakening the virtue of independence. Behind the rigid system of the workhouse, and the separation of husbands from wives and parents from children was the "Principle of Population".

Again, these trends were behind the way the Poor Law Amendment Act (1834) was administered in practice. The following letter from Chadwick is an interesting illustration:

Poor Law Commission Office,
Somerset House.

18th March, 1840.

"Sir,

The Poor Law Commissioners have perceived, that, on Christmas Day, and other recent festive occasions, the Guardians of various Unions have provided for the inmates of workhouses dinners which, both in quantity and quality of food, and its cost, have greatly exceeded the usual diet of the workhouse inmates, and even many of the less prosperous portion of the rate-payers.

The Commissioners, however, cannot but perceive the injustice of applying the proceeds of a compulsory tax, raised only to relieve destitution, to provide for the inmates of a workhouse luxuries which are beyond the reach of those by whom the tax is paid. They have, therefore, determined to give positive instructions to the Auditors to disallow in the accounts any expenditure which shall henceforth have been incurred in the extra allowances which shall be furnished on the occasion above alluded to.

Signed by order of the Board,

E. Chadwick, Secretary. (1)

(1) Baxter, G.R.W., The Book of the Bastiles, London, 1841, p.467.

Another illustration was the administration of medical relief under this Poor Law. According to a Committee appointed by the Provincial Medical and Surgical Association in 1841 to study this subject, the policy of the Poor Law Commissioners was to restrict greatly Poor Law medical relief. For fear of breaking down the spirit of independence, they did not want to give the poor relieved by the law proper medical aid. They extended their policy of making the condition of the paupers least desirable even to such a vital necessary aid as medical treatment. In illustration of this, the above-mentioned committee quoted a certain circular of March, 1838. It contained the following passage,

"There is danger that when relief in money or in kind shall have ceased in a district, relief in medicine may still prevail, and that the habits of dependence on parochial aid may thus be continued".⁽¹⁾ The Committee mentions the many ways adopted by the Poor Law authorities to restrict medical aid, among which were the practice of refusing "orders", and the very inadequate remuneration of medical officers.

Again the fear of making the condition of the paupers in any way desirable, was reflected in their policy in the question of the diet of the sick poor. There was a great reluctance among the Poor Law authorities to supply the extra diets ordered by the medical officers to the sick poor. Even on

(1) The Administration of Medical Relief to the Poor, under the Poor Law Amendment Act and Other Legislative Provisions for the Public Health, Considered in the Reports of the Poor Law Committee of the Provincial Medical and Surgical Association...., London, 1842, p.53.

such a vital provision as the diet necessitated for the sick, they pursued the same policy of stintedness. Wakley on March 22nd, 1841, brought in front of the House of Commons the case of a medical officer whose orders of diet for the sick poor were refused and torn up by the Guardians. This officer wrote to the Commissioners complaining, and pointed out that "the quantity and description of nourishment is of as much, if not more, importance to the successful issue of any case under treatment as any other remedy".⁽¹⁾ The Commissioners answered that "a medical officer is not empowered ... to order articles of diet for pauper patients under his care" as "such a power would be equivalent to the power of giving relief".⁽²⁾

As a result of this harsh administration of the Poor Law in England, there prevailed a general abhorrence of this Law among the working classes. The workers used to endure any amount of hardship rather than apply for relief. This general hatred of the workhouses tended to lower the wages,⁽³⁾ as the workers were forced to accept any terms rather than go to the workhouse.

(1) & (2) Baxter, G.R.W., The Book of the Bastiles, London, 1841, pp.469-470.

(3) Hamilton, C., Hansards Parliamentary Debates, 1841, Vol. LIX, p.1080.

A man who stood against this general trend of thought and opposed it was William Pulteney Alison. He wrote articles, addressed meetings, and published pamphlets for many years to endeavour to divert this trend of thought about poverty and to create another outlook on this problem. He argued and argued to impress that poverty is not the fault of the poor but it is imposed upon them by the social order. He discussed and discussed the economic theories of Malthus and other economists to show their fallacies in the problem of poverty and their injustice for the poor. He wrote and wrote to convince that the community should be preoccupied with the prevention of poverty, and should ensure a comfortable life for every individual. His writings show that he had such a deep insight into the response of the individual to his social environment, and the interaction of the different social conditions upon the people's behaviour and health ... a deep insight, which was far ahead of his time. They also show his mental courage which made him dare think of completely new concepts and new ideas opposed to the general popular beliefs.

It is true that Alison was not the only 19th Century pioneer who regarded poverty with a different eye from the general one, or the only philanthropist who fought the unjust economic concepts of the periods. But surely, he was the only one to use, on a large scale, a new language in his argument. He was the only one to use a new convincing language in order to prove to society that it was in its own interest to prevent poverty. He was the one who discovered through his experience,

one of the main reasons why any community should be preoccupied with solving the problem of poverty and ensuring its individuals against privation and misery. His arguments could not but attract the attention of any society and his language could easily find its way to the ears of the country. What was this language?

THE NEW LANGUAGE

Alison's new language against poverty was the language of health. It is a language which shows that the disease from which society is suffering terribly was the result of poverty, and that the prevention of poverty is necessary in order to prevent disease. He says, "Which of these different predisposing causes to 'continuous epidemic fever' is the most formidable, the most general, the most remediable, and especially the most fundamental? And in this view, although all demand attention, and ought as far as possible to be removed, there can be no doubt of DESTITUTION being that which demands the chief attention. While people are in a state of unrelieved destitution, nothing that can be done will prevent their suffering that depression of strength and spirits which results from imperfect nourishment, nor from crowding together, and inhabiting the poorest and worst aired parts of towns. The prudent and economical, but effectual relief of destitution, must therefore be the first object of all measures intended to diminish the tendency of a population to suffer from contagious fever".⁽¹⁾

And it is not only "contagious fever" which is bred by poverty, but other diseases too. Alison says, "Even independently of the disposition which is given to fever by the destitute condition of the poor in our large towns, it is

(1) Alison, W.P., Observations on the Famine of 1846-7 in the Highlands of Scotland and in Ireland, Edinburgh and London, 1847, p.14.

generally admitted that the want of sufficient nourishment, and sufficient clothing, their irregular and precarious subsistence, and their occasional intemperate habits (which I believe to be the natural result of such a mode of life) are the fruitful sources of many other diseases which continually afflict them and embitter and shorten their existence".⁽¹⁾

Further, in order to make his language find its way to the ears of the upper classes, Alison shows them the dangers to which they themselves are exposed from these epidemic fevers. That could be a most convincing language as it could arouse the alarm and concern of the influential circles. He assures them that epidemic fevers are not confined to the poor, but they spread to upper strata of society. He also assures that when these fevers attack the upper ranks, they assume a more malignant nature and become more fatal than they are among the poor. In this way he impresses the ruling classes that it is in their own interest, therefore, to prevent the poverty among the working population. In his own words, "I have myself witnessed a pretty general epidemic fever in the New Town of Edinburgh (the residence of better classes) in winter 1823-9, consequent on that previously prevailing among the poor in 1827-28, but occurring when the poor in the Old Town were nearly exempt from the disease; and it is well known that one of the most virulent epidemic fevers recorded in

(1) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. 1st Edition, Edinburgh and London, 1840, p.31.

history — that which afflicted France in 1528, — although beginning, as usual, by famine, general distress and indigence, and bands of wandering beggars, soon extended rapidly upwards in society, 'want and ill-health even affording a kind of miserable protection against it', and ultimately acquired its vulgar name (Trousse-galant) from its frequency and fatality among a part of the population certainly very different from that which has chiefly suffered of late years in Scotland".⁽¹⁾

That was Alison's new argument against poverty. It was a most convincing argument for any society. Poverty could no more be met with half solutions when it is recognised that it threatens the health of the community. Relief of poverty could be ignored or only met with insufficient remedies when it was only considered just as a benevolent humanitarian duty, but not when it becomes obvious that it is the first defence against disease and perishment. Alison raised the red light. The health of the community was his great argument in favour of establishing a system of security against poverty. He was hoping to change the general trend of thought towards poverty by showing and proving its disastrous effect on health. He found this a most efficient way to overcome the dominating concepts of political economy about poverty. Prevention of disease was his ready argument to any of the points raised by the political economists against relief of poverty. In answer to any of their assumptions, he could only raise the argument of

(1) Alison, W.P., Observations of the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Condition of the Poor. Edinburgh and London, 1844, p.62.

health in order to convince. Thus, when it is argued that poverty is caused by the immorality, improvidence and intemperance of the poor, and that its relief will thus encourage vice and intemperance. ... Alison, in answer uses his characteristic reasoning and says, "We cannot overlook the fact, that those whom we may regard on account of their intemperance or immorality as unfit objects for legal relief - or the relief of whom we may regard as encouragement to vice - are just of that description of persons, among whom fever and other epidemics are most apt to break out and to extend, and can only be prevented by some improvement of their condition and comforts. In my opinion, then, for the sake of morals, but quite certainly for the sake of the health of the community, it is most important, that the wants (well ascertained by inquiry) of the vicious poor should be promptly relieved, and that this should be done as much as possible out of the view of the public". (1)

In answer to the idea that the able-bodied should not be offered relief to preserve their spirit of independence, Alison again resorts to his distinctive argument saying, "Although it has yet been the practice in Scotland to give any parochial relief to able-bodied poor, yet I am equally confident that, in justice to the poor themselves, with a view of the maintenance of a desirable standard of comfort in them, with a view to tranquility, and more especially with a view to the health of the community, such relief ought to be regularly

(1) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Large Towns, 1st Edition, Edinburgh and London, 1840, p.141.

given to those of the poor who are proved to be destitute from want of employment".⁽¹⁾ The "Health of the Community" was thus the main argument used by Alison in his violent struggle and fight to establish a better system for the prevention of poverty.

Again, in order to oppose the provisions of the Poor Law Amendment Act (1845) which allows the destitute Irish in Scotland no relief except sending them back to Ireland, and imprisoning them if they return .. in order to oppose these provisions, he again raises his argument, "The health of the community". He thus says in a letter to the Board of Supervision in 1851.

"In illustration of the evils thus arising, two facts were adduced. First, that in the last great epidemic of fever, a great majority of the cases admitted into the hospitals both of Edinburgh and Glasgow were Irish people, belonging chiefly to this great class of sufferers; shewing distinctly, that it is mainly by the circumstances of this class of persons that the epidemic fever, with all its consequences, is kept up in these large towns. And secondly, that such is the abhorrence of the destitute Irish, when sick or disabled, or becoming widows or orphans, to the forcible return to Ireland, which is the only mode of relief granted by law - that rather than expose themselves to this treatment, they have been very frequently found to conceal the existence both of epidemic fever and of malignant cholera in their families, the effect of which, in

(1) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Large Towns, 1st Edition, Edinburgh and London, 1840, p.180.

favouring the extension of these diseases, and frustrating all (1) measures for checking their diffusion, need not be pointed out".

There was another prevailing trend of thought which Alison had to oppose in his distinctive way. Long before Alison, the public mind was impressed with the relation between poverty and disease but only in the sense that disease leads to and aggravates poverty, i.e., it was only conscious of one half of the vicious circle. The public eye could not help noticing that visitation of fever among the lower classes used to throw them into sudden hopeless privation. By attacking the bread winners, it used to cut suddenly their resources and throw them and their dependants and children into starvation. Besides, through lack of treatment and care, it used to send thousands to the graves and thus consign tens of thousands of orphans, which were usually spared, into abject poverty, and into medicancy and crime. Thus, the community was impressed with the great necessity for treatment and provision for the sick poor. But, unfortunately, the public eye could not see then the other more important part of the vicious circle, i.e., how poverty in turn leads to these visitations of epidemics. So, it was supposed that the medical charities should be offered to the poor, but that these should be the only assistance given to them. As long as they were not sick, it was thought, the poor could be left to their own resources.

(1) Memorial Regarding Amendments in the Scottish Poor Law, Proposed by William P. Alison, Revised and Adopted by a Committee formed from the Managers of Several Charitable Institutions in Edinburgh, Edinburgh and London, 1852, p.15.

Poverty was supposed to be a burden only in sickness, but otherwise, it was regarded as being bearable and even as a condition which has its own merits and spiritual benefits. This trend of thought had been reflected in the concentration and enthusiasm for medical relief for the sick poor during and before the 19th Century. A remarkable illustration of that trend is to be found as early as 1737 in a "Collection of Papers relating to the County Hospital for Sick and Lame etc. at Winchester", dated 1737. These papers show that the object in the establishment of a hospital in Winchester was to replace other modes of relief for the poor, as sickness was supposed to be the only condition that called for relief of the lower classes.

"Poverty of itself", says the writer of these papers, "gives no interruption, either to the pleasures or comforts of Life, which are for the most part, enjoyed in greater plenty and with a more exquisite relish by the Lower Part of the World, as long as they are in a condition of providing for themselves and their families. So that a present Support in the time of Sickness would prevent most of the Evils to which the Poor are subject, and would in some measure supply all their Wants more effectually, than by furnishing them with Money".⁽¹⁾

The same idea that it is disease which causes poverty was also behind the initiative for the inquiry made by the Poor Law Commissioners into the sanitary condition of the labouring

(1) A Collection of Papers Relating to the County Hospital for Sick and Lame &c. at Winchester. London, 1737, p.10.
(Photographed in the London School of Hygiene and Tropical Medicine) 124.

population in Great Britain in 1842. But here, there was a further development of the idea. Not only treatment of disease but it was "prevention of disease" which was thought the way of alleviating poverty. The object in devoting much interest to public health was to lessen the poverty and thus decrease the amount of poor rates. Reduction of the poor rates was the stimulus which initiated the inquiry into health and disease in 1841. The letter from the Poor Law Commissioners to the Home Secretary in 1838, which led to the sanitary inquiry, and which was supplemented by Drs. Kay, Arnott and Southwood Smith's reports, this letter illustrates clearly that the object and the purpose in devoting attention to public health was to reduce the poor rates and their burden. This letter states "In general, all epidemics and all infectious diseases are attended with charges, immediate and ultimate on the poor rates. Labourers are suddenly thrown by infectious diseases into a state of destitution, for which immediate relief must be given. In the case of death, the widow and children are thrown as paupers on the parish. The amount of burthens thus produced is frequently so great as to render it good economy on the part of the administrators of the Poor Laws, to incur the charges for preventing the evils where they are ascribable to physical causes We have eagerly availed ourselves of the opportunity to submit to your Lordship the urgent necessity of applying to the legislature for immediate measures

for the removal of these ... causes of destitution".⁽¹⁾
 Again in the circular letter,⁽²⁾ containing the directions to
 the assistant commissioners about the sanitary inquiry, the same
 object referred to above was clearly illustrated.

This trend of thought which was also prevalent in
 Scotland was opposed by Alison. He fully agrees that disease
 truly leads and augments poverty but he stresses also the other
 side of the vicious circle. It is not only true that disease
 leads to poverty, but it is also true that poverty creates
 disease. Those who saw only one half of the vicious circle
 were inclined to think that medical relief should be the only
 essential type of charity to the poor, and that this would be
 enough to alleviate the problem of poverty. That was the
 prevailing thought in Scotland in the 1840's. That was also
 the point of view of Alison's opponents. For example.
 Thomas Chalmers says, "A provision for disease, however
 auspicious will not add one instance of distress to the
 already existing catalogue, but a provision for general
 indigence, if regular and proclaimed will be counted on, and
 be sure to multiply its own objects, to create in fact more of
 general want than it supplies".⁽³⁾

(1) Fourth Annual Report of the Poor Law Commissioners for
 England and Wales, 1838. Appendix A, B.P.P.1837-38 (147) XXVIII,
 145, p.63.

(2) General Report on an Inquiry into the Sanitary
 Condition of the Labouring Population of Great Britain.
 Presented to Parliament July, 1842. p. xi.

(3) Alison, W.P., Reply to Dr. Chalmer's Objections to an
 Improvement of the Legal Provisions for the Poor in Scotland.
 Edinburgh and London, 1841, p.20.

They could not agree more with the necessity for medical charities, but as they could not see the other side of the vicious circle, they were extremely prejudiced against provisions for the poor apart from sickness.

In answer to this point of view, again Alison uses his convincing language and his usual argument. He says, "These repeated and severe visitations of fever demand special consideration on this account, that they are not merely the occasion of much and widely spread suffering and destitution, but they 'argue a foregone conclusion'; they are, as I shall endeavour to shew, in a great measure the result, and the indication and test, of much previous misery and destitution, - and I believe never occur, in peaceful times and in wealthy communities, where the condition of the lower orders is so generally comfortable".⁽¹⁾

"Thus it appears, that in Edinburgh, while there has been much disposition to relieve the sick poor, there has been a very general discouragement of institutions for the relief of mere poverty, - of the unemployed poor, the aged or permanently disabled poor, and the widows and orphans of the poor. ... The kind of assistance to the poor, which all medical men know to be of the utmost importance for the prevention of many of their most formidable diseases, has been as much as possible withheld".⁽²⁾

(1) & (2) Alison, W.P., Observations in the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. 1st Edition, Edinburgh and London, 1840, p.18; p.36.

But was it really a new language that Alison was using?

It may be objected that the idea of the close association between poverty and disease was not a new one, and that it was expressed by other medical men even at earlier dates. This may be true, but, however, Alison was the one who pointed out the implications of this medical idea in the political and social fields. He was a pioneer of these trends which we call now: Social Medicine. He conceived the importance of studying the social conditions of disease, and of applying this knowledge to guide the state in creating better social conditions, and thus a healthier society. It was a new experience in Britain, that the knowledge of the social conditions occasioning disease was used in a large campaign for social reform. The idea of the association between poverty and disease might have been mentioned before in medical books or in articles and lectures, but never before was there a trial to shape the policy and the politics of the State in the light of this idea. Medicine might have devoted before much interest to the poor, but it was a new line of thought to study the social pathology of disease, and to apply this to reform in the social and economic life of the country. There might have been before many reformers who advocated a change in the policy towards poverty but this was the first time when society and the State were asked to be guided in this respect by the medical experience in health and disease. It may be said that Alison had really begun a fresh line of evolution of public health; he extended its scope to the study and to the reform of the economic orders, and the

social patterns, in the light of their effects on health.

It must be realized that Alison was not just a medical man who, recognising the relationship between poverty and health, mentioned the idea to his students within the enclosed walls of the medical sphere. He was not just a scientist who, discovering the injurious effects of poverty, added it to the long list of predisposing factors. But he was a social pioneer who wanted to change the social life of society guided by his insight into the causes of disease. His study of the social conditions of sickness led him to devote himself to the creation of a better society as a means of attaining better health.

Alison was one of the first few who conceived that the experience of the medical profession should make them most entitled to advise as to the right social and economic policy of the State and should guide the politics of the country. This idea that the stethoscope does not only diagnose diseases of individuals, but could also diagnose and advise on social diseases of the community - this idea was frequently repeated in Alison's works. For example in the preface to one of his pamphlets he says "In undertaking to give an opinion on a subject of such extent and importance as the nature of the provisions which it is right and expedient to make for the relief of poverty ..., I am quite aware that I may be thought to have entered on a discussion, which is both without my province and beyond my powers".

"When it is stated, however, that in the two greatest cities of Scotland, where medical schools exist, claiming as high a rank in point of practical usefulness as any in Europe, the annual

proportion of deaths to the population..is very considerably greater than that of ..., it surely cannot be thought beyond the province of one who is honoured with a situation of trust and responsibility in the greatest of these medical schools, to endeavour to investigate the causes of this mortality, and the means by which it may be diminished".

"Nor can it be thought presumptuous for one who has been for many years daily engaged as a Dispensary and Hospital Physician, in applying remedies to diseases which have obviously been the result of privations and sufferings in the poorest of his fellow citizens, - and too often found them ineffectual, or known that they could be only temporarily useful, simply because he had no remedy for the privations from which they originated - to extend his inquiries to the grand evil of poverty itself, and endeavour to apply to it the same principles of investigation, by which physicians are guided in determining the immediate causes and remedies of disease".⁽¹⁾

The same idea was expressed by Alison as early as (1820-21) in his lectures on the Practice of Medicine given in association with Dr. James Gregory. He says in these, "There is no class of men who from the nature of their profession have greater opportunities for the collection of facts, on which political measures with regard to the internal economy of the country may be grounded, than physicians and they may in this way do great service to the Government. This

(1) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. 1st Edition, Edinburgh and London, 1840, p.iv.

position is well illustrated by the reports made to Government by those physicians whom I have often quoted and who were deputed to survey and give an account of the state of Ireland with respect to health". (1)

Moreover, if we look into Alison's lectures on Medical Police we find that he devoted a large part of them to the study of political economy and social science. In fact it is more exact to call these lectures a course in Social Medicine as they really exhibit clearly this trend. (2)

(1) Gregory, James, and Alison, W.P., Notes on a Course of Lectures on the Practice of Medicine Delivered from the Professorial Chair of Edinburgh. M.S. Lectures 1820-21, Roy. Soc. Med. Library. Vol. I, p.323.

(In the autograph of the late Sir Thomas Watson.)

N.B. Although these lectures are under the names of both Professor J. Gregory and Professor Alison, yet the part of them dealing with Epidemic Fevers is exactly identical with Alison's Medical Police lectures in this subject, almost word for word. So it is natural to suppose that this part was delivered by Alison. The quoted lines are from this part and they are almost the only lines missing in the lecture on Medical Police.

(2) Alison, W.P., Lectures on Medical Police and Jurisprudence. M.S. Lectures 1821. Roy. Soc. of Med. Library.
(In the autograph of the late Sir Thomas Watson.)

The Idea In Alison's Earliest Works

A fact of particular significance is that Alison had used his new language on a very large scale and for a long time in Scotland. His efforts in this respect could really be regarded as a planned huge educational campaign. He published scores of successive pamphlets on the subject. Most of these were during the forties when the question of the "Condition of the People" was a most engrossing topic. But a number of them were also published later on in the fifties.

If we want to trace back the idea of the relationship between poverty and disease in Alison's writings, we can find it expressed by him as early as 1817-1819. In his quarterly New Town Dispensary reports then, published unsigned in the Edinburgh Medical and Surgical Journal, we can find early evidence of this idea.

In one of these reports we read, "with respect to the causes of the disease, we apprehend that there can be no difficulty when it is considered that whole families, or even more families than one (particularly in hard times) are often crowded into single rooms, - and that a great number of the inhabitants of such places, notwithstanding the exertions so liberally made for their relief, have suffered severely during the winter, both from want of necessaries of life, and likewise from the depression of spirits that attends the want of employment".⁽¹⁾

(1) "Quarterly Report of the New Town Dispensary. 1st March - 1st June, 1817", Edinburgh Medical and Surgical Journal, 1817, Vol. XIII, p.400.

The report further goes on to oppose the idea saying that fever is generated by effluvia from the dunghills around the town; and it opposes this idea with the same arguments and the same way of reasoning which Alison uses later on in answering Chadwick and his school. The report concludes that "Continued fever has never been ascertained to proceed from the effluvia arising from dead animal or vegetable matters".⁽¹⁾ Another report says "This state of the weather, together with the privations and hardships necessarily arising from the want of employment among the labouring poor, seems to have added to their other miseries an unusual degree of disease".⁽²⁾

Again in 1820 in his lectures on Medical Police, while he was Professor of Jurisprudence at Edinburgh University, Alison expresses the same idea and develops it clearly. Thus on the subject of epidemic fevers he says, "In speaking of the means of prevention I have said nothing of what, if it could be effected, would be of the greatest importance, viz., the obviation of the predisposing causes, particularly those of want and mental depression, which if they do not ever produce the disease, tend greatly to promote its communication".

He then, referring to some prosperous parts of Scotland and England, says,

"In these places it is easy for a traveller to see that there is not much of distress, or want - the inhabitants of them are not out of work in great numbers, as I have stated those of Dublin to

(1) "Quarterly Report of the New Town Dispensary. 1st March - 1st June, 1817," Edinburgh Medical and Surgical Journal, 1817, Vol. XIII, p.400.

(2) Edinburgh Medical and Surgical Journal, 1817, Vol. XIII, p.119

have been at the time when the late fever raged there. Now it would be going too far to say that fever cannot spread in such state of society as this - but it is certain that the good diet, and the habits of cleanliness, comfort and active occupation, which obtain amongst persons thus situated, are very unfavourable to its diffusion".

Referring to non-prosperous parts, he says,

"On the other hand there are many other parts of Scotland and of Ireland (and particularly in the manufacturing parts of Scotland, when the manufactories stop) in which there are more persons than can obtain a comfortable subsistence, or constant employment, and it is amongst such persons in particular that the fever spreads".

He thus concludes, "These, and various other facts, show that in a complicated state of society, the attention which is paid by the rich to the concern and comforts of the poor not only does not lead to bad consequences and to the increase of distress as some have ascribed, but it is the source of much benefit and protection from misery amongst the poor, and moreover a great means of preserving the health of the community in general by the check which it is calculated to afford to the (1) propagation of continued fever".

In these lectures also, Alison points out the relation between fever in Britain and between periods of distress. He says, "The connection of pestilence with famine has been observed from

(1) Alison, W.P., Lectures on Medical Police and Jurisprudence. M.S. Lectures, 1821, Roy. Soc. of Med. Library. Vol. II, pp.59-62.

the antiquity. In this country, within the last 25 years; there have been two periods of great scarcity, viz. in 1799 and 1800 and in 1816 and 1817, and at both of these periods continued fever prevailed extensively; it was at the former of these times of scarcity, that Dr. Willan estimated the annual number of fever patients in London to be 40,000 and just after the last time of scarcity the fever was extremely prevalent here and in Ireland".⁽¹⁾

Again we find the same idea clearly expressed by Alison in 1836 in Blackwood's Edinburgh Magazine. This was in an unsigned comment by him on a book about Ireland, "Evils of the State of Ireland, their Causes, and their Remedy - A Poor Law" by John Revans. In this comment, Alison shows his specific trends of thought about poverty and its relation to disease. He says in it for example,

"It is well known to professional men, that contagious fever, ... is the natural result of scarcity of food and clothing, of want of employment, and mental despondency".⁽²⁾

The comment, published in two articles is almost completely identical word for word with a big part of Alison's pamphlet "On the Management of the Poor in Scotland", published later on in 1840.

(1) Alison, W.P., Lectures on Medical Police and Jurisprudence. M.S. Lectures, 1821, Roy. Soc. of Med. Library. Vol. I, p.410.

(2) Blackwood's Edinburgh Magazine, 1836, Vol. XL, p.501.

THE ANTI-POVERTY MOVEMENT

I shall next discuss the influence of Alison on his society and the reaction of the society to his ideas. Alison had played in the history of public health in Scotland, a comparable role to that of Chadwick and his friends in the English public health history, in as much as both of them initiated and created an active energetic public health movement. But, the two movements differ sharply in their objects, and also in the degree to which they had affected the evolution of public health in both countries.

Thus, while the English public health movement was directed towards sanitary reform, the Scottish movement was based on the prevention of poverty with the object of improving the public health.

When one looks back at the political and economic trends of the period, one will hardly expect at that time anything like the story of the Scottish movement - this story which I am going to tell in the following pages. It was speaking with a language, that the human race only really appreciated after the experience of a whole century of industrial life. Although it was in the first half of the 19th Century, yet the movement was based on a sound knowledge of the real factors determining health and disease - a knowledge, which is not different from our modern outlook nowadays. It was guided by the concept relating deterioration of the public health to the poverty of the lower classes. It was also based on an outlook on poverty, far

ahead of the time, and not very harmonious with the economic and political trends then. For all these reasons one tends to attempt to find an explanation for the initiation and evolution of such a movement. It might have been inspired by the conditions existing then of extreme destitution and of prevalent disease, especially those alarming epidemics of typhus and relapsing fever which attracted much attention then. This striking background which I shall describe later in detail may have been one of the stimuli for the movement. However, I regard that the evolution of this movement was mainly the fruit of the Scottish medical school of thought led by Alison. It is the attitude and efforts of this school that explain the unexpected birth and development of such a movement and it is especially to Alison that goes the credit of its creation.

In telling the story of this movement I think it is proper to begin from 1840, although many of the events leading to it belong to earlier years. For some years before the (1) "condition of the people" question began to be an engrossing topic in literature of the period. In 1840, Alison published the first edition of his pamphlet "Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns". In the same year there was formed in Edinburgh an association called "The Association for Obtaining an Official Inquiry into the Pauperism of Scotland". This was formed in a meeting which was held in the Council Chamber, Edinburgh on the 23rd of March, 1840. The object of the meeting was "to form a

(1) N.B. In 1839, a report by a special committee of the General Assembly on the management of the poor was presented to Parliament.

Society of those who are convinced of the inefficiency of the present mode of relieving the poor in Scotland; with a view of diffusing information on this important subject; and ultimately of inducing the legislature to adopt such measures as may appear most likely to raise the condition of the poor in Scotland to the same standard as that already existing in the best regulated countries in Europe". (1)

The Committee of Management of the Association included many of the eminent personalities in Edinburgh, and among them there were five Professors of the University, of whom Alison naturally was one.

It is interesting to quote the resolutions which were passed during that meeting as they show clearly how the Association adopted the concept of the relationship between poverty and health. One resolution was,

"That in the opinion of this meeting the peace and well-being of all ranks of society are in a great degree affected by the want and destitution of the poor; which they regard as contributing largely to the formation among them of habits of improvidence, mendicity, dishonesty, and other vices; and that to the same causes, may be traced those periodical visitations of epidemic disease with which this city has in late years been afflicted, producing a fearful mortality among the poor themselves, and involving the whole community in the common danger of its contagion". (2)

(1) & (2) Association for Obtaining an Official Inquiry into the Pauperism of Scotland [Minutes of the First Meeting of the Association], Edinburgh, 1840, p. I.

Another resolution was, "That, in the opinion of this meeting, the provisions of the poor ... should be such as to raise them above the moral degradation known by experience to result from a state of want and misery; and also as will protect them from the risk of these diseases which appear to be almost necessary consequence of an extreme degree of physical suffering".⁽¹⁾

Another resolution was an expression of appreciation and gratitude to Alison. It runs as follows,

"That this meeting cannot close their present proceedings without offering to Dr. Alison their sincere and cordial thanks for the able, humane, and perspicuous manner in which he has recently brought the subject of the inadequate provision of the poor in Scotland before the public. In his long career of active benevolence, especially as a kind, courageous, and skilful physician, ever ready to visit the indigent sick in their crowded and wretched abodes, and amidst fever and contagion, this meeting recognise in Dr. Alison a person eminently qualified to inform the public mind as to the real condition of the poorer classes, and however unpalatable for a time may be the statements which he has made, they are sure that the whole people of Scotland will ultimately feel grateful to him for his exertions".⁽²⁾

The Committee decided in its constitution and course of proceeding to diffuse an abstract of Dr. Alison's pamphlet, to

(1) & (2) Association for Obtaining an Official Inquiry into the Pauperism of Scotland [Minutes of the First Meeting of the Association], Edinburgh, 1840, p. 1; p. 2.

which I referred before. In their own words,

"The mode in which the Association propose to obtain the inquiry is, first, by diffusing widely some portion of the knowledge already existing especially that contained in the recent work of Dr. Alison "On the Management of the Poor in Scotland".

The committee, therefore, published with its proceedings an abstract of Dr. Alison's pamphlet.

Again, the second report of the Association included many illustrations to prove the relationship between poverty and disease in various towns of Scotland. These were given by Alison and were published in the appendix of the report. (1)

Further, to demonstrate the degree of sufferings of the poor, the Association carried out an inquiry into the extent of poverty and the degree of privations in Edinburgh. It circulated a list of questions among those who are connected with the poor and the answers, which spoke loudly of the great sufferings of the poor, were analysed and published.

This anti-poverty movement in Edinburgh was echoed in other parts of Scotland and it stimulated a great enthusiastic interest in exploring the degree of poverty in different Scottish towns. There resulted a large amount of research in the conditions of the poor and one can count a large number

(1) Alison, W.P., Further Illustrations of the Practical Operation of the Scotch System of Management of the Poor (From J. Stat. Soc. 1841, Vol. IV), London, 1841, p.18.

of reports and pamphlets about the condition of the poor of almost every town and district in Scotland, which were published at this time. These studies were stimulated by Alison's writings and by the anti-poverty movement, and contained a large amount of data which corroborated and illustrated his views. Some of them were instigated by Alison, and were done along lines suggested by him. These studies involve almost every part of Scotland, and are so numerous that one can get a very detailed picture of the social conditions of the poor in this country at that time. Some of them are made on sound bases and can be regarded as successful attempts in scientific social investigations. An example of these is a paper (1) by D.W. Steward about Hillside. In this paper, there is a detailed analysis of the poor section of the population, and a detailed study of their circumstances, ability to work, occupation, causes of their poverty, amount of assistance received from charity and from relatives etc. In this way the writer calculates in great detail the income, from all possible sources, of different groups of this lower class of the population. He then estimates the average standard of living of the working classes. He calculates in great detail the average expenditure of a labourer and his family, giving two rates of greater and lesser comfort and taking into account the sex, the age, the marital state, and the number of children. Further, he compares

(1) Alison, W.P., Further Illustrations of the Practical Operation of the Scotch System of Management of the Poor. (From J. Stat. Soc. 1841, Vol. IV), London, 1841, p.10.

the income of different groups of the poor with the average expenditure to illustrate the degree of privations endured by them. The study is a very diligent one and shows great accuracy. A similar one again is that done by C. Scott about Peterhead and there are many others.

This animated interest in the problem stimulated and instigated by Alison and the Association - had many fruits. Among these was that the town councils of thirteen of the principal towns in Scotland, including Edinburgh, Glasgow, Paisley, Greenock, Ayr, Perth, Dundee, and Aberdeen, "after making some inquiry into the destitute condition of their poor, and the inadequacy of the existing means for their relief", petitioned Government, almost all unanimously, for an official inquiry in the view to "some modification and a more uniform enforcement of the law".⁽¹⁾

Besides, the General Assembly of the Church of Scotland made a strong representation of the inadequacy of the (then) existing provision for the poor in Scotland. It is interesting to notice that the General Assembly in describing the sufferings of the poor, included among them, their exposition to ravages of diseases. In their own words,

"The condition of the poor, also, suffering too frequently under privations such as it could scarcely be conceived possible

(1) Alison, W.P., Further Illustrations of the Practical Operation of the Scotch System of Management of the Poor. (From J. Stat. Soc. 1841, Vol. IV), London, 1841, p.7.

that a Christian country could tolerate, or that human nature could endure, exposed to the ravages of disease, the contamination of vice, and temptations to crime, hard, in their circumstances to be resisted, - is forcing itself on the notice of the community. That means have been partially adopted for the remedy of these social grievances, is a cause of thankfulness to him. That these means have been so inadequate, is a matter of reproach and blame to the Church and the country".⁽¹⁾

These were some of the practical fruits of the anti-poverty movement. Naturally most of the credit goes to Alison who during 1840 and 1841, continued to carry out an immense educational campaign in this field. He published a second edition of his pamphlet "On the Management of the Poor". Again, he addressed a meeting of the British Association for the Advancement of Science at Glasgow in September, 1840.⁽²⁾ In this meeting all the lights were concentrated on the problem of poverty and the diseases bred by it. Thus in addition to Alison's paper, which was a strong defence of his characteristic idea, there were other papers which espoused the same idea by Dr. A. Watt, Captain Miller and Professor R. Cowan. Besides, in this meeting Alison was involved in long discussions to prove his point of view and to answer the opposite trends of thought. Again, Alison, in 1841, read a paper on the same subject before the Statistical Society of London.⁽³⁾ Both these papers were published.

(1) Pastoral Address, Relative to the Appointment of July 22nd, 1841, as a Day of Humiliation, Thanksgiving and Prayer. Edinburgh, July, 1841, p.3.

(2) J. Stat. Soc. 1840, Vol. III, p.209.

(3) J. Stat. Soc. 1841, Vol. IV, p.288.

The Opposition to Alison's Movement

This movement was not welcomed by all the quarters in Scotland. There were some who were extremely opposed to the inquiry into the conditions of the poor. Dr. S.S. Alison says in this respect,

"Great exertions were made by the landlords, and the clergy to prevent a Government inquiry into the condition of the poor of Scotland. It was gravely asserted that the people were exceedingly comfortable; that to give the poor a legal claim to assistance, such as exists in England, would destroy the character of the nation, remove the much vaunted characteristic of Scotland, the independent spirit. One clergyman had the presumption or folly to assert, in a printed report, that the Scottish administration of the poor-law had attained as near as possible to a state of perfection".⁽¹⁾

These angry feelings were expressed not only towards Alison's movement but even towards those who contributed to the Sanitary Inquiry in Scotland. Thus Dr. S.S. Alison, one of these contributors says, "The Sanitary Report of Mr. Chadwick, gave ample testimony of the destitute condition of the poor of Scotland. ... The curtain was lifted, the veil was torn aside, and destitution, grave, terrible and pressing, was revealed - a destitution pressing down thousands to the dust, cheerless and hopeless. ... It was felt that the credit of Scotland's better and richer classes was involved, efforts were made to

(1) Alison, S.S., "The state of the Poor in Scotland". London Medical Gazette, 1844-45, Vol. I, (Vol. XXXV), p.311.

impugn the statements, and to throw discredit on the witnesses. Many of the lawyers, and not a few of the clergy - we say it to their shame - thus endeavoured to stifle the voice of humanity, and having long deprived the poor of their rights, desired still longer to withhold from them that relief to which they were entitled by Act of Parliament, by religion, and common charity. . . . We told the truth as it was known to us, and, in our simplicity, dreamt not that the statement of truth could create angry feelings, though it might be unpalatable to some. In so good a cause, we feared no evil, but we were soon disabused of our error" (1)

An association was made "for opposing any official inquiry into the management of the poor in Scotland". This was mainly formed by the old managers of the poor. They alleged that it was absurd to "tamper with the Scottish Poor Laws" which were known by experience to "work so well, and produce "the happiest effect on society". (2)

W.P. Alison describes the reaction of certain classes to the movement saying, "Again we must expect that a very large and influential part of the middle and upper ranks of society in this country (as, I presume in all others) will take no further interest in this question, than to inquire into the cost of the poor, and will always be most ready to support those men and those measures which are the most economical". (3)

(1) Alison, S.S., "The state of the Poor in Scotland". London Medical Gazette, 1844-45, Vol. I, (Vol. XXXV), p.311.

(2) & (3) Alison, W.P., Remarks on the Report of Her Majesty's Commissioners on the Poor Law of Scotland, Edinburgh and London, 1844, p.135.

In addition to this hostility of certain classes against the Anti-Poverty movement, there was some antagonism against it, on scientific and ideological grounds, by a powerful group including some of the leaders of thought in Scotland. Alison, in his discussions, was asking for a new Poor Law which will provide legal relief for all the poor including the unemployed able-bodied, which will enforce legal assessment, and which will introduce an administrative machinery of poor relief similar to that of England. The above-mentioned group, for what they thought the interests of the whole society, were extremely prejudiced to the idea of making relief legal and compulsory. They were influenced by the views of the contemporary political economists, and were reflecting the prevalent trends of thought on poverty. They were afraid that legal liberal relief of poverty will kill the virtue and spirit of independence, and thus they were only in favour of the existing parochial system of relief to the crippled and infirm. This group was headed by Thomas Chalmers and David Monypenny. There had been an old controversy on this subject between Chalmers and Alison, and this was stimulated and heated by the new movement. This was manifest in pamphlets and articles framed by each of them to oppose the other's point of view. Thus in answer to the purposes espoused by the Association for

(1)

Inquiry into Pauperism and to Alison's views, Chalmers published a pamphlet titled "On the Sufficiency of the Parochial System without a Poor Rate, for the Right Management of the Poor", 1841. To this, Alison replied with another pamphlet titled "Reply to Dr. Chalmer's Objections to an Improvement of the Legal Provision for the Poor in Scotland", 1841.

Again David Monypenny who took Dr. Chalmers' side, in answer to Alison, published a pamphlet titled "Proposed Alteration of the Scottish Poor Law and of the Administration thereof as Stated by Dr. Alison in his 'Observations on the Management of the Poor in Scotland' Considered and Commented on", 1840. In reply to this, Alison published another pamphlet in 1840. David Monypenny in turn answered him in a second pamphlet entitled "Additional remarks on the Proposed Alteration of the Scottish Poor Law". Again in the meeting referred to on page of the British Association for the Advancement of Science at Glasgow, Alison and Chalmers entered into a long discussion on the subject. This controversy between Alison and Chalmers attracted much attention and was echoed in the press and literature of the

(1) Dr. Thomas Chalmers (1780-1847), theologian and philanthropist. The name of St. John's Parish is much attached to his name, as, when he was a minister there in 1820-30, he put into effect his idea about the ideal method for dealing with poverty. He undertook the whole management of pauperism in the parish, and introduced his well-known scheme which succeeded in lowering the cost of relief of the poor to one-fifth. This scheme was always referred to in the discussions of the forties about poverty. He was Professor of Moral Philosophy, St. Andrews in 1823-8, and Professor of Divinity, Edinburgh in 1828-43. He was an active pioneer of the movement which led to the disruption of the Scottish Established Church, and the formation of the Free Church, 1843. He was Principal and Divinity Professor of the Free Church College, Edinburgh, 1843-7.

period, and I think it helped considerably to arouse the interest of the public in the problem of the poor.

Among Chalmers's arguments against Alison, there is one which deserves particular attention. This is the one in which he could not conceive that Medicine should be concerned with economic and social conditions, or that the physician should be listened to in deciding on political and economical policies. He says, "It is political economy, and that alone, which has to do with the minor proposition, and ere we give ourselves up to the authority of those new advocates for a poor rate, we must make sure not only that they are able physicians, but sound economists. It is always thus, when, with but the authority earned in one science, men step forth of its legitimate boundaries and make unwarrantable invasion on another. The professors of the art medical did right, when they repelled the inroad of the old astrologers. ... They did well in warding off the incursion made upon their own territory. But let them not in turn, and by a sort of reverse astrology, make incursion on other sciences and other territories not their own".⁽¹⁾

There was another opposition for Alison's movement and ideas furnished by this part of the medical profession in Scotland who followed the theory of Chadwick and the Sanitary school about the causes of disease. We can find in the Scottish medical literature of the period, some articles defending the⁽²⁾

(1) Chalmers, T., On the Sufficiency of the Parochial System without a Poor Rate, for the Right Management of the Poor, Glasgow, 1841, p.183.

(2) British and Foreign Medical Review. Oct. 1844, p.510. Cited by Watt, A., The Vital Statistics of Glasgow for the years 1843, 1844, Glasgow, 1846.

sanitary idea against Alison's views, and we can find answers and replies to these by Alison's disciples. It was also in 1842, at the time when Alison was most involved in his movement, that the Reports on the Sanitary Inquiry were published. These contained much opposition and a great amount of controversy against Alison's ideas. Again, this controversy attained a greater publicity when it was echoed in the Parliament in 1844. On the 26th July of this year the Marquis of Normanby made a speech in the House of Lords, in which he attacked the view that disease was bred by poverty. (1) He repeated to the House all the reasoning of Chadwick and Arnott in this respect and all their arguments which were included in the Sanitary Report and Health of Towns Report. This of course added to the publicity of this controversy.

Naturally this medical controversy was exploited by Alison's opponents. One of their main arguments was that his concept of the relationship between poverty and disease, - this concept which was his most convincing reasoning against poverty, was not agreed on by the whole of the medical profession. Thus T. Chalmers says that much value cannot be attached to Alison's reasoning in this respect because "professional and eminently scientific men ... are nevertheless most widely and yet, most hopelessly, at variance among themselves". (2)

(1) Hansards Parliamentary Debates, 1844, Vol. LXXVI, p.1472. N.B. Dr. A. Watt, one of Alison's disciples, who was quoted by the Marquis of Normanby, replied to his arguments in his pamphlet about the vital Statistics of Glasgow in 1843-44.

(2) Chalmers, T., Op. Cit., p.181.

The Poor Law Inquiry in Scotland, 1844

In spite of the opposition to the anti-poverty movement, it succeeded in inducing the Government to direct an official inquiry into the Scottish Poor Laws. The Government appointed seven commissioners, six of them were Scottish and one, E. Twisleton, was English, to carry out this inquiry in 1843; the report of the Commissioners was published in 1844. It is interesting to notice that the concept of the relationship between poverty and disease was reflected in the Commissioners' report. They summoned Dr. Alison and specially asked him to give evidence as to the connection between destitution and health. Also, in their examination of other witnesses, especially medical men, they always asked about the extent of fever, about its origin and causes of spread, and the views of the witness as to its relation to destitution. One of their common questions was the effect of destitution on the public health. In their final report and conclusions they showed that they were quite aware of the view that destitution played a role in the spread of disease, although this did not influence much their decisions. They say, "There may be said to be three distinct opinions on the subject. The first is stated in the Sanitary report, and attributes the spread of fever to filth and defective sewerage; the second would ascribe the evil to an overcrowded population, the third to destitution. We believe it to be true that wherever fever prevails, one or more of these concomitants will be found to exist. But as to the amount of influence which all or any of such causes may have on the diffusion or origin of disease,

we feel that it would be presumptuous in us to offer an opinion, where medical men of the greatest experience are not agreed.

We give Dr. Alison's opinion in his own words".⁽¹⁾

After that the Commissioners quoted other medical men holding different views and concluded,

"Notwithstanding the discrepancy of opinion in the medical evidence, we believe that it will be generally admitted, that wherever the constitution is weakened by destitution, dissipation or unhealthy atmosphere, or any other cause, the susceptibility to contagion is greatly increased, and we most cordially concur in recommending that Legislative measures should be adopted to remove the causes which tend to predispose the poorer classes to attacks of epidemic disorders".⁽²⁾

In another place they say, "we have held the allowances now made to impotent paupers to be too small, and we have, therefore, in providing means for bringing an enlightened public opinion to bear on the amount of relief to be allowed, applied a remedy to this evil which we trust may prove effectual. If the result shall answer our confident expectation, a large mass of the wretchedness which becomes at the present time the prey of epidemical disorders, and through which such disorders are more widely diffused, will be taken out of the way".⁽³⁾

Again they say, "That the great mortality of some of the large towns in Scotland, arising from fever or other epidemics, may be

(1) & (2) Report from Her Majesty's Commissioners for enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. B.P.P.1844 (557) XX, pp.xxvii;xxviii.

(3) Ibid, p.liii.

fairly ascribed to the less comfortable condition of the labouring and pauper population, we do not presume to dispute". (1)

It is also interesting to notice that Alison's idea was supported by quite a considerable number of the witnesses examined by the commissioners. In the evidence they laid before the commissioners it was clear that many had realised and were convinced with the responsibility of destitution for disease, and they tried to prove the connection between the two from their observations and experience. I shall quote from the report and its appendix some of the evidences which were given in favour of this view.

W.W. Gray, Surgeon, Irvine, says, "Last year we had more fever than usual. I attribute the fever to the hardness of the times. The poor had a greater difficulty in obtaining proper diet. I observed, even in going to the houses of those who were not paupers, that they were partaking of a diet which I deemed not sufficiently nutritious. ... The fever selected the poorest, and was confined to the most wretched of them, or nearly so. The persons attacked usually lived in damp, low, ill-ventilated apartments, and, perhaps, the fever was partly owing to that cause. But I think that their living in low, damp unwholesome houses, is a consequence of their poverty. I observed, during the depression of trade, that operatives descended to worse apartments than they had formerly occupied. I have observed that the fever was most prevalent in lodging

(1) Report from Her Majesty's Commissioners for enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. B.P.P.1844. (557) XX, p.lii.

houses, and in other rooms where the poor were most closely huddled together; but then, I think again that their being so closely huddled together in lodging houses and elsewhere, is, to a certain extent, a consequence of their poverty. ... During the late depression of trade, I think there was likewise more low drinking than in other times. ... Persons in a low state of poverty, deprived of their usual employment, in a depressed state of mind, without sufficient food or sufficient clothing, have naturally a craving for stimulants. In this way I account for the excessive drinking among the lower orders during the late depression of trade. It was not so much the intemperance that caused the poverty as the poverty that caused the intemperance".⁽¹⁾

Another witness was W.H. Forrest, Surgeon, Stirling. The following is his evidence as given by the report.

"There have been 240 cases of fever within the last six or eight months. He (witness) thinks the late fever is connected with poverty and want of proper sustenance, and with the dirty habits of the people. Witness has seen no cases of this disease among persons who had a sufficiently nourishing diet".⁽²⁾

In a report subjected to the Commissioners on the state of pauperism in the town of Stirling the same witness says, "The poor of Stirling suffer chiefly from fever. ... That this disease will continue to prevail, there is every reason to believe. The causes favourable to its production continue

(1) & (2) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844. Appendix Pt. III, B.P.P.1844 (565) XXII, p.502; p.210.

unabated, and are rapidly acquiring fresh vigour from the increasing wants and privations of the poor. Fever may be emphatically called the poor man's disease. It is seldom absent from his abode, and not unfrequently his whole household are its victims....."⁽¹⁾

I shall also extract a part of Dr. Templeton's examination before the Commissioners.

- Q. Have there been infectious diseases lately in Aberdeen?
- A. Yes, we had a severe epidemic in the beginning of 1837, and terminating in the end of 1840.
- Q. Can you state a cause for its extension after making its appearance, - say from the miserable circumstances of the lower classes?
- A. Yes, it spreads most rapidly amongst those who are in miserable circumstances, we find it so in all cases - among those who want food and clothing and among the inmates of houses which are too much crowded"⁽²⁾

Not only medical men but other witnesses too showed that they were impressed with the effect of poverty on health. For example a magistrate's evidence was, "Interrogated whether from his experience, he thought there was any danger of persons being allowed to die of starvation in the town of Ayr?", "answers there would be danger, in some seasons, of death being hastened by want of means of subsistence". Interrogated, "Do you think

(1) Report from Her Majesty's Commissioners for enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. III, B.P.P.1844 (565) XXII, p.973.

(2) Ibid., Appendix Pt. II, B.P.P.1844 (564) XXI, p.620.

such danger would be met by voluntary contribution?", answers, "it would be met to the extent of preventing starvation, but not to the extent of preventing privations which would impair the health".⁽¹⁾

A witness from Dundee - L. Davidson, a surgeon, also says, "Fever has been remarkably common for the last two years. ... I am very much inclined to trace it to want .. to destitution .. I should say (that persons attacked by it have generally been in destitute circumstances) ... Sometimes, (in attending the poor on the roll, I have found difficulty in treating their cases properly, from not being able to provide nutritious diet). The greatest difficulty is in cases of convalescence from fever, whether the patients have been treated at their own houses or have been recently dismissed from the infirmary. I refer to the want of food and clothing".⁽²⁾

Besides, poverty was held in the evidence responsible not only for fever but for other diseases too. "Fever", says Alison, "is by no means the only one which afflicts humanity the more, as unrelieved destitution is more frequent. I formerly⁽³⁾ stated in evidence that this is true of almost all mortal diseases". One of the most interesting evidence laid before the commissioners was connecting the frequency of mental diseases with poverty. That was the evidence of Dr. William Hutcheson, physician of the

(1) Report from Her Majesty's Commissioners for enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. I, B.P.P.1844 (563) XX, p.699.

(2) Ibid., Appendix Pt. III, B.P.P.1844 (565) XXII, p.118.

(3) Alison, W.P., Remarks on the Report of Her Majesty's Commissioners on the Poor Laws of Scotland, Edinburgh and London, 1844, p.201.

Royal Asylum for Lunatics, Glasgow. He says,

"There is one thing which I have noticed in my last report - the increase of cases traced to intemperance and want. For some years the number of patients, whose malady may be attributed to these causes had been increasing. In the 29th Report, p.36, this subject is noticed as follows: "Next to hereditary predisposition, the most frequent causes of the disease in the cases admitted last year were intemperance and want. For some years the number of patients whose malady may be attributed to these causes has been increasing. The increase has been among the lower classes. In 1841, the cases which could be traced to intemperance were thirty, in 1842, they were forty-six. In 1841 those arising from want amounted to five, in 1842 to seventeen. I have no doubt that the cause of the increase of both is manufacturing and commercial distress, giving rise to lowness of wages and want of employment. It may be said, that when wages are low, and occupation difficult to be obtained, men will have less money to spend, and consequently will drink less. A pretty extensive observation of the different grades of the working classes, for upwards of fifteen years, has convinced me that this opinion is erroneous; for I have generally found that want and intemperance go hand in hand ... Whenever a man falls below a certain point in physical comfort, he becomes reckless, and sensual enjoyment forms his only pleasure. ... the habits of intemperance are frequently acquired in seasons of distress, which the individual in more favourable circumstances, finds it impossible to lay aside ...

Q. In what precise way does want, in your opinion, operate to produce lunacy?

A. In two ways, first it reduces the system, and brings on disease. Lunacy is a physical disease; the mind is manifested in a morbid manner, in consequence of the body being diseased. Want shatters the system, it also makes the individual seek sensual enjoyment, it makes him reckless.

Q. Depression of mind is produced?

A. In some cases there is depression of mind also, resulting from constant suffering and misery; hope deferred leading to perfect despair".⁽¹⁾

There are also many evidences given in the report about the diffusion of fever as a result of the wandering of the destitute unemployed operatives from one town to another in search for employment. Many medical men reported that these travelling unemployed poor labourers, who used to aggregate in overcrowded lodging houses, were often the original cause of fever epidemics. The following statements are few examples of a great amount of similar evidence on the report.

(a) "Fever was introduced by operatives who came from another town - having the disease at the time of their arrival. I could not get relief for them, because they had no settlement here".⁽²⁾

(1) Report from Her Majesty's Commissioners for Inquiry into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. I, B.P.P.1844 (563) XX, p.481.

(2) Ibid., Appendix Pt. III, B.P.P.1844 (565) XXII, p.508.

(b) "There was lately a good deal of fever in - generally brought by contagion, by persons coming as beggars from Glasgow and Paisley. . In some cases, I could trace it to no other cause than destitution".
(1)

(c) "I believe fever was first introduced by wandering unemployed people of whom there are so many going about
(2)
Generally the fever patients were destitute".

(d) "Fever was brought into town by vagrants and spread from beggars' lodging-houses through the town. . Almost all the epidemics with which the town was attacked have been introduced by vagrants".
(3)

(1) (2) (3) Report from Her Majesty's Commissioners for Inquiry into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. III, B.P.P.1844 (565) XXII, p. 419; p.569; p.672.

N.B. For similar statements also see Appendix Pt. III, pp. 412, 333, 404, 460, 839, 657, 690.

THE INFLUENCE OF ALISON

In the evidence laid before the Poor Law Commissioners one can detect that the current thought of the country had been influenced to some degree by Alison's ideas. Again one can ascertain this influence from the contemporary Scottish periodicals and literature at the time of Alison's campaign. In these periodicals there were many instances of a new outlook towards poverty and a greater interest in its problems. Many writers were treating poverty in a new way and many proved to be impressed by the relationship between poverty and disease. Many of Alison's publications were summarised and favourably commented upon in the Scottish periodicals in Edinburgh and Glasgow. Among these periodicals were the Edinburgh Medical - Surgical Journal (1) and Blackwood's Edinburgh Magazine, (2) Glasgow Argus (3) and many others. Further, in the very many numerous pamphlets and works on poverty which were stimulated by Alison's teachings and which were published in the forties, he was greatly quoted and was highly admired and praised. In illustration, in the Chadwick collection in the British Museum, there are two volumes containing pamphlets about Scottish Poor Law. These are the remainder of a series of at least four volumes about that subject which were originally owned by Chadwick. Almost every pamphlet in these two volumes quoted Alison's writings and spoke highly

(1) Edinburgh Medical and Surgical Journal, 1840, Vol. LIII,

&

(2) Blackwood's Edinburgh Magazine, 1840, Vol. XLVIII, p.819.

(3) Glasgow Argus 30th May and 3rd, 6th and 10th June, 1844.

of his views. The idea of the responsibility of destitution for disease was admitted in many of these pamphlets and it was often adopted as an important reason for the relief of poverty. Again the long discussions between Alison and Chalmers were echoed and commented upon in the periodicals of the period. One can see from the different commentaries on these discussions how the public opinion was influenced by Alison, and how his line of thought has impressed a great many. For example a Glasgow paper in its comment on the two controversial pamphlets written by Dr. Alison and Dr. Chalmers, takes the side of Dr. Alison and introduces its comment saying, "Our readers are aware that we have, again and again, called attention to the fearful extent of destitution and suffering among the poor in our land, and to the sad effects thereof on the health and on the morals of the people"⁽¹⁾

In 1848, after the hard struggle of 8 years, Alison happily records that there was a definite change in the public opinion and in the general trend on the subject of poverty, and that his ideas were at last almost generally accepted. He says, "I hope I may be allowed to take this opportunity of expressing the sincere thankfulness with which I have observed, that the confidence I have always expressed as to the ultimate prevalence of truth and justice on this subject, has been already so far justified"⁽²⁾.

(1) Pauperism. On the Right Management of the poor in Scotland (Chadwick collection on Poor Law, Scotland, Vol. 1).

(2) Alison, W.P., Letter to the Chairman of the Edinburgh Parochial Board, on the Present Position of the Question Relative to the Claim of the Able-Bodied Unemployed to Legal Relief in Scotland, Edinburgh and London, 1848, p.v.

Besides, the anti-poverty movement and Alison's writings had also greatly influenced the Scottish medical thought of this period. Thus one finds in the medical and the public health literature then, many instances which show the strong impression which Alison had made on his contemporaries. There are many medical works at this period in which one can see Alison behind the lines, and which profess great faith in the concept relating to poverty and disease.

An example of these are the statistical reports of Glasgow written by Alexander Watt, the City statistician. The author in these reports espouses with enthusiasm the concept of the responsibility of destitution for disease, and tries to collect and arrange his statistical data to prove it. This was evident in his report of 1842 and again in that for (1843 and 1844). In both he tries to relate the mortality figures of Glasgow to the material prosperity of the people. He introduces his report about 1843-1844 saying, "as..., however, it appears that there is yet some difference of opinion as to the connection between destitution and fever, additional facts are stated bearing on this important subject, and tending to prove that these effects, instead of being casual, are uniform".⁽¹⁾

He compares the mortality figures of 1843 and 1844 in Glasgow. During 1843 there was a great distress and severe privations among the working classes. While the year 1844, he says was "a year of great commercial prosperity, when labour was in

(1) Watt, A., The Vital Statistics of Glasgow for 1843 and 1844. Glasgow, 1846, p.12.

sufficient demand and the wages good, and when food was cheap, abundant, and of excellent quality, arising from a succession of abundant harvests".⁽¹⁾ He states that in 1844 most of the extensive manufacturers could not obtain enough operatives, to an extent that advances of wages were offered to the workers; while in 1843 there were great masses either unemployed or only partially employed. He relates these conditions with the mortality figures -

In 1843 the mortality was 1 in 31.82 and

In 1844 it fell to 1 in 42.29.

He further furnishes a table (Table Fourth) of the number of burials in different burying grounds in the town in both 1843 and 1844. As there were special grounds exclusively used for those buried at the expense of charitable institutions, he was able to calculate the proportion buried at the public expense in each year. "As every precaution", he says, "is taken to prevent coffins and ground from being granted to those who can afford to pay for them, we can have no better proof that the parties were in poor and destitute circumstances".

It appears from his data that the number of total burials in 1843 were high, and that there was a big decrease in 1844. But it also appears that 71.42% of the whole decrease in burials in 1844 had been among that class of destitute who in 1843 were buried at the public expense. And even apart from those burials at the public expense, the decrease which occurred in 1844 in the other burying grounds had been greatest in those in which

(1) Watt, A., The Vital Statistics of Glasgow for 1843 and 1844. Glasgow, 1846, p.112.

the greatest amount of the labouring classes were buried. He gets the same result in comparing 1842, a healthier year, with 1843. He also shows that the same thing had occurred in 1818-19 and in 1837.

He concludes that almost the whole excess of mortality in 1843 took place among the poorest of the people, and that the great amelioration in health in 1844 was similarly confined almost entirely to this class of the population.

He concludes therefore "The results brought forward for late years show that it is among the poorer classes alone that the great mortality of Glasgow is to be found, and there is perhaps no town of a more healthy character than this city, for the wealthy, and those in comfortable circumstances".⁽¹⁾ He also states,

"From the numerous facts now elicited, the causes of excessive mortality cannot be stated without destitution holding a very conspicuous place among them".⁽²⁾

He also says,

"There is abundant evidence to prove that a high mortality from fever, as well as from other diseases, during the time of unusual destitution among the poor, is a uniform result, and there appears to be every reason to believe that had the wants of the poor been fully supplied during 1843, the fever of that year would have been much more limited in its effects".⁽³⁾

A. Watt in his report was always referring to Alison ideas and writings. In the appendix he stated that at the

(1) (2) (3) Watt, A., The Vital Statistics of Glasgow for 1843 and 1844. Glasgow, 1846, p.112; p.110. p.110.

suggestion of Alison, he carried out an inquiry among the district surgeons of Glasgow, "in order to render the evidence more complete in regard to destitution or want of employment being the chief cause of diffusion of fever".⁽¹⁾

He sent a circular to them, and all the answers received by him agreed that fever was related to destitution. I shall quote one of them as an example,

D. Walker (surgeon) said,

"Sir, - In answer to your note of the 25th instant, I have to state, that I am of opinion that the cases of disease and mortality which occurred among the destitute poor who came under my care in 1843, were chiefly in persons who had little or no employment, and, so far as I could see, this arose from there being no demand for their labour".⁽²⁾

It is interesting to notice that A. Watt was accused of "warring on the side of philanthropic Alison" in a comment on one of his reports in the British and Foreign Medical Review.⁽³⁾ Again A. Watt in his report, replied to the speech referred to before of the Marquis of Normanby in the House of Lords, the speech in which the Marquis attacked the view relating disease to poverty and in which he expressed the views of Chadwick and Arnott. Watt answered the arguments of the sanitary school in this speech and defended Alison's concept.

(1) & (2) Watt, A., The Vital Statistics of Glasgow for 1843 and 1844. Glasgow, 1846, p. 123; p.124.

(3) British and Foreign Medical Review. October, 1844, p.510. Cited in Watt, A., Ibid.

Professor Robert Cowan is another example which illustrates how the trend of thought of the Scottish medical school had been at that time greatly impressed with the relationship between poverty and disease. He was the Professor of Medical Jurisprudence and Police in the University of Glasgow and he was wholeheartedly supporting Professor Alison in his movement. He supplied him with many statistics and data about Glasgow in favour of his arguments. This is quite evident from Alison's different pamphlets. Again in 1840, Cowan published a paper titled "Vital Statistics of Glasgow, illustrating the Sanitary Condition of the Population". He read it to the Statistical Section of the British Association for the Advancement of Science, in September, in the same meeting at Glasgow in which Alison read his paper titled "Illustrations of the Practical Operation of the Scottish System of Management of the Poor". Cowan's paper backed up Alison's idea and was another strong support, in this meeting, of the concept relating disease to poverty. He prefaced his paper by quoting "Quetelet" who said,

"La misere, avec les privations qu'elle amene a sa suite, est une des causes les plus influentes sur la mortalité".⁽¹⁾

Cowan also says in this paper, "The prevalence of epidemic diseases depends upon various causes but the most influential of all is poverty and destitution. In every one of the epidemic fevers which have ravaged Glasgow, its progress has

(1) Cowan, R., "Vital Statistics of Glasgow illustrating the Sanitary Condition of the Population". J. Statist. Soc. 1840. Vol. III, p.257.

been slow, unless extreme destitution has existed; and it is only when contagious fever, that unerring index of destitution, has prevailed, and influenced the selfish fears as well as the benevolent sympathies of the inhabitants that any active, although temporary, measures have been taken to alleviate the existing distress. The fever abates from want of "material", and the wants of the poor remain unnoticed till its next recurrence".⁽¹⁾

He gives in his paper tables of fever patients in each year in Glasgow, and he concludes from these that the years in which they are most numerous are those in which destitution most prevailed. In this way he demonstrates that destitution is "the cause and effect of the prevalence of fever" and that they are inseparably linked together. "Food, fuel, and clothes", he says, "are the best preventives of fever. ... In short, if those who officially come into contact with the mass of crime and disease in our public courts and hospitals, be asked to what it is mainly to be ascribed, the uniform answer will be, 'to destitution'".⁽²⁾

In this paper Cowan answers the common objection that it is the overcrowding and not the destitution itself which causes epidemic fevers. He maintains that it is poverty and poverty alone which is the real cause of the overcrowding of the poor in the most insanitary districts of the large towns.

(1) & (2) Cowan, R., "Vital Statistics of Glasgow illustrating the Sanitary Condition of the Population". J. Statist. Soc. 1840. Vol. III, p.288; p.239.

He says in that respect, "The next cause of the diffusion of epidemic diseases is the state of the districts which the poor inhabit. But they have no choice of a locality; their state of destitution ties them firmly to one, and the increasing amount of destitution is annually adding to the density of the population in the already most densely populated districts".⁽¹⁾

The same trend of thought about the relationship between poverty and disease is exhibited in another work by Dr. Cowan "Statistics of Fever in Glasgow for 1837" which was read by him to the Statistical Society of Glasgow⁽²⁾ in 1838 and was reprinted in the Lancet.

Alison quoted in one of his works a remark repeatedly made to him by Dr. Cowan in conversation on this subject. The remark is "Turn which way we will, in seeking for the causes of these epidemics of fever; destitution stares us in the face, - the main cause of all".⁽³⁾

Another example of the influence of Alison's movement on the Scottish medical school of thought at this period is the appearance of a work by Dr. Perry of Glasgow, "Facts and Observations on the Sanitary State of Glasgow in 1843 &c.". In this work Dr. Perry explains the extensiveness

(1) Cowan, R., "Vital Statistics of Glasgow illustrating the Sanitary Condition of the Population". J. Statist. Soc. 1840. Vol. III, p.290.

(2) Cowan, R., Vital Statistics of Glasgow, (I) Statistics of Fever and Smallpox prior to 1837; (II) Statistics of Fever for 1837; (III) Remarks Suggested by the Mortality Bills, (Read to the Statistical Society of Glasgow April, 1837 and May, 1838), Glasgow and Edinburgh, 1838, pp.33-54.

(3) Alison, W.P., Remarks on the Report of Her Majesty's Commissioners on the Poor Laws of Scotland, Edinburgh and London, 1844, p.199.

of the 1843 epidemic of relapsing fever by stating that "the poor classes of society, had, for the last two years, suffered great privations in the comforts of life, so that their constitutions might be less able to resist external influences of an injurious tendency".⁽¹⁾

He also says, "One striking feature in the circumstances of the thousands who have suffered most from the present epidemic (that of 1843), presents itself; that is, the overcrowded state of their houses; families of 6, 8 or 10 crowded into one small apartment, without a bed to lie on, except perhaps, a quantity of long-used straw or filthy rags"

"Some have imagined, that by destroying these wretched abodes, pulling them down, and building better houses and wider streets, they would remedy the evil. This is taking a very limited view of the distress, and betrays a lamentable ignorance of the cause; for the poor, not having the means to pay for better than they now possess, must still continue to huddle together in dwellings, scarcely fit for pigs".⁽²⁾

"In reflecting on the immense amount of destitution and misery that exists, it is impossible to avoid coming to a conclusion, that there must be something wrong in the state of society, where a population acute in intellect, and fertile in resources, is plunged into such a state of hopeless misery, yearly...increasing in intensity, and extending wider".⁽³⁾

(1) Perry, Facts and Observations on the Sanitary State of Glasgow in 1843, 1844, pp. 5 & 6.
Cited by Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.59.

(2) & (3) Perry, Op. Cit., p.7; p.8. Cited in Alison, W.P., Op. Cit., p.67.

In this work, Dr. Perry published the answers by the district surgeons to an inquiry he organised about the extent of misery and disease among the poor of Glasgow. Many of these answers give further evidence that the medical thought was impressed by the concept relating disease to poverty.

An example of these answers is the following,

"Report from District XVI by J. Ross, District Surgeon: "Here the houses are well ventilated; and I can only account for the prevalence of disease by their great poverty; hence arise insufficient food, fuel and clothing".⁽¹⁾

Other evidences of the influence Alison had on the Scottish medical trend of thought are to be found in the Report on the Sanitary Inquiry in Scotland. Although there are some replies received by Chadwick which were not published in the report, and although there are grounds to think that these were the most favourable to Alison's views, yet even these which were published are sufficient to show the degree to which the medical thought was impressed by Alison's ideas. I have quoted some of these reports on pages (7 - 8) and one can see how Alison was quoted in admiration and how many professed their faith in his ideas. I have also referred to the report about Aberdeen which shows that the committee carrying out the inquiry there had to change the forms of questions sent by Chadwick, because these forms contained no reference to poverty, while the questioned medical men all stressed the influence of

(1) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.74.

poverty on health. One is apt to appreciate more the degree of influence that Alison had, when one compares the two reports about England and Scotland. These are completely different. While that of England is concentrated on sanitation and sewers, that of Scotland devotes a great part to the standard of living of the poor.

Again other evidences of Alison's influence on the medical thought are to be found in the Report of the Poor Law Inquiry in Scotland. This report is remarkable and distinguished from other reports on similar subjects by the agreement of the majority of the medical profession on the responsibility of poverty for disease. I regard this voluminous report as one of the remarkable publications in the history of the development of this concept (see pages - - -).

Furthermore, the Scottish medical school shows this distinctive trend of thought not only during the forties when Alison's ideas were an engrossing topic, but it also continues to keep that distinguishing characteristic trend in later periods in the Century. Alison's influence could be clearly detected in successive generations of medical men which were educated in the Scottish Universities.

For example in 1860, after Alison's death, J.A. Easton, Professor of Materia Medica in the University of Glasgow reads a paper entitled "Poverty in relation to Disease" in the meeting of the National Association for the Promotion of Social Science. In this paper he tries to show how the different elements of poverty lead to disease. He says in introduction, "In entering upon

this subject I submit as a postulate that whatever depresses the vital force is either itself a direct cause of disease, or makes us more susceptible of its power and less able to withstand its attacks. Now that poverty, according to the degree of it present, depresses, more or less, the vital energies of all who are under its deteriorating influence has long been recognised as a fact, both in medical and social science, and, therefore, in discussing the relation of poverty to disease, I have to deal with an acknowledged truism, the proofs of which, unfortunately are as numerous as they are painful".⁽¹⁾

Again in the same meeting of the Association a Scottish medical man, James Fraser reads a paper, "On the excessive Infantile Mortality occurring in Cities and Large Towns". He points out poverty and deficient nutrition as one of the reasons accounting for excessive infantile mortality. He says "it is enough to state, that to debility on the part of the parent while nursing, absence, and poverty, no inconsiderable number of the deaths among the young in cities are to be ascribed".⁽²⁾

Another striking example is to be found in the first Annual Report of the Registrar General in Scotland. In this

(1) Easton, J.A., "Poverty in relation to Disease". Transactions of the National Association for the Promotion of Social Science (Glasgow meeting) 1860, p.655.

(2) Fraser, J., "On the Excessive Mortality Occurring in Cities and Large Towns". Transactions of the National Association for the Promotion of Social Science (Glasgow meeting) 1860, p.651.

report the Registrar General, W.P. Dundas holds that the mortality rates in different years were intimately related with the unemployment and the standard of wages in the respective years. In his own words, "Besides . . . , there are other agencies which powerfully modify these diseases, and their action on mankind. Of these, the most important to consider are the state of trade (including the question as to the wages paid, and the fullness of the occupation), the price and quality of provisions, and the weather".

It is a well ascertained fact, that a bad harvest, which raises the price of all kinds of provisions, is in general attended by an increased mortality; for though the wages of those in full employment may advance somewhat in proportion to the increased price of the provisions, yet so many of the lower classes are so close at all times on the starving point, that the smallest rise in the price of provisions tells on them; and through insufficient nourishment they die in much greater numbers under any and every disease with which they may be seized".⁽¹⁾

Another example is to be found in a report on the Mortality of Edinburgh in 1847 by James Stark. In this year the mortality was exceptionally high. The author accounts for this high mortality in the following way:

"The failure of the potato crop in the autumn of 1846, the deficiency of the corn crop, and the prevalence of

(1) First Detailed Annual Report of the Registrar General of Births, Deaths and Marriages in Scotland (For the year 1855) B.P.P. 1861 [2814] XVIII, p.51.

epizootic disease among cattle, raised the price of all kinds of provisions to a most exorbitant height. The consequence was, that most of the poorer classes who in ordinary years subsist chiefly on oatmeal porridge, potatoes and milk were obliged to substitute unazotized substances, for the highly azotized principle milk, and use other substitutes for potatoes. Very little animal food was used by the lower classes, and milk was too scarce to be obtained by them. The consequence was, that scurvy in all its varied forms made its appearance, and appeared to render all more liable to be affected by the atmospheric vicissitudes and external agencies than if they had remained in vigorous health. This scorbutic tendency was not confined to the poor alone - though it was only among them that the severer forms of scurvy were remarked. ... Hence it happened that during the first quarter of the year, the increase in the number of deaths above the average mortality in Edinburgh was almost solely confined to persons labouring under diseases of the respiratory organs, and to those registered under the head of old age - two classes much influenced by atmospheric agencies".⁽¹⁾

The author then proceeds and attributes the high mortality in the second and third quarters of 1847 to an epidemic of typhus, and the high mortality in the fourth quarter of the year to an epidemic of influenza. He further says, "Having thus noticed the three special causes of the

(1) Stark, J., Report on the Mortality of Edinburgh and Leith for the year 1847, Edinburgh, 1848, pp.8-11.

high mortality of the past year, some allusion may be made to these general causes which have a marked influence on all of them. ... But there is another cause which experience and observation has also shown to have a marked effect on the general mortality, viz., the failure of the crops and the consequent high price of provisions. M. Messance in his interesting work titled "Recherches sur la Population", 1764, showed the close connection between the number of deaths in most of the towns and provinces of France and the price of grain". (1)

(1) Stark, J., Report on the Mortality of Edinburgh and Leith for the year 1847, Edinburgh, 1848, pp.8-11.

Repercussions of Alison's Ideas in England

Alison's movement and writings in Scotland were also echoed to some extent in some quarters of England. Even apart from his students who were practising in England, one finds some other instances there where the influence of Alison was clear and obvious. Some of the English periodicals devoted considerable attention to Alison's works, and echoed his ideas in the southern part of the island. One of these was the London Medical Gazette. On many occasions, this periodical referred to Alison's publications, summarised them, and admirably commented upon them. (1) Thus for example on one of these occasions, it published an article by Dr. S. Alison discussing the Report of the Commissioners for Inquiry into the Scottish Poor Laws, and W.P. Alison's answer to it. The periodical introduced the article with the following,

"Although the Report of the Commissioners for Inquiry into the administration and practical operation of the Poor Laws, and the Remarks of Dr. Alison on that report are not strictly of what may be called a practical medical character, still these documents have appeared to us to embrace medical considerations of the very highest kind, and we have thought that a notice of them in this place would be very much in place. The condition of the poor has important relations with disease, and therefore with the medical profession. Out of their destitution arises

(1) London Medical Gazette 1839-40, Vol. I, pp. 759, 790, 854, Vol. II, pp. 664, 844, 871.

disease, and the future security of the general health depends mainly upon their physical condition".⁽¹⁾

On another occasion, the Journal, in an article about the physical condition of the working classes says, "One is inclined to regret, indeed, that among the six hundred and fifty-eight members of the House of Commons, there is not room for half a dozen sensible physicians, who might act as interpreters between rich and poor, and inform their fellow deputies of the real state of the working classes ... But, for the present, destiny has ordered it otherwise, and as we cannot have Dr. Alison in the House, we must be content with the benevolent speech of Mr. Stanley".⁽²⁾

On another occasion, the Journal quoted from Alison the number of fever cases in Edinburgh, and commented, saying, "These large and increasing numbers to the medical reader can scarcely require a comment. They speak of a state of destitution otherwise beyond all belief, and afford a dreadful example of the workings of Laissez-faire system".⁽³⁾

"We remarked in our last article, that the large and increasing number of fever cases in Edinburgh, would of themselves speak to the medical reader, and required no commentary. ... But, though the fact is trumpet-tongued to the intelligent, an interpreter is necessary to the multitude. The conclusion, then, is that misery is widely spread over the town,

(1) Alison, S.S., "On the State of the Poor in Scotland". London Medical Gazette, 1844-45, Vol. I (Vol. XXXV), p.310.

(2) London Medical Gazette. 1839-40, Vol. II, p.110.

(3) Ibid., 1839-40, Vol. I, pp.762.

and is still extending its grasp. For, as the botanists can tell the quality of the soil from the flowers that spontaneously arise upon it, the physician knows the state of a people from the epidemics which mow it down. ... And the fevers which continually desolate Ireland shew the state of the country better than whole folios of reasoning".⁽¹⁾

It is interesting to notice that the editor of the "London Medical Gazette" who shows such a clear understanding of the relation between poverty and disease - was Roderick Macleod, a student of the Scottish medical school. He was educated at Edinburgh and graduated M.D. there in 1816.⁽⁵⁾

On one of the occasions when the London Medical Gazette quoted and commented on Alison's writings, the Times republished its article.⁽²⁾

Another London periodical in which Alison's writing appeared was the Journal of the Statistical Society of London. This periodical published two of Alison's pamphlets, "Illustrations of the Practical Operation of the Scottish System of Management of the Poor", 1840,⁽³⁾ and "Further Illustrations of the Practical Operation of the Scotch System of Management of the Poor", 1841.⁽⁴⁾ The latter paper was read before the Statistical Society of London.

(1) London Medical Gazette, 1839-40, Vol. I, p.790.

(2) The Times, 27th August, 1840, p. 6f.

(3) J. Statist. Soc. 1840, Vol. III, p.211.

(4) Ibid., 1841, Vol. IV, p.288.

(5) Munk, William, The Roll of the Royal College of Physicians of London, Comprising Biographical Sketches, Vol. III, 2nd Edition, London, 1878, p.243.

The Lancet, although it did not comment on Alison's papers, yet it commented and analysed some of those written by his friends and disciples like Professor Robert Cowan⁽¹⁾ and Dr. A. Watt.⁽²⁾

A very interesting example of the educational influence of Alison's ideas in England is a pamphlet⁽³⁾ published in 1842 about the distress in Manchester and the condition of the labouring classes there. It is clear from this pamphlet that it was inspired by Alison's line of thought. On the title page a quotation from Alison is printed. Besides, the study and the investigation of the condition of the working classes is done along the lines, and with the same spirit distinctive of Alison. Further, in the pamphlet, Dr. R.B. Howard, who was one of Alison's students, publishes a chapter about the effects of poverty on the health, a chapter which shows a deep conviction that poverty is the mother of disease.

Another example of the repercussions of Alison's views in England is to be found in the Reports of the Poor Law Committee of the Provincial Medical and Surgical Association. This was a committee appointed by the Association in 1838 to defend the purpose of the medical profession in the conflict which occurred between the Poor Law authorities and the medical officers of Unions, on the subject of medical relief of the poor, - that struggle which led the Parliament to

(1) Lancet 1838-39, Vol. II, p.145.

(2) Ibid., 1844, Vol. I, p.734.

(3) Adshead, J., Distress in Manchester - Evidence on the State of the Labouring Classes in 1840-1842, London, 1842.

appoint a select committee to investigate the matter. One of the points on which there was much and frequent collision between the medical officers and the administrators of the Poor Law was the subject of the diet of the sick. The 1841 report says in this respect, "respecting the diet of the sick, a subject which, in many unions, has occasioned much unpleasant discussion between the administrators of the law and the medical officers. The frequent directions of the latter for a supply of animal food and cordials to the enfeebled paupers, whose diseases often arise as much from the lack of proper nutriment as from any other cause, have roused the prudent anxieties of the guardians, and excited the sympathies of the commissioners"

"It is difficult to conceive, how the practitioners of an entire country could submit, without public remonstrance, to regulations which prohibit the medical officers from recommending "any additional dietary (except in some very special case) to any of the out-door paupers".

"How can medical men withhold a decided expression of their opinions, when they see the sick poor committed to their care, perishing, or at best struggling through protracted illness for want of 'relief in kind'. Would the philanthropic Dr. Alison of Edinburgh endure prohibition of this nature?" (1)

(1) The Administration of Medical Relief to the Poor, under the Poor Law Amendment Act and Other Legislative Provisions for the Public Health, Considered in the Reports of the Poor Law Committee of the Provincial Medical and Surgical Association ..., London, 1842, pp.92-94.

How Far Alison Succeeded in Influencing Social Legislation?

The Poor Law Amendment Act, 1845

Unfortunately, however, Alison's anti-poverty movement, unlike the sanitary movement in England, had failed to influence markedly enough the legislation of Scotland. It was not echoed to the same extent in the statute book and it did not succeed in directing the legislative trends. The contemporary sanitary movement in England had greatly influenced the development of public health in this country. And one should expect that in Scotland where the problem of health was attacked from a different angle, the public health and social welfare would evolve along different lines, and that they would reflect the trend of the Scottish movement towards raising the standard of living of the people. But I cannot say that this occurred to any marked extent. It is true that the movement resulted in a new Poor Law, "The Poor Law Amendment Act, 1845", but this act did not put into effect many of the important ideas that Alison was fighting for. It maintained most of the old Scottish system for relief of the poor, and it was more a victory of the point of view of Alison's opponents than his.

One of the main objects for which Alison was fighting was that the law should secure the unemployed operatives against poverty during periods of unemployment. However, the law did not give the able-bodied the right of relief. It stated,
"that nothing herein contained shall be held to confer a right
to demand relief on able-bodied persons out of employment". (1)

(1) An Act for the Amendment and Better Administration of the Laws Relating to the Relief of the Poor in Scotland, 24th August, 1845, 8 & 9 Vic. C. 83, Proviso 68.

That was the idea of the majority of the Commission of Inquiry into the Poor Laws of Scotland. The Commissioners expressed themselves strongly against giving the able-bodied any right for relief. In answer to Alison's argument that this right should be given to the unemployed for the sake of the health of the community, they said, that they "cannot hold that the greater prevalence of epidemical diseases in the manufacturing towns of Scotland makes out a case for the radical subversion of the present system of Poor Laws".⁽¹⁾

Their reasons were that the medical views differed about the causes of diffusion of fever and that not all medical authorities agreed about the importance of poverty in this respect. They mentioned in evidence of this the views of Chadwick, expressed in his sanitary report. They argued that as long as the sanitarian's view, "has not been proved to be without foundation", the greater prevalence of epidemic fever in Scottish towns than in English ones might be due to the lower standards of sanitation in Scotland. Therefore, it seemed to them "unwise" to alter the poor laws of Scotland, and give the unemployed able-bodied the right of relief, "in accordance with theoretical speculations" about the causes of fever. "Particularly", they say, "when other causes may be assigned for the evil, which, by such alteration, it is proposed to remedy".⁽²⁾ In this way the commissioners refused

Alison's arguments in favour of giving the able-bodied the

(1) & (2) Report of Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844. B.P.P. 1844 (557) XX, p. lvi.

right for relief. That was not the opinion of the whole Commission. Edward Twisleton, one of the Commissioners of Inquiry, dissented from the report of the majority, and in a special report by himself advised the necessity for giving the able-bodied unemployed the right of relief.

In the discussion of the Poor Law Amendment Act in the Parliament some efforts were made in order to give the unemployed workers the right of relief, but in vain. A motion was submitted for the omission of the proviso, "That nothing herein contained shall be held to confer a right to demand relief on able-bodied persons out of employment", but this was refused. ⁽¹⁾ When this trial failed another was made by moving a more modest motion. This did not give the unemployed the right of relief but only made it lawful for the Parochial Boards to decide, if they wish to, to help the unemployed during periods of temporary distress, provided that such decision would be approved by the Board of Supervision. ⁽²⁾ But even this motion was also refused.

What were the arguments and the point of view of Government and the majority of the House in refusing these amendments? These were the same prevailing arguments of the time, which were always repeated when the problem of poverty was discussed; and they could be taken as a good specimen of the general trend of thought on poverty then. Malthus was behind many of these arguments. That is why Chadwick says when commenting on the Scottish Poor Law Amendment Act that "In relation

(1) & (2) Hansard's Parliamentary Debates, 1845. Vol. LXXXII, p.487.

to Scotland, we were not consulted, and an opposite system founded apparently on the population theory, was adopted, under which the adult able-bodied, as such, have no right to relief whatsoever".⁽¹⁾

Other arguments were the fear of killing the spirit of independence, of injuring the habits of the people, and of teaching them laziness and idleness. The relief of "unemployment", it was feared, would remove that strong stimulus to exertion. The poor were held responsible for their poverty, and it was thought that it was in the interest of the poor themselves that they should not be offered too lavish a measure for relief. Several members criticised that Government would refuse to give the unemployed in Scotland the same rights which the Law had offered to the unemployed in England for a long time. The Government excused itself for such a discrepancy between the two Poor Laws by saying that the prevailing general trend in Scotland was against relief of the able-bodied. In answer for every request that the Scottish Poor Law would give the same rights as the English one, Government stated that the general opinion in Scotland was sticking to the old Scottish Poor Law system, and that Government was acting in accordance with this general trend in Scotland. The general trend must have meant to Government at that time, the trend of the Scottish influential landlords,

(1) Chadwick, E., "On the Comparative Results of the Chief Principles of the Poor Law Administration in England and Ireland as Compared with that of Scotland". Transactions of the National Association for the Promotion of Social Science (Edinburgh Meeting), 1863, p.717.

master manufacturers, and heads of the church. When faced by a Scottish Member of Parliament with the objection that the Scottish Courts had given a decision that the able-bodied poor were entitled for relief according to the old Scottish Poor Laws, Lord Advocate answered, that "there was such a decision; but still the prevailing opinion was that able-bodied persons were not entitled to relief by law. The present bill would leave the law as it is now".⁽¹⁾

Another point in which the Amendment Act disappointed Alison's group was that legal assessment was not made compulsory all over Scotland, and it was still left to the Parochial Boards to decide whether assessment was, or was not necessary. That was also the idea of the Commission for Inquiry into the Poor Laws of Scotland. In this point too, Edward Twisleton dissented from the report of the majority. He described the trend of the Commission in this respect to be in accordance with the prevailing theories that "a provision for the poor creates much of the misery which it relieves, but does not relieve all the misery which it creates".⁽²⁾ These were the theories of Chalmers and the political economists of the time. Fortunately, however, this point of weakness in the Act did not prove to be of great importance, as, during the practical application of the act, the number of assessed parishes increased quickly, although this was not compulsory by law.

(1) Hansard's Parliamentary Debates, 1845, Vol. LXXXII, p.486.

(2) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844. B.P.P.1844 (557) XX, p.lxvi.

The Poor Law Amendment Act 1845, could not be considered as a radical change in the attitude of the legislator towards poverty in Scotland, and it could not be regarded to reflect to a sufficient degree Alison's active movement in this field. In the words of Thomas Wakley, who made great efforts in the House to improve it, "the Bill inflicted the greatest possible injury upon the poor of Scotland".⁽¹⁾ He said that "he had supported the Bill originally in the hope that alterations might be made in it with the view to its improvement, but, unfortunately, the many alterations in it were anything but improvements, and as it now stood, it never would work well for the poor".⁽²⁾

By another member of the House, the Bill was termed "a landlords' Bill".⁽³⁾

In conclusion, I think I am entitled to say that Alison's movement did not succeed in influencing the legislation of Scotland to a marked extent, and that it left very little effect indeed in the statute book. It was a movement ahead of its time. It was far away from Westminster, and was against the general trend of thought of the influential classes about poverty. It was not the philosophy needed or fitted for the growing Industrial revolution, and could hardly suit this new ruthless competitive life. The community, who had adopted the new ideals and the new ethics of wealth and power was in need

(1) Hansard's Parliamentary Debates, 1845, Vol. LXXXII, p.490.

(2) Ibid., Vol. LXXXII, p.792.

(3) Ibid., Vol. LXXXI, p.1465.

of a different language from that of Alison. His language could not serve the purpose of the new economic development. So it was not the language that the new world could want to listen to. That is why, unlike the sanitary movement in England, the anti-poverty movement in Scotland, for no fault of its leaders, failed to influence the evolution of public health and social welfare to a marked extent.

Justice to Ireland Act, 1847

Alison's movement failed in producing an immediate radical change in the attitude of the legislator towards poverty in Scotland, yet it prepared the soil for future changes in legislative trends through its educational influence on the people. It furthered appreciably the growth of understanding on the subject of poverty and disease, and created a considerable public opinion on the subject. And in this way it had led to not very remote consequences in the field of social legislation in Britain.

Among the consequences of Alison's movement, in this respect, there is one which deserves special attention. Through its educational influence and by the creation of some public opinion on the subject of poverty and disease, Alison prepared the way for those who strove along the same lines in relation to Ireland in 1846-47. I shall discuss this question later in much more detail. It is sufficient now to say that those who fought the battle of poverty in Ireland, namely, Thomas Wakley and George Julius Poulett Scrope, used the same language as Alison that poverty and disease were cause and effect. They succeeded where Alison's movement failed. They succeeded in making the legislator listen to their argument that relief of poverty in Ireland was the way of prevention of disease. They were able to make the concept relating disease to destitution echo strongly in the House of Parliament. This was more easily attained as the conditions of famine and disease in Ireland during the Irish Famine were a most impressive

illustration of this concept. Every side of the House and almost every speech admitted this concept, and regarded it as an unquestionable fact. A pamphlet published at that time by Dr. Dominic John Corrigan "On Famine and Fever as Cause and Effect in Ireland",⁽¹⁾ and expressing views similar to those of Alison helped to impress the House with this concept. Wakley and other M.P's read to the House long extracts from it.

It was clear in the discussion then that the House became impressed with the intimate relationship between poverty and disease. Sir James Graham, the representative of Government, stated that he read Dr. Corrigan's Pamphlet. Again he, and other members of Government showed that they were guided by the principles expressed in the pamphlet. The Parliamentary debates on the subject of the Irish Famine are really very interesting. I could quote a large number of passages which repeat very clearly the ideas which had been advocated by Alison for a long time. Food and not physic was the generally admitted way of preventing the spread of epidemic fever in Ireland.

It is no wonder, therefore, that the legislation passed by the House on this occasion to meet the conditions in Ireland, showed a greater understanding than any time before, of the importance of the prevention of poverty for the prevention of disease and pestilence. This was one of the instances in which the concept of the relationship between poverty and disease was at the back of the mind of the legislator. The "Justice

(1) Corrigan, D.J., On Famine and Fever as Cause and Effect in Ireland, Dublin, 1846.

(1)
to Ireland Act" of 1847 was an amendment of the Poor Law on the same lines that had always been advocated by Alison. It was a definite symptom of the growth of understanding on this subject.

I consider that this was partly one of the fruits of Alison's movement, although he did not participate directly in the harvest. His teachings must have been one of the great influences that stimulated and inspired those who fought the Irish battle. His long public strife since 1840 for a greater understanding of the role of poverty in public health instigated, and inspired, those who espoused the "Justice to Ireland" cause. This is possible to prove because those who fought the Irish battle and advocated the same concepts, were in such positions that they could not have helped being influenced by Alison's ideas and activity. Thus, Corrigan, an eminent Irish medical man, was a student of Alison. He was graduated M.D. in Edinburgh in 1825 when Alison was a Professor in this University. Alison had been a Professor since 1820, first as Professor of Medical Police and Jurisprudence, and then as Professor of Institutes of Medicine from 1822 onwards. Moreover, Corrigan was much connected with the Scottish medical school of thought. He published many articles in the Edinburgh Surgical and Medical Journal, and naturally must have been looking mainly to the Edinburgh school for knowledge. Corrigan's pamphlet "On Famine and Fever as Cause and Effect",

(1) An Act to make further Provision for the Relief of the destitute Poor in Ireland, 10. Vic. C.31 [8th June, 1847].

published in 1846, is talking the same language, and is very similar to the numerous pamphlets of the same kind that Alison published since 1840. However, I do not think that Corrigan typified Alison's pamphlets. I do not think so, because ... Corrigan published almost the same pamphlet as a paper in the Lancet in 1830. (1) The pamphlet and the paper are, but for a change of a word or of a paragraph here and there, exactly the same. But one must remember that, since 1820, long before ... Alison began to publish his ideas, he had been teaching to his students the same views and the same reasoning, and that many parts of his pamphlets are taken exactly from his lectures. So it is natural to assume that it was the teachings and lectures of Alison that had guided Corrigan along this line of thought.

Wakley, another of the leaders who fought the battle of Ireland, was the Editor of the Lancet. The type of this work would naturally make him quite aware of Alison's ideas, especially as it is evident that the Lancet was pursuing the Scottish medical literature with great intensity. It is also evident from the Lancet that Wakley was quite aware of Alison's great prestige, and was following his trends of thought. Thus he says on the occasion of the appointment of Alison as the Professor of the Practice of Physic, "Dr. Home, the Edinburgh Professor of the Practice of Physic, has been known for nearly half a century as the very worst lecturer in Europe. He has at length retired, and been succeeded by Dr. Alison. We need

(1) Lancet 1829-30, Vol. II, pp.569-600, and 614.

scarcely observe that Dr. Alison's appointment is judicious....

Dr. Alison is an industrious teacher, a worthy man and a popular professor".⁽¹⁾

Again on the occasion of Chadwick's inquiry into the Sanitary Conditions in Scotland, Wakley says,

"If Cholera or any epidemic threatened, the Home Office would not consult the President of the College of Physicians - but that greater Francopulos than he - Mr. Edwin Chadwick, the learned secretary who has devoted himself to the study of dietetics and arithmetic,"

"Very recently, at a meeting of the managers of the Charity Workhouse, Edinburgh, 'a letter was read from Mr. Chadwick Secretary to the English Poor Law Commission, requesting answers to certain queries relative to the causes of disease and destitution of the poor, and their sanitary condition generally'. The wolf in sheep's clothes. If any inquiries had been made on the part of Government into the sanatory state of Scotland, the people there would have naturally expected the queries to be drawn up and addressed to them, not by Mr. Chadwick - but by Dr. Alison, Dr. Craigie, Henry Marshall, Dr. Cowan, Dr. Cleland, or some other highly-talented and respectable physicians of that part of the kingdom".⁽²⁾

I could not find any comment in the Lancet⁽³⁾ on the many pamphlets published by Alison since 1840; but although Alison's

(1) Lancet, 1841-42, Vol. II, p.791.

(2) Lancet, 1839-40, Vol. II, p.579.

(3) There was great animosity and rivalry between Wakley and between Roderick Macleod, the editor of the London Medical Gazette which devoted great interest to Alison's works !!

pamphlets were not commented on, yet many of the works and papers of his students and followers were analysed and annotated. Many of these works were devoted to prove Alison's views and ideas. An example of these was Dr. Alexander Watt's paper, "The Vital Statistics of Glasgow for 1843 and 1844". This paper, in which Watt declares that he is a disciple and a follower of Alison, and quotes him with admiration, was analysed and commented on by Wakley. In this analysis Wakley points out the author's idea of the relationship between poverty and disease. He says,

"As we intend to revert to these subjects on another occasion, we shall merely mention for the present, that Dr. Watt has found the ravages of fever and of disease generally, among the poor, always to bear strict relation to their destitutive state, increasing as destitution became more general, and decreasing, on the other hand, as the circumstances of the poor improved and their wants relieved".⁽¹⁾

Again, the Lancet published for Robert Cowan, an advocate of the same concept of the relationship between poverty and disease, an article "Statistics of Fever in Glasgow for 1837",⁽²⁾ in which he pointed out clearly this concept.

So it is natural to assume that Wakley was aware of Alison's distinctive trend of thought, and that this might have been among the influences that determined his attitude in the

(1) Lancet, 1844, Vol. I, p.734.

(2) Lancet, 1838-39, Vol. II, p.145.

problem of poverty and disease in Ireland. However, I must say that Wakley's writings and speeches give evidence that he had always been interested in raising the standard of living of the people, and that he was aware of the importance of that in health.

In conclusion I think that Alison's teachings had contributed greatly to the growth of understanding of the influence of poverty on health, and that in this way they had been responsible greatly for the evolution of the "Justice to Ireland" movement. It was he that developed that language which Corrigan, Wakley and Scrope used during the Irish Famine.. this convincing language which had greatly influenced the legislation during this period. That is why I think Alison is entitled to say in 1853 that, his discussions on the influence of poverty on health between the years 1840-45 had "contributed in some degree, as I believe, to the formation of that public opinion on the subject, which attended at least, if it did not assist, the corresponding although tardy, act of Justice to Ireland".⁽¹⁾

(1) Alison, W.P., "On the Effect of Poverty and Privation on the Public Health". Transactions of the National Association for the Promotion of Social Science (Liverpool meeting) 1853, p.434.

Alison's Campaign Pursued After the Poor Law Amendment Act

I have mentioned that the object for which Alison was fighting in Scotland was not fulfilled by the report of the Commission of the Poor Laws of Scotland or by the passage of the Poor Law Amendment Act of 1845. But Alison did not lose hope and did not give up the battle. In spite of his disappointment, he continued in his campaign and he persisted in fighting for his original aims and objects.

Thus, immediately after the report of the Commissioners of Inquiry into the Poor Laws was issued in 1844, he published a long pamphlet in answer to it titled "Remarks on the Poor Laws Commission Report for Scotland and on the Dissent of Mr. Twisleton from that Report" (1844). In this pamphlet he tried to show that the conclusions and decisions of the Commissioners were inconsistent with the evidence laid before them, and that the proposals of Twisleton, who dissented from the majority, were the right ones. Naturally the motive for his answer to the Commissioners was his fear that their suggestions, which were far away from his views, would determine the trend of legislation. That is why he tried by his immediate reply to put before the legislator the other point of view, and to point out the masses of evidences which were presented to the Poor Law inquiry in its favour. As we know, this attempt did not succeed and the Poor Law Amendment Act, 1845, followed closely the lines suggested by the majority of the Commissioners.

However, Alison pursued his struggles. In 1847, he found that the circumstances of the Irish Famine and the similar

Famine in the Highlands of Scotland were a suitable occasion for putting the question again before the public. At that time the "Relief of the Destitute Poor" Act of 1847 had given to Ireland a poor law on the same lines advocated by Alison - a Law that offered to the poor in Ireland many rights which had not been given to the Scottish poor. Among these was the right of relief to the unemployed able-bodied. Alison found this a suitable occasion to demand the assimilation of the Scottish Poor Law to the English and Irish Laws, and to press again his point of view in this respect. He said, "And notwithstanding the strong feeling of distrust (or prejudice as I believe it) which still exists among many respectable persons on this point, I confidently expect that this right (the right of relief of the unemployed able-bodied), - now granted to the inhabitants of every other part of Her Majesty's European dominions, ... cannot be much longer withheld from the inhabitants of Scotland".

He also thought that the Irish Famine with its moving illustrative story of the pestilence bred and nursed by famine, had offered him with a convincing argument in favour of his concepts. He regarded that the history of this famine should infer that "the prudent, and economical, but effectual relief of destitution must, therefore, be the first object of all measures intended to diminish the tendency of a population to suffer from contagious fever".

He therefore found this a suitable occasion to ask his people to reflect on the lessons taught by

(1) & (2) Alison, W.P., Observations on the Famine of 1846-47 in the Highlands of Scotland and in Ireland, Edinburgh and London, 1847, p.72; p.15.

this famine, and to consider again the question of prevention of poverty.

In the year 1848, he found again another occasion for putting before the public the question of the right of relief for the unemployed able-bodied. In this year the two Sheriffs of Glasgow successively gave a judgment that destitution from want of employment furnished a valid claim to legal relief in Scotland. This was confirmed, on appeal, by a judgment by Lord P. Robertson, Lord of Session, in which he regarded as part of the duty of those charged with the administration of this law to give relief in cases of ascertained destitution from want of employment. This judgment was in turn sanctioned by the First Division of the Court of Session. Alison found this incident an occasion for pursuing his attempts in creating a public opinion on this subject, and in establishing a new line of thought. So he published a letter to the Chairman of the Edinburgh Parochial Board on the subject of the judgment of the Scottish courts. In this letter, he again fought for the idea that the society should secure the unemployed able-bodied against poverty. He found in the revolution of France then, the collapse of Monarchy there in February, 1848, and the formation of the Second Republic, ... he found in these occasions lessons to prove his point of view. In this pamphlet, Alison, for the first time, recorded that a change in the public trends had occurred on this subject. He said that the confidence he had always felt as to the ultimate victory of the cause he had espoused had been "already so far

justified; - the great principle of the possibility and expediency of legal relief of destitution, from all causes without exception; being now all but universally admitted and acted upon in this country, with the approbation and sanction of the highest authorities in political economy".⁽¹⁾

He gave the credit of changing the public opinion in Scotland and in establishing an efficient Poor Law in Ireland to the Irish Famine. He considered that but for the existence of the famine in Ireland, all the arguments that could have been employed would certainly have been ineffectual in reaching these ends.

Again in 1850, Alison laid before the public another pamphlet, "Observations on the Reclamation of Waste Lands and their Cultivation by Croft Husbandry Considered with a View to the Productive Employment of Destitute Labourers, Paupers and Criminals". The greater part of this pamphlet was taken from articles which he had published at different times during the continuance of the Irish Famine in Blackwood's Magazine, and in Frazer's Magazine, and from a paper he had laid before the Statistical Section of the British Association. The distress in the Highlands afforded Alison an occasion to continue and pursue his trials to establish a sound public opinion on the subject of poverty. That was the motive behind these different articles which he had published and which he later collected in this pamphlet. In these articles he quotes the moving pictures of

(1) Alison, W.P., A letter to the Chairman of the Edinburgh Parochial Board .. on the Claim of the Able-Bodied Unemployed to Legal Relief in Scotland, 1848, Edinburgh and London, p.v.

poverty and disease in Ireland and in the Highlands, - these pictures which are given by different writers especially "Poulett Scrope" in his "Notes of a Tour in England and Scotland in 1849", and Count P.C. de Strizelechi in his "Letters to the Subscribers to the Fund Raised in June, 1849, for the Relief of the Distress in Ireland". He takes that this lamentable state of affairs points out to the necessity of a legislation offering the right of relief for the able-bodied out of work. This pamphlet is meant also to oppose the trend favoured then, of displacement of small tenants and consolidation of farms for the purpose of agricultural improvement. Alison puts forward the suggestion that the able-bodied out of work would be employed in reclamation of waste lands by the system of "Petite Culture". He favours this system, of dividing the reclaimable waste lands into small farms, to which the unemployed would be set to farm and cultivate by ordinary spade-labour "the system of Croft Husbandry". He advocates this system in preference to the system of large farms, as the former will absorb the labour of a much greater number of labourers. (1) He gives in evidence the example of two successful experiments of this system, one at Gairloch and the other at Sheffield.

Again, in 1851 Alison published a letter to Sir John McNeill in answer to his report on Highland destitution. The destitution in the Highlands was a topic that attracted much

(1) Alison, W.P., Observations on the Reclamation of Waste Lands and their Cultivation by Croft Husbandry Considered with a View to the Productive Employment of Destitute Labourers, Paupers and Criminals, Edinburgh and London, 1850.

attention in these years and aroused a great amount of discussion. Alison in his reply had again to oppose and repeat his arguments against the current ideas about poverty - these ideas which he had been trying for a long time to contradict, and which were reflected to a certain extent in McNeill's report. Thus Alison criticises the chairman of the Board of Supervision, "in yielding too much to the vulgar cry so easily got up against charity, as materially injuring those who receive it".⁽¹⁾ He also thinks that emigration, which was proposed by Sir John McNeill as a solution for the problem is inadequate. Besides, he opposes Sir John McNeill's idea that agricultural improvement in Scotland requires the displacement of small tenants and the consolidation of farms. Alison's solution for the problem of destitution in the highlands was again legal relief of the unemployed able-bodied whose labour should be utilised in Reclamation of Waste Lands by the system of Petite Culture.

In 1851, again, Alison instigated the formation of a committee from the managers of charitable institutions in Edinburgh to submit a memorial to the Board of Supervision regarding proposed amendments in the Scottish Poor Law. These amendments, proposed by him, and adopted by the Committee, concerned the attitude of the Poor Law towards the destitute Irish who had not resided for five years in Scotland in the same parish. The only relief offered by the law to these was to

(1) Alison, W.P., Letter to Sir John McNeill on Highland Destitution and the Adequacy or Inadequacy of Emigration as a Remedy, Edinburgh and London, 1851, p.13.

send them back to Ireland and to imprison them if they return. Alison's argument for a change of the law in this respect was his specific argument, "for the sake of the health of the community". He argued that disease would be bred by the privations of these destitute Irish, especially as they would conceal the disease, for fear from forcible return to Ireland. The submitted memorial for the amendment of the Poor Law, the minutes of the meeting of the Committee, and a letter by Alison to the Chairman of the Board of Supervision were published in a pamphlet in 1852. (1)

In 1852 he published another pamphlet which was a paper read before the statistical section of the British Association for the Advancement of Science, in its meeting in Belfast in this year. This paper deals with the "Laws of Settlement", in England, Scotland and Ireland. He attacked the forcible removal of the destitute strangers on the same grounds and with his usual reasoning about destitution and disease. (2)

And again in 1853, one year before his death, he made another contribution to the good cause he had always fought for: the creation of a new line of thought on the subject of poverty and the education of the public opinion in this respect. He read a paper before the National Association for the Promotion of Social Science entitled, "On the effect of Poverty and

(1) Memorial Regarding Amendments in the Scottish Poor Law, Proposed by William P. Alison, Revised and Adopted by a Committee formed from the Managers of Several Charitable Institutions in Edinburgh, Edinburgh and London, 1852.

(2) Alison, W.P., On the Present State of the Law of Settlement and Removal of Paupers in Scotland. (Read at the Statistical Section of the British Association at Belfast, September, 1852.) Dublin Statistical Society, Dublin 1852.

Privation on the Public Health". In this paper he again fought for the purpose he had always espoused, the legal right of relief to the unemployed able-bodied and the assimilation of the Scottish Poor Law to the English and the Irish Laws in this respect. He says in this paper, "The diseased states of the body which may be most distinctly traced in part to the influence of poverty and privation, may be divided into the constitutional chronic diseases and the epidemic and endemic acute diseases. Of the first, the most important are those resulting from the scrofulous habit, or tubercular diathesis in children and young persons, and those resulting from the tendency to atheromatous deposits, or malignant deposits, in advanced life"

"I should be concealing a conclusion to which all my own observations and experience have led me, and of the truth of which I am firmly convinced, if I did not distinctly avow my belief, that whatever the essential cause or causes of the origin of contagious fever may be, poverty and want are the most influential causes of its prevalence and extension among the labouring classes".⁽¹⁾

(1) Alison, W.P.; On the Effect of Poverty and Privation on the Public Health. Transactions of the National Association for the Promotion of Social Science (Liverpool Meeting), 1853, p.442.

FACTORS THAT INSPIRED AND INFLUENCED ALISON:THE BACKGROUND AND ENVIRONMENT

In this section I shall try to study the evolution of Alison's views, and the influences that had determined his trend. I shall try to answer some of the questions that one asks oneself, when startled by discovering such sound views written at such an early date. How was Alison inspired with such ideas? What circumstances influenced him to adopt and develop such views? What influences affected him and determined his characteristic line of thought?

I think that the main factors that inspired and stimulated his ideas were the social conditions in Scotland in the early Nineteenth Century. It was this background in which poverty and disease dominated the scene. Scotland at that time was suffering from the stresses and strains of the Industrial Revolution. This revolution created a new pattern of life on the surface of the land with completely new problems and new conditions, about which the human society had had very little experience before. The social institutions and the state machinery were not adapted to meet the new life, although they might have been enough to meet the problems of the old conditions. And one of the concurrent results of that was an increase in the amount of poverty of the working classes and consequently a deterioration of the public health. It may seem a contradiction that industrialisation should lead to the accentuation of poverty, but the change produced in the social and economic patterns of society could explain that satisfactorily. With the growth of

industry, there was a corresponding growth of urbanisation in Scotland. The growing industry brought into being huge increasing urban populations which were drained from rural areas into the towns. These were attracted by the chances of employment afforded by the new industrial life. This led to a rapid increase in the town population in Scotland or in other words to a great concentration of the population in industrial centres. Most of the increase in town population was consequently in the lower class; and thus the percentage of this class in different towns was greatly augmented. In other words the huge additions to urban populations were mainly constituted by the poor classes. These vast masses of newly urbanised working population, brought into being by the industrial life, were absolutely dependent on the industrial machine for subsistence. But the new industry was at the beginning unable to supply a continuous secure employment to its workers. It was still new, and young, and liable to frequent breakdowns, displacements and vicissitudes. There used to be great fluctuations of commerce and industry during this half of the 19th Century. Each commercial or industrial slump used to throw large masses of town population into unemployment and bitter poverty. There was nothing then in the social institutions of the country to protect these miserable masses at such times and they had no alternative but to suffer and suffer waiting for better times to come. Furthermore, even when industry and trade were not stagnant, the immigration into the towns was sometimes more than the demand for labour, and thus there

was a redundancy of population. The surplus population besides suffering from unemployment, also tended to lower the standard of wages in the labour market. The concentrations of the working classes in the industrial towns and in special areas in these towns, congregated the miseries they were enduring in one scene. This could not but attract attention. Besides, as they gradually constituted greater and greater proportions of town populations, their poverty began to dominate the scene in the town life during periods of distress.

The inevitable result of such extreme poverty was naturally disease and epidemics. The privations of these multitudes of poverty-stricken masses bred epidemics of typhus and relapsing fever which were unusually extensive. A factor which helped the spread of epidemic fevers among the working classes was the overcrowding of their habitations and lodgings. The growth of industrial towns could not keep pace with the continuous quick growth of the newly urbanised population. Thus there were not enough houses for the new immigrant masses, and extreme overcrowding could not be avoided. Besides, the frequent distress of the labouring classes tended to force more and more of them into the most congested, least suitable habitations and in this way poverty tended to augment the degree of overcrowding in the industrial slums. The overcongested common lodging house, which played a great role in the history of epidemics in Scotland, was one of the manifestations of the overcrowding and the poverty of the labourers at these times.

The poverty of the working classes helped the spread of epidemics also in another way. It resulted in the movement of distressed populations from one place into another in search of work. This helped greatly the extension of different epidemics. Unemployed workers used to wander for long distances from one town to another searching for work; and naturally as a result of their privations and, as a result of the overcongested filthy lodging houses to which they had to resort, they became easy victims for typhus and relapsing fever, and they acted as agents for the spread of epidemics all over the country. Another factor which must have helped the breeding of disease was the natural susceptibility of rural population to diseases of the town.

Thus it is evident that the masses of poor newly urbanised populations in industrial towns became subject to epidemics of disease which threatened the whole community. The relationship between their poverty and their diseases was suggested to society by the usual association of periods of industrial distress with extensive epidemics. Whenever there was a great severe distress in the industrial areas, there was almost always an epidemic accompanying or following it. This was so constant a rule, that the medical charities became the most needed charities during periods of distress. The extensiveness of epidemics accompanying periods of severe distress, was something new in the life of that generation, and they thus excited some anxieties and apprehensions and tended to attract more attention to the conditions of the working classes. This

might have been one of the reasons that helped to make the "Condition of the people" one of the engrossing subjects in the literature of the period.

This is an outline of the background of the life in Scotland during the early decades of the last Century. It was in this environment, in which privations and epidemics dominated the scene that Alison lived and practised. And, as he had been attached for a long time to many charitable hospitals for the poor, he had been naturally most intimately connected with the mass of poverty and disease in his society. It was amidst these scenes of misery and hardship that he spent most of his time. So one can imagine the reaction of such surroundings on him and his response to them. He had ample opportunities to watch for himself how poverty bred disease and sickness. It was a phenomenon going on under his eyes all the time. And that is probably how he was impressed with the relationship between poverty and health.

Contemporary Portrayals of the Background and Environment

I have tried to give a sketchy outline of some features of the background of the life of Scotland during the early decades of the last Century. I shall try next to add more details to the picture and to look in the literature of the period for evidences of that sketch. This period was really rich in interesting writings that could throw much light on the condition of the people, the socio-economic changes, and their repercussions on health.

I. The Swell of the Urban Population

I have mentioned that there was a progressive drain of population into the industrial towns of Scotland during the Industrial Revolution, and that the increase in urban population was mainly furnished by the lower classes. I have also mentioned that these newly urbanised large masses used to suffer the privations of unemployment during periods of depression of trade, and that this led to the accentuation and the conspicuousness of poverty in town life during that time. In evidence of this state of affairs I shall refer to Alison's pamphlets and other publications of the time. In these there are statistical evidence showing that the majority of the poor in industrial towns were not furnished by the original natives of the towns, but by those who had only recently settled there.

There are many evidences of this sort about Glasgow. Thus Alison states that in 1841, a return of the circumstances of 455 weavers out of employment shows that the heads of

families born in Glasgow are only 120 out of the 455. He further states that out of 1851 children in these families, only 430 are born in Glasgow, which shows that many of these families have only recently settled there. (1)

The report of the directors of the night asylum at Glasgow for 1841, gives further illustrations. From this report it can be seen that out of the 9,560 poor people accommodated in this institution, only 3,035 have been received from Glasgow and suburbs and 6,525 from other parts. In 1840 these numbers are 2,440 from Glasgow, and 6,752 from other parts (whereof 4,714 from other parts of Scotland, 2,038 from England and Ireland). (2)

In Paisley, the evidence given before the Poor Law Commissioners show that out of 652 on the Permanent Poor Roll of the Abbey Parish of Paisley, only 210 were born in Paisley and Abbey Parish. (3) Alison states that in this town, it was ascertained in 1821 that not more than one half the families were from Renfrewshire, and nearly two-fifths were from other parts of Scotland. (4)

In Dundee, again out of 999 paupers in 1840 it appears that only 344 are natives of the town. (5)

(1) & (2) Alison, W.P., Further Illustrations of the Practical Operation of the Scotch System of Management of the Poor. (From J. Stat. Soc., 1841, Vol. IV), London, 1841, p.30.

(3) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844, Appendix Pt. I, B.P.P.1844 (563) XX, p.597.

(4) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of large towns. 2nd Edition, Edinburgh and London, 1840. p.107.

(5) Alison, W.P., Illustrations of the Practical Operation of The Scottish System of Management of the Poor. (From J. Stat. Soc., 1840, Vol. III), London, 1840, p.4.

At Peterhead, Charles Scott, gives evidence to the same effect. He states that out of 259 applicants for legal relief at this town, 112 are natives of the parish. The remaining 147 have acquired a claim in virtue of a residency, frequently very little exceeding the period (of three years) required by law. (1)

The case was the same in Aberdeen and Alison quotes the numbers of the poor on the roll as 1,612. Of these 452 as born in Aberdeen while 1,160 were born elsewhere. (2)

In Edinburgh in 1840, it appears, from the statistics of the "House of Refuge", that not more than 35% of those admitted on account of their destitution are natives of the town. It appears also that out of 2,910 admissions into the "Night Refuge" connected with the previous institution, in July, 1840, only 1,185 were from Edinburgh and nearby parishes. (3)

Retrospectively, D.F. Macdonald illustrates clearly this social feature with statistical data. He compares the decennial rates of increase of population for Scotland, as a whole, with the rates in the industrial areas during the first half of the Nineteenth Century. (4) From his table it is

(1) Scott, C., Remarks on the Circumstances and Claims of the Indigent Poor and the Inadequacy of the Present System of Parochial Relief in Scotland with Reference especially.... to Peterhead, Aberdeen, Peterhead, 1841, p.25.

(2) Alison, W.P., Further Illustrations of the Practical Operation of the Scotch System of Management of the poor. (From J. Stat. Soc. 1841, Vol. IV), London, 1841, pp. 29 & 30.

(3) Alison, W.P., Illustrations of the Practical Operation of the Scottish System of Management of the Poor. (From J. Stat. Soc. 1840, Vol. III), London, 1840, p.5.

(4) Macdonald, D.F., Scotland's Shifting Population, (1770-1850) Edinburgh, 1937, pp. 12 & 13.

apparent that the average decennial increase for Scotland as a whole was 12.4 per cent. However, the figure for Lanarkshire was 26 per cent. Again, the average decennial increase in Glasgow was stated by him to be "almost 34 per cent". He also states, "that the proportion of the population of Scotland resident in Glasgow was doubled" during the first fifty years of the century, and that the proportion in the towns of over 10,000 inhabitants increased in almost the same ratio.

(1)
The Report on the census of Great Britain (1851) gives additional evidence in this respect. Out of the total number of inhabitants in the ten principal Scottish towns in 1851, only 48 per cent had been born in them. Moreover out of the number of inhabitants at the age of 20 and upwards, only 33 per cent had been born in the towns.

(2)
Alison believes that this movement of poor population into towns was further helped by the fact that in such towns there was usually a system of legal assessment for the poor. Thus there was a more generous provision for them compared with the negligible voluntary funds raised for them in their original country parishes. Writing in 1840 he gives the number of parishes in Scotland where there was no legal assessment for the poor as 517. He says, "as long as the relief given in these parts of the country (non-assessed parts) is so small, while the law apportions some allowance (scanty although it be) to all infirm and destitute persons who have lived three years

(1) & (2) Census of Great Britain, 1851, Population Tables II: Ages, Birth Place of the People, Civil Condition, Occupation &c., Vol. I, B.P.P.1852-53 [1691-1] LXXXVIII, p. CV.

in Edinburgh, I apprehend it will act as a continued bounty on the importation of distressed and half employed families from these districts".⁽¹⁾

"In the report on the pauperism of Ayr, it is complained that 'Other parishes, in a manner, half starve their poor, in order to prevent their increase and save expenses'. The natural effect of which must be, an influx into the large towns, where there is more wealth and more irregular and precarious employment, as well as charitable institutions".⁽²⁾

This shift of population from rural areas into urban areas had affected adversely the public health in many ways. Even apart from leading to overcrowding and poverty in towns, the urbanisation of a great portion of rural population in itself must have had an injurious effect on the general health of the people. The country folk who emigrated in large numbers to the towns were naturally more susceptible to diseases of the town, and this probably had been an important factor in the rise of the incidence of disease in the towns during this period. It is interesting to notice that the role played by this factor on health was recognised and understood by some medical men at these times.

Thus Dr. Perry of Glasgow seems to have been clearly aware of this phenomenon, of resistance of town dwellers compared with new emigrants from the country. He accounts for each wave

(1) & (2) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of Great Towns. 2nd Edition, Edinburgh and London, 1840, pp.4 & 107.

of epidemic in Glasgow by the influx of masses of susceptible immigrants from rural areas. In his evidence in the Poor Law Inquiry in April, 1843, he says, "In 1835 and 1836, a period of prosperity, in which there was a great demand for labourers and servants, there was a great influx from the country districts, and from Ireland, than for several years before, and I believe it was the great influx of individuals from the country districts not previously protected from the epidemic, that gave rise to the great number of cases in 1836-37. I believe this (the fact that Glasgow has been peculiarly free of epidemic since 1840) is owing to the very cause I formerly mentioned. There has been a general want of employment, and no encouragement has been given to strangers coming in from other districts, where they are not exposed to fever, and hence there has not been the same increase of fever among the poor as there was under different circumstances" (1). Alison also might have been referring to the same phenomenon in saying, "Strangers newly arrived at any town, are always persons adapted for the reception and extension of epidemic disease" (2).

II. Stir of Population

We also find in the contemporary literature a large amount of evidence about the large-scale movement of the working population from one place to another in search of work. This

(1) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844, Appendix Pt. I, B.P.P.1844 (563) XX, pp.429 & 432.

(2) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.4.

was one of the social phenomena brought about by the economic conditions during this epoch of the Industrial Revolution. During periods of depression, large numbers of unemployed workers used to wander in the whole country from one town to the next in search of work. They naturally used to resort in each town to the most overcrowded wretched lodging houses, and to depend on begging for subsistence. The report of the Poor Law Commissioners contains a large amount of evidence about this social feature.

A large number of magistrates, Provosts and other witnesses all over the country reported to that Commission in the same language that their parishes were overrun by unemployed workers who were travelling searching for work from neighbouring manufacturing towns during periods of depression.

The witnesses from Forfar and Kirkaldy attributed the flooding of their towns with vagrants to distress in Dundee.⁽¹⁾ And those from Annan and Selkirk attributed it to distress in Glasgow.⁽²⁾

The witnesses from Greenock attributed it to depressions in Glasgow and Paisley.⁽³⁾ Greenock itself, however, was held responsible for the increase of vagrancy in Largs.⁽⁴⁾

(1) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. III, B.P.P.1844 (565) XXII, pp.83 & 343.

(2) Ibid., pp. 633 & 651.

(3) Ibid., Appendix Pt. I. B.P.P.1844 (563) XX, p.534.

(4) Ibid., Appendix Pt. I, B.P.P.1844 (563) XX, p.484.

The witnesses from Edinburgh accused unemployment in Glasgow (1) and Greenock for the swarms of unemployed that filled the town.

The witnesses from the parishes on the main routes between England and Scotland reported that there was a constant procession of these unemployed in hard times between Glasgow and Newcastle in opposite directions. (2)

All different witnesses asserted that these vagrants were regular artisans and operatives, who were only compelled to travel because "they had been starved out at home for want of regular employment". (3) Many of the witnesses gave evidence

to the large distances these workers used to travel in search for employment (4) and how sometimes they used to return back again disappointed and "worn out with their exertions" "after travelling a great part of the country without succeeding in obtaining work". (5) Some witnesses complained from the heavy

burden of these searchers for work upon the poor funds as they used to get fever and spread it in the places to which they resorted. (6) Besides, much expense was incurred in giving them the little relief that could allow them to proceed on with their travel. (7)

(1) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. I, B.P.P.1844 (563) XX, p.103.

(2) Ibid., Appendix Pt. III, B.P.P.1844 (565) XXII, p.708.

(3) Ibid., p.343

(4) Ibid., Appendix Pt. I, B.P.P.1844 (563) XX, p.103.

(5) Ibid., p.521

(6) Ibid., Appendix Pt. III, B.P.P.1844 (565) XXII, p.651.

(7) Ibid., Appendix Pt. I, B.P.P.1844 (563) XX, p.534.

That is why the Provost of Kirkaldy says "I certainly think that, in such seasons of depression, some means should be adopted for preventing the unemployed operatives from being reduced to the necessity of roving the country as beggars ... there should be some general fund over the country to relieve unemployed persons in these circumstances". (1)

This stir of population must have been an important factor in the spread of epidemics at these times. Medical thought was quite aware then of the importance of this factor in the transmission and extension of fevers. The medical witnesses in the Poor Law inquiry had almost unanimously agreed that the vagrants looking for work were almost always those responsible for the spread of epidemics to different districts. I have quoted some examples of their statements in this respect but the report contains many others. (see p.100-101)

III. Poverty in the Scottish Towns

We also find in the publications of the period a great deal of evidence about the marked increase and prevalence of extreme poverty among the working classes. In the early decades of the Industrial Revolution, the growing industry which attracted and assembled great masses of the working population in the manufacturing districts used, for some reason or another, to give up suddenly its dependent working population

(1) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. III, B.P.P.1844 (565) XXII, p.343.

and throw them into unemployment and abject poverty.

In these times, these newly urbanised population who had left their original rural residence, and had become completely dependent on the new industries used to suffer in silence great hardships and grinding privations.

This can be explained by the fact that the recently growing industries were subject to great fluctuations of prosperity and breakdown. There used to be frequent vicissitudes and upheavals in trade at that time. Again, the new manufactures were then not well established, and new industries used to replace old ones. Besides, sometimes the non-availability of raw material, like cotton used to compel factories to stop or diminish their work. Moreover, during this early epoch of industrialisation there were many hazardous speculations which were carried out without sufficient capital. The failure of these used naturally to throw their workers into unemployment. In addition there were great fluctuations on the demand of certain articles, especially fine textiles from variations in fashion. In the hand-loom weaving inquiry, this factor was found to play an important role in the fluctuations of this industry. (1)

Moreover, the introduction of the "Machine" in industry (for example the introduction of the power loom and the power mule in the textile industry), hit hard the old flourishing industries (such as the Hand-loom weaving), and was responsible

(1) Reports from Assistant Handloom Weavers' Commissioners. Reports by J.C. Symons, Esq., on the South of Scotland, and on France, Belgium, Switzerland, and part of Austria, 1839. B.P.P.1839 (159) XLII, p.33.

for the hardship of a considerable section of the population who had always been prosperous before. The class of aged people was naturally the class most hardly hit in this way. In addition, the new economic status was not stable enough to resist general economic depressions which thus used to almost paralyse most branches of industry. As a result of that, we find that during the frequently recurring periods of economic depressions and slumps, there used to be general unemployment in the industrial districts all over the country.

Another factor which tended to augment the poverty of the work-people was that, as the number of the factories increased more and more, there used to occur an undue competition between different master manufacturers. They used to undersell each other by means of reducing wages. (1) This lowering of wages, of which we find many evidences of at this period, (2) was made possible by the redundancy of labour supply in the labour market over the demand. This was all at a time when "Laissez faire" was the general beloved motto, and when wages were completely left to be determined by forces of competition.

This lowering of wages used to lower the standard of living of the working classes. And the lower their standard of living got, the more ready they became to accept lower and lower wages.

Alison describes that saying, "Men brought up in this state of

(1)(2) Reports from Assistant Handloom Weaver's Commissioners, Reports by J.C. Symons, Esq., on the South of Scotland, and on France, Belgium, Switzerland and part of Austria, 1839. B.P.P. 1839 (159) XLII, pp. 59 & 60.

poverty and degradation will live on little, and work for little; they will recommend themselves, sooner or later, more than all other labourers, to that influential class of men, to whom the wages of labour must always appear as so much deduction from the profits of stock; and whose interest, to have labour always available, and at the cheapest possible rate, is opposed to, and ought to be checked by, the interest of the community at large to have poverty and pauperism, equitably distributed, and at the lowest possible amount". (1)

The Corn Laws were also considered by a great many writers of this period as contributing largely to the privations of the working classes by raising the prices of provisions, and hindering the export of products of industry. (2)

Apart from economic conditions, a factor which might have added to the want of lower classes was the Disruption of Church in 1843. The Established Church was inclined to confine its limited resources for relief of the poor to its own followers and to exclude all others. (3)

This increase and prevalence of poverty in industrial towns was recognised and admitted by the Commissioners for the Poor Law Inquiry

(1) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Condition of the Poor, 1844, p.36.

(2) Reports from Assistant Handloom Weavers' Commissioners. Reports by J.C. Symons on the South of Scotland, and on France, Belgium and Part of Austria, 1839. B.P.P.1839 (159) XLII, p.57.

(3) Ferguson, T., The Dawn of Scottish Social Welfare, Edinburgh and London, 1947, p.192.

in Scotland in 1844. They say in their report, "It must at the same time be admitted, that great changes have been taking place since the commencement of the present century, in the circumstances and condition of the people in some parts of the kingdom. The impetus which has been given to manufactures of various kinds, and the extended operations in the coal and iron districts, have contributed to create a completely new order of things and have led to a great increase of vice and pauperism". They are thus impressed with the importance of "adapting the Poor Laws of Scotland to the altered economic condition, which has thus arisen"⁽¹⁾. They further say, "In periods of a depressed state of trade and manufactures, the labouring classes are subject, in many instances at least, to severe privations"⁽²⁾. They also say, "Scarcely a year elapses, in the course of which, at one season or another, large portions of the labouring classes ... are not more or less straitened for the means of subsistence. Their distress on some recent occasions is well known to have been very great"⁽³⁾.

I shall now proceed to give evidence of this state of poverty, which had prevailed in this period, from the history and experience of different towns.

Paisley

Beginning with Paisley, which was an important centre

(1) (2) & (3) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844. B.P.P.1844 (557) XX, pp. XVI, LII, & XLIX.

for textile industry, we find that it had suffered a series of great depressions in the years 1816, 1826, 1837 and 1841-43.

We find evidence of the 1816 distress in a report of a meeting held in the Relief Church, Paisley, on 5th October of this year, "to consider the present distresses of the country, their causes, and probable remedies". In this report there is quoted a memorial from the influential inhabitants of Paisley to the Lords Commissioners of His Majesty's Treasury. The memorial says that "the trade and manufactures of this large Commercial town, with its suburbs, a Population of nearly Forty-Thousand, having during the present crisis, suffered a degree of depression almost unprecedented; and the consequent want of employment, or low rate of wages, has reduced numerous industrious operatives, and their families to great difficulties and distresses".⁽¹⁾

J.C. Symons, the Assistant Commissioner in the Hand Loom Weaving Inquiry describes the very hard distress of 1837 in this town. He states that although Paisley weavers are liable to recurrent stagnations of trade, yet the 1837 was the most severely felt of all of these periods. He gives tables about the gross average wages of weavers employed by two different manufacturers during the period of about 30 years. From these it is apparent that the wages of weavers of first class shawls had progressively decreased from (33/-) in 1810-16

(1) Report of the Meeting held in the Relief Church, Paisley, on 5th October, 1816, to Consider the Present Distress of the Country, Paisley, 1816, p.4.

to (19/8 $\frac{1}{2}$) in 1837 (in 1826 it was only 16/-). The wages of weavers of inferior quality shawls had decreased from (15/6) in 1817-20 to (8/- - 9/-) in 1837. (1)

There was a more acute distress in this town in 1841-43. It was so extensive and severe that it called for the raising of funds in England and in other parts of Scotland for its relief. In London, the Manufacturer's Relief Committee raised a special fund for relieving this distress. Mr. Edward T.B. Twisleton, an Assistant Poor Law Commissioner, was unofficially sent to Paisley to suggest the best mode of distributing this fund. The sufferings of the working classes in this town became so great, and continued for so long that it attracted great attention, and Parliament appointed in 1843 a Select Committee to inquire into their conditions. From the Report of this committee it is apparent that as much as 14,791 (out of a population of 48,416) depended for subsistence on what they obtained from relief funds in February, 1842. (2)

The Provost of the town in his evidence before the committee described the condition of a section of the working classes on the discontinuance of relief to them, as "absolute starvation, and but for the relief given by private parties in the town, some of them must have died of starvation". (3) He also stated

(1) Reports from Assistant Handloom Weaver's Commissioners. Reports by J.C. Symons on the South of Scotland, and on France, Belgium, and Part of Austria, 1839. B.P.P.1839 (159) XLII, p.33.

(2) & (3) Report from the Select Committee Appointed to Inquire into the Treatment of the Unemployed and Destitute Inhabitants of Paisley since 1841, Together with the Minutes of Evidence Taken Before Them, 1843, B.P.P.1843 (115) VII, p.135; p.68.

that out of 112 manufacturing firms who were doing business in the town in July, 1841, 67 failed and out of 40 leading merchants (1) 20 failed.

He also states, "I have visited a very great number of families, and found many of them without any single article which they could dispose of in any form; without anything in the shape of bedding, without anything in the shape of furniture, without anything in the shape of clothes to cover themselves, and several of the petitioners who have come to state their case to me have had to borrow some piece of upper clothing from a neighbour to enable them to appear on the street". (2)

He also says, "I find that the pawnbrokers complain now as much as any class of the community, that the people have nothing left to pledge, and that the little business still doing is in a shirt, or a handkerchief, or some trifling thing that in ordinary times the people would never have pawned". (3)

The Select Committee concludes that "the working classes of Paisley have borne a state of suffering unparalleled in extent and duration". (4)

In 1844, in the inquiry made by the Poor Law Commission, Rev. A. Baird, a minister of Paisley, says, "I don't see how it is possible for society to get on in circumstances such as we have unhappily been placed in for the last eighteen years, with perpetually recurring convulsions, throwing immense numbers of population into the very extremity

(1) (2) (3) (4) Report from the Select Committee Appointed to Inquire into the Treatment of the Unemployed and Destitute Inhabitants of Paisley since 1841, Together with the Minutes of Evidence Taken before Them, 1843, B.P.P. 1843 (115) VII, p.69; p.56; p.69; p.v.

of destitution. I cannot conceive a more melancholy thing than the spectacle of labourers suffering from want of employment. Persons well disposed to labour, heads of families.... thousands of them, ... without food for themselves and their families,.... and lying in the depth of winter without a blanket". (1)

He thus proposes a nationalised fund to relieve the unemployed, "in a time of such destitution as Paisley has lately gone through, or such times as Paisley went through in 1826 and 1837 (which, however, did not amount in duration to above six or seven months, whereas the distress now has lasted two years)" (2)

He further adds, "I think it is a very serious thing when the pressure comes so heavily as to beat down a population of that kind, and I tremble for the result, if such times are to come upon us again and frequently. I hope such evils are not before us". (3)

Glasgow

Glasgow was another town which was struck hard by successive periods of stagnations of trade that led to the most grinding privations of the working population. Being the biggest industrial centre in Scotland, it had attracted a large scale emigration from the country, and its population became mainly constituted by the working classes. Thus the recurrent slumps to which the town was subjected, with their resultant unemployment, led to poverty and hardship on such a large scale unparalleled elsewhere. Alison, therefore, when picturing the

(1) (2) (3) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844, Appendix Pt. I, B.P.P.1844 (563) XX, pp.684-687.

degree of poverty in Scotland, extracted most of his pictures from Glasgow. He says, "It is evident, that while the higher ranks in Glasgow have been advancing in wealth and luxury, a large proportion of the lower ranks have been, at least as rapidly, receding towards barbarism....Under these circumstances, the physical condition of a large proportion of the poor has become as bad as is compatible with human existence".⁽¹⁾

The main slumps of trade in this town occurred in the years 1819, 1826-23, 1831-32, 1837-38, 1841-43 and 1846-47.

James Cleland describes the depression of 1819, and says that the distress became so great in the beginning of that year that "thousands of workers paraded the streets in organised form, demanding employment or bread".⁽²⁾ He illustrates the degree of poverty among the poor by the growth of pawnship. He states that in 1820, 2,043 heads of families (i.e., total 8,000 individuals) pawned 7,380 articles. And what were the articles pawned? Cleland enumerates them and one finds among them Bibles and Waterloo medals besides blankets, sheets, petticoats, stockings etc.⁽³⁾

J.C. Symons, the Assistant Commissioner of the Hand-loom Weavers' Inquiry gives evidence of the depression of 1837. He states that in the summer of 1837, the number of unemployed male operatives in Glasgow who were supported by work from one of the public charities (Glasgow Relief Committee) was

(1) Alison, W.P., Observations on the Management of the Poor in Scotland, and its Effects on the Health of the Great Towns, 1st Edition, Edinburgh and London, 1840, pp.182-183.

(2) & (3) Cleland, J., Statistical Tables Relative to the City of Glasgow, 1823, Glasgow, 1823, p.197; p.198.

3,072. Among this portion of the unemployed there were
 (1)
 2,273 heads of families.

Symon's Report gives vivid moving portrayals of the poverty at that time. It says for example, "The wynds in Glasgow comprise a fluctuating population of from 15,000 to 30,000 persons.... Revolting as was the outward appearance of these places, I was little prepared for the filth and destitution within. In some of these lodging rooms (visited at night) we found a whole lair of human beings littered along the floor, sometimes fifteen and twenty, some clothed and some naked; Their bed consisted of a layer of musty straw, intermixed with rags. There was generally little or no furniture in these places; the sole article of comfort was a fire. Thieving and prostitution constitute the main sources of the revenue of this population". "A very extensive inspection of the lowest districts of other places, both here and on the Continent, never presented anything one half so bad, either in intensity of pestilence, physical and moral, or in extent proportioned to the population". (2)

He also says, "Poverty is a main instrument in the debasement of mankind. It has dragged the handloom weavers of Scotland from the highest to among the lowest ranks in the civilisation of their class". (3)

(1) Reports from Assistant Handloom Weavers' Commissioner. Reports by J.C. Symons on the South of Scotland, and on France, Belgium and Part of Austria, 1839. B.P.P.1839 (159) XLII, p.23.

(2) & (3) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Large Towns. 1st Edition, Edinburgh and London, 1840, p.13; p.181.

He accounts for the poverty of the handloom weaver by the periodical stagnations of this industry. He states that there were few branches of the Scottish handloom weaving "of which some portion of the weavers were not thrown wholly out of employment during the crisis of last summer; In April there were 365 looms idle in Glasgow".⁽¹⁾

But Symons does not think that periods of stagnation can alone explain the poverty of the weavers. He thinks that the root of the evil is the extreme lowness of their wages. He calculates their wages and finds them too low to afford a comfortable life. He is "decidedly of the opinion that not less than two-thirds of the whole number of weavers belong to the worst paid group (from 4s.6d. to 10s.0d. per week)."⁽²⁾

In 1844, in the inquiry carried out by the Poor Law Commissioner, Dr. Perry describes the poverty of the working classes of Glasgow saying, "I know from the circumstances in which they are brought into the hospital, the very great extent of destitution and misery that prevails among them on many occasions we find great difficulty in getting quit of them from the infirmary. They have no means of living after they get out. They are often unable to provide for themselves, and what they get from the parish is so small that they are absolutely in a state of starvation. ... We have had fathers and mothers in the infirmary with children in a state of

(1) & (2) Reports of Assistant Handloom Weavers' Commissioners Reports by J.C. Symons on the South of Scotland, and in France, Belgium and part of Austria, 1839. B.P.P.1839 (159) XLII, p. 8; p.7.

starvation. On parents coming to the hospital, I have taken the trouble to inquire into the circumstances of their families, and have found them almost in a state of starvation. We get many cases in the house which are not fever cases at all, but mere cases of starvation".⁽¹⁾

He believes that the condition of the poor of Glasgow "is deteriorating" and he states that "the low rate of wages is the most likely cause"⁽²⁾ of this deterioration.

Edinburgh

Edinburgh, although not one of the main industrial cities, yet showed many evidences in the contemporary literature that its lower classes had suffered from much poverty and destitution in the early decades of the Century. This could be explained by the fact that it attracted much emigration of working populations. These were mainly attracted by the work on the construction of the Forth-Clyde Junction Canal, and the huge building projects to which great interest and enthusiasm was specially devoted in Edinburgh early in the Century.

In 1825, the great commercial slump hit Edinburgh badly, and the town became unable to supply these masses of newly urbanised working population with enough employment. Most of the building speculations turned out unprofitable and were stopped; so also languished other branches of trade and

(1) & (2) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844, Appendix Pt. I, B.P.P. 1844 (563) XX, pp. 429-430.

industry. Thus since that year the lower classes of Edinburgh suffered from an increasing poverty and misery.

In 1840, Professor Alison, in order to determine the magnitude of unemployment in Edinburgh, instituted a social investigation of two small areas in the town. These he considered a fair specimen of the poverty in Edinburgh, and their inhabitants as a fair sample of the working classes. This was because they were inhabited by people "of tolerably regular habits, and less migratory than in the poorest districts". The following is the result of the investigation in one area.

TABLE I

Result of an Investigation into the Degree of Unemployment in a Sample Area in Edinburgh in 1840.

Total number of families	48
Total number of persons	158
Number of families whose working members had regular employment	10
Number of families out of employment from two to ten months in the year	38
<u>Of these</u> the number of families out of employment six months or more	12

When employed, the earnings of 18 of these families were less than 3s.Od. a week, and the earnings of another ten were less than 6s.Od. a week. The clothing and furniture of most of

(1) & (2) Alison, W.P., Illustrations of the Practical Operation of the Scottish System of Management of the Poor. (From J. Stat. Soc. 1840, Vol. III), London, 1840, p.14.

these families were marked as "bad", "very bad", or "very scanty" and sixteen of them were marked as having either no bed or no bed clothes.

This is only a small sample, but Alison says, "I am certain that I do not exaggerate in stating that, in the Ancient Royalty of Edinburgh (comprising 55,000 inhabitants), more than 50 districts may be found, of equal extent, containing a population equally destitute, of which this may be taken as a specimen, as well as many other districts ... of which a part of the inhabitants are in a similar state of destitution".⁽¹⁾

Another inquiry into the extent of poverty in Edinburgh was carried out by the "Association for Obtaining an Official Inquiry into the Pauperism of Scotland".⁽²⁾ Queries were sent to those most intimately associated with the poor in different parishes. The queries were meant to explore the degree of poverty and the real conditions of the poor. The answers reveal a striking state of destitution and privations. Most of the inquirers agree that there are "many thousands of individuals in extreme want" and that but for the private charity, "they must have been starved to death". This destitution is found to be the result of "unemployment or precarious irregular employment". 27 out of 28 investigators agree that the food of the poor is "precarious and permanently scanty in the extreme" and that "those who do not receive

(1) & (2) Alison, W.P., Illustrations of the Practical Operation of the Scottish System of Management of the Poor. (From J. Stat. Soc. 1840, Vol. III), London, 1840, p.14; p.9-13.

additional aid from private benevolence are scarcely one remove from absolute starvation". Many of them state that they have seen many of the poor "nearly starving" and the medical men state that "they had visited many whose diseases might strictly be termed want of proper support".

Again, most of the investigators agree that the homes of a large section of the working classes are "entirely without either furniture, or clothes" and that the only bedding they contain is "a little straw". They state that the poor have "no choice" in that, as they either have to "sell or pawn their furniture" and bedding or they have to "starve". It is also stated that the want of clothing make the poor "ashamed to go to the infirmary" when sick, and often "prevents them from accepting employment" when it becomes available.

Again, the majority of the inquirers agree about the extreme overcrowding in the homes of the poor, and that it is the poverty of the lower classes which makes them overcrowd in small rooms to "lessen rents". It is stated by some inquirers that "in some lodging houses not less than 30 people live in one room, men, women and children" and that "in some cases asses, swine and poultry associated with human beings in the same small rooms".

Again the queries reveal a great amount of unemployment among the working classes. 23 out of 24 of the inquirers have found in their areas large numbers of unemployed labourers and artisans. It is agreed that destitution not only arises from "being out of work for months together" but also from "getting but partial employment". The inquirers agree that the

unemployed "are willing to work but cannot procure it". The answers reveal too the pitiful condition of the single women and widows as a result of want of employment. It is stated that "some of these have only a day's work in the week, some none for weeks together, and some none at all".

It is agreed that the females who work in out-door work in the fields suffer great privations in winter as this work completely ceases for months in winter time. "They have then no means of subsistence except by begging". The inquirers also agree that their wages even during the months of employment is "scarcely sufficient to keep them in subsistence".

In the inquiry into the Scottish Poor Laws in 1844 there is more evidence about the poverty in Edinburgh. The Chairman of the Committee for the relief of the unemployed operatives in this town in 1842 says, "On the 1st of April last, large bodies of unemployed men assembled in the Calton Hill, with the view of laying their case before the public..... They perambulated the streets and caused a very considerable alarm in the houses. On their consenting to give up parading the streets, I promised to get them a small supply of bread and meal according to their numbers and wants.... We had a double check on the statements made by the poor themselves. Those inquiries led to some most distressing revelations.... In many instances they assured us (and we found the statements true), that they had not tasted food for twelve, fifteen, twenty-four and some even twenty eight hours. I found, in some cases, that the very

grates of the parties had been sold or pawned; and, in numerous instances, when we gave a pittance of meal, they had not the means of cooking it, no salt to season with it. There were many who had been in a respectable way as tradesmen, reduced to perfect destitution, through causes over which they had no control". He further states that the Government accepted a proposal of sending a large number of these families to Australia, but this could not be done because the unemployed had no suitable clothing whatsoever as "they were reduced to such beggary, that nothing they had could raise the necessary amount of equipment".⁽¹⁾

Another witness, Rev. T. Clark, says about the condition of the working classes of Edinburgh, "I was not the least aware that such destitution existed in Scotland. ... I visited the (poor classes) rooms lately, and there was not a particle of furniture in any one of them ... the people were lying on the floor, upon just as much straw as you could hold in your hands... No doubt a great deal of the destitution is caused by want of employment. They exist, for weeks together, without the least portion of fire, and, for days together, without tasting food. But, amidst all the evidence I have had of actual starvation, the strongest proof of it is, that I have seen them lift out of the gutter, green herbs, which they devoured greedily, and also offals of fish or what might be passing.... Some change is necessary. The destitution is so great, that danger arises from it. If there be not some

(1) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. I. B.P.P.1844 (563) XX, p.200.

(1)
change, you will have positive starvation".

Ayr.

We also find evidences of poverty and destitution about another Scottish town, Ayr. The poverty in this town is described by Dr. Sym in his report about the sanitary condition of Ayr. He illustrates the increase in poverty of the industrious unemployed workers by the increase in the business of pawnbrokers in Ayr. He states that this business has become very extensive and that one of these pawnbrokers has alone about 4,000 transactions during each of the winter months. Dr. Sym regards this "a melancholy proof of the straits to which the industrious poor are reduced by temporary difficulties! He also points out that not more than one or two per cent of the pledges are left unredeemed except during severe and protracted depressions. He takes that to show that most of the pledgers are industrious people, labouring under temporary difficulties.

Dundee

Dundee was another of the Scottish towns which suffered a great amount of poverty at that time. Laurence Davidson (Surgeon) in his evidences before the Poor Law Commission gives a portrayal of this destitution. He attributes the increase in the poverty to the introduction of

(1) Report from Her Majesty's Commissioners for Enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. I. B.P.P.1844 (563) XX, p.116.

(2) Reports on the Sanitary Condition of the Labouring Population of Scotland. Dr. Sym's Report on Ayr, 1842, p.228.

the "Machine" in industry which had thrown the aged workers into unemployment. He says, "...The means of supplementing (the allowances of the poor) from manufacturers are now extremely limited. There were much light work suitable for paupers some years ago than there is now From the change in the mode of manufacturing the fabrics by the introduction of machinery, there is far less scope for employing the aged persons than formerly".⁽¹⁾ He believes that these circumstances had "decidedly" resulted in a considerable increase in the numbers of the poor and the assessment for them.

Greenock

In Greenock, in 1842, there was a great distress and unemployment. We find evidence of this distress in the proceedings and resolutions of a public meeting of the unemployed workers in this town in December, 1842, and in a memorial presented by them to Sir Robert Peel. The unemployed asked the executive Government for a grant of public money and an issue of clothing for them and their families. They also asked for a system of legal assessment for the relief of unemployment. Sir Robert Peel answered that "the state of the Law in Scotland in respect to the relief of the destitute has attracted the serious attention of Her Majesty's Government, and that measures are now in progress for instituting a full and comprehensive inquiry into that important subject with a view to the amendment of the existing law".⁽²⁾

(1) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. Appendix Pt. III, B.P.P.1844 (565) XXII, p.118.

(2) Times. 3rd December, 1842, p.6.

The Famine in the Highlands and Islands, 1846-47

In 1846-47 there occurred a famine in the Highlands and Islands of Scotland at the same time as the Irish famine. This was caused by the failure of the potato crop. As a result of that "three-fourths of the food of the vast population has been at once withdrawn from them".⁽¹⁾ (In the Highlands and Islands the population was 448,500 people in the 1841 census.)

This led to extreme poverty and destitution in these areas. The degree of consequent destitution can be recognised from the percentage of population which the relief committees found in need of charity in different districts. In a district of 114,200 people, not less than 84,300 (i.e. 73 per cent) needed the aid of charity.⁽²⁾

In another with a population of 115,000 as much as 86,000 (74 per cent) were found absolutely destitute and dependent till next harvest, on food supplied to them.⁽³⁾ The relief committees specified in their reports 106 places to which they found it necessary after careful inquiry, to supply with provisions, "to preserve part of the population from perishing by famine".⁽⁴⁾

Dr. Boyter, one of the agents of the Relief Committees, says referring to the Western Islands, "Were it not for the supplies sent by the Central Relief Fund, some hundreds of the people

(1) (2) (3) (4) Alison, W.P., Observations on the Famine of 1846-7 in the Highlands of Scotland and in Ireland. Edinburgh and London, 1847, pp. 19 & 20.

must inevitably have perished from want of food".

The failure of the potato crop was the direct cause that led to the famine, but the deeper cause was the very low standard of life of the people in this part of Scotland. Besides the tenants of large farms, the population there was formed mainly by two classes, the crofters who were small tenants possessing from one to six acres of land, and the cottars who possessed nothing except the cottages in which they live. The last class depended for subsistence on fishing and the precarious employment they might get every now and then in their surroundings. Their staple food was potatoes which they used to grow in small patches of ground which they hired or got in return of labour from their neighbours. "This class", says the report of the relief committee at Edinburgh, "live at all times in a constant struggle for the means of bare subsistence, and do not rise above the lowest scale of living necessary for existence, not to talk of comfort. In some seasons they are frequently reduced to live on such shellfish as they can collect"⁽²⁾.

The condition of these lower classes of the Highlands and Islands was made worse by the wholesale clearances to which they were sometimes subjected, and which used to compel them to emigrate and crowd into areas already congested. There were many instances in the first half of the Century of this

(1) Second Report by the Central Board of Management of the Fund Raised for the Relief of the Destitute Inhabitants of the Highlands and Islands of Scotland, Glasgow, 1847, p.21.

(2) First Report by the Central Board of Management of the Fund Raised for the Relief of the Destitute Inhabitants of the Highlands and Islands of Scotland, 1847, p.10.

clearing system, and one can imagine the amount of hardship and misery that was endured by the lower classes in these instances. The social institutions of the country at that time offered no protection or security whatsoever for these classes of agricultural labourers against the owners of the land. (1)

In addition very little effort and attention was devoted by these owners to the exploitation of the natural resources in these areas (2) and this naturally tended to keep low the standard of living of the whole population.

The Commissioners of the Poor Law Inquiry admit the very low standard of living in the Highlands and account partly for it by the system of consolidation of farms. They say, "the alteration in the system of farming in the highlands, by which a number of crofts and small farms have been thrown into large sheep walks, have tended greatly to increase the mass of pauperism. ... Now in consequence of the recent changes which have taken place, the crofters ... have been collected in villages on the coast, and many of them ... have the greatest difficulty in supporting themselves and their families. ..."

"Scarcely a year elapses, in the course of which, at one season or another, large portions of the labouring classes in the highlands are not more or less straitened for the means of subsistence. Their distress on some recent occasions is well known to have been very great. Indeed, according to their present

(1) & (2) Alison, W.P., Observations on the Famine of 1846-7 in the Highlands of Scotland and in Ireland, Edinburgh and London, 1847.

mode of life, it must always be so in the event, either of a defective potato crop, or an unsuccessful herring fishery, as, in the case of a large majority of the population, potatoes and herrings constitute their principal means of subsistence". (1)

For all these reasons, the failure of the potato crop resulted in a famine in these areas. A large percentage of the population was immediately faced with the danger of perishing from hunger. Just like the poor classes of Ireland, they were living on the border line of starvation, and they only needed the failure of a crop to be thrown into that terrible fate.

The years 1846 and 1847 were hard years not only in the Highlands and Islands but also all over Scotland. Besides the failure of the potato crop, there was a deficiency in the corn crop and a prevalent epizootic disease among cattle. These resulted in a rise in the price of provisions of all kinds to a great height. (2)

(1) Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844, B.P.P.1844 (557) XX, pp. XVI & XLIX.

(2) Stark, J., Report on the Mortality of Edinburgh and Leith for the year 1847, Edinburgh, 1848, pp.8 - 11.

IV. Poverty and Disease

I have given evidence of poverty in Scotland in the first half of the Century. I shall proceed now to give evidence about the effect of this poverty on the health of the people, and how it was reflected in the prevalence of disease. Scotland, during this epoch, endured extensive epidemics of Typhus and Relapsing fevers. The prevalence of this "contagious fever", the natural result of poverty, was another important social feature of the time. In any picture of the life and thought at that time, this question of contagious fevers must occupy a very prominent part as it was a noticeable scene in the background.

As these diseases were naturally diseases of the working classes, this suggested to society their association with poverty and their connection with the conditions of living of the poor. And in this way, they aroused some concern about the problem of poverty.

The study of these diseases, therefore, is a necessary part of the study of the environment and the background. It is necessary first, as an evidence of the conditions of extreme privation prevalent then. And it is also necessary for fully appreciating the effect they might have had on the public trends of thought.

Extent of Epidemics

A series of these epidemics occurred in Scotland in the years (1816-18), (1827-28), (1835-39), (1842-44) and (1847-48). I shall give some figures to show their extent. The following table gives the proportion of people attacked by the epidemic of (1835-39) in the three main towns of Scotland as estimated by Professor Alison and Professor Cowan. The figures in the table are approximate estimates furnished by Alison and quoted from his works.

TABLE II

Proportion of the Population of Edinburgh, Glasgow, and Dundee
Attacked in the Epidemic of 1835-39.

Town	Population (Approximated)	Estimated Number of Fever Cases in the Five Years (1835-39)	Estimated Proportion of Population attacked in the Epidemic
(1) Glasgow & Suburbs	300,000	55,000	18%
(2) Edinburgh & Leith	180,000	15,000	8%
(3) Dundee	62,000	10,000	16%

This table illustrates the extensiveness of these epidemics. An epidemic which involves about one-sixth of the population as in the case of Glasgow and Dundee, or one-twelfth as in the case of Edinburgh must have found the conditions extremely favourable to its propagation, and must have attracted the attention of the country.

The next table gives the number of fever cases treated at the public expense in the two big towns of Scotland in three epidemics.

(1) & (2) Alison, W.P., Illustrations of the Practical Operation of the Scottish System of Management of the Poor, 1840, p.23.

(1) Cowan, R., "Vital Statistics of Glasgow illustrating the Sanitary Condition of the Population", J. Stat. Soc. 1840, Vol. III, p.273.

(3) Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. 2nd Edition, Edinburgh and London, 1840, p.14.

N.B. The figure of Dundee is not the number of cases of fever in the whole five years, but only the number in the four years 1836-39.

TABLE III

Number of Fever Cases Treated at Public Expense in
Edinburgh and Glasgow in the Epidemics of (1817-19),
(1826-28 and (1836-39).

Years	Edinburgh (1)	Glasgow (2)	
	Hospitals	Hospitals	District Surgeons
1817 -19	3,110 (1,572 in 1818 alone)	4,644	
1826 -29	5,115 (2,013 in 1828 alone)	4,386 (1,511 in 1828 alone)	2,340
1836 -39	5,355 (2,244 in 1838 alone)	12,088 (5,387 in 1837 alone)	4,169

The above table is not intended, and cannot be used to measure and compare the prevalence of fever in these periods. My only intention is to show how the hospitals were overcrowded with fever cases, and how this must have attracted attention. The striking high figures in the table show that clearly.

Moreover, there is evidence to show that these figures, high as

(1) Creighton, Charles, History of Epidemics in Britain. Cambridge, 1894, Vol. II, pp.174, 181, 192.

(2) Cowan, R., "Vital Statistics of Glasgow, Illustrating the Sanitary condition of the Population". J. Statist. Soc. 1840. Vol. III, pp.271 end 272.

N.B. In the case of Edinburgh, the above table gives the number of fever cases admitted to the Royal Infirmary and the auxiliary fever hospital. In the case of Glasgow, it gives the numbers admitted into the Royal Infirmary, and in 1818-19 to the Hospital at Spring Gardens in addition; the table also gives the numbers of fever cases treated in Glasgow by district surgeons.

they are, are only a portion of the total numbers afflicted with fever. In respect to the Infirmary of Edinburgh, Alison says, "When we remember the number of young children affected with fever on all these occasions, the number of the poor who refused to go to the infirmary, or were too far advanced in the disease, when seen by the medical men attending them, to be removed, and the number of fever patients in the middle or higher ranks, we can hardly suppose the number admitted into the Infirmary during any of these epidemics, to have been more than one-half of the whole"⁽¹⁾.

In Glasgow, the number of fever cases introduced into the infirmary is even a much smaller estimate of the actual number of population affected by fever. "The hospital accommodation in Glasgow", says Alison, "has been much less adequate to such extension of fever than in Edinburgh, so that I believe in all the epidemics 'numerous applicants for admission have been thrown back on their own resources'⁽²⁾". We could conclude that the doors of the Infirmary in Glasgow were not open to all, from an incident told by Dr. Cowan about an order issued by the Managers of the Infirmary "that its doors should be closed to all, but those who present a recommendation from some qualified subscriber"⁽³⁾. Dr. Cowan also reports that "the hospital accommodation in Glasgow was inadequate in 1819, 26-27, 31, and 36-37"⁽⁴⁾.

(1) & (2) Alison, W.P., Observations on the Management of the Poor in Scotland. 2nd Edition, Edinburgh and London, 1840, pp. 8 and 13.

(3) & (4) Cowan, R., "Vital Statistics of Glasgow Illustrating the Sanitary Condition of the Population". J. Statist. Soc., 1840, Vol. III, pp. 272 and 271.

These extensive visitations of fever had greatly aroused the concern of the people in Scotland. For example in October, 1818, the Edinburgh Medical and Surgical Journal, (1) in the critical analysis of the new publications found eleven of these on fever, and the prevalent epidemic then of 1818. Among these were 5 published in Edinburgh and 2 in Glasgow. In evidence of the alarm produced by these epidemics I shall quote Andrew Duncan (junior) who wrote in November, 1817, a special article with the purpose of quieting this alarm. He says, "A considerably greater degree of alarm has been spread among the higher classes of society concerning the prevalence and danger of fever in Edinburgh, than I think is necessary or well founded ... Another reason why the public believe that fever is more prevalent is that it has caused several deaths in the higher classes of society. This mortality is, I believe, extraordinary, and so far as I can learn, during the present year, a larger proportion of deaths than usual has taken place among the rich, not only in Edinburgh, but all over the kingdom, and every death in this rank of society is known, and excites general lamentation and fear". (2)

This article was intended to quiet the alarm which the epidemic had aroused. The writer tried to show that the fever was not

(1) Edinburgh Medical and Surgical Journal, 1818, Vol. XIV, pp. 528 and 529.

(2) Duncan, Andrew, (junior) "Report on the Present State of Fever in Edinburgh". The Edinburgh Magazine and Literary Miscellany (A new series of the Scots Magazine) 1817, Vol. I, pp. 348 and 349.

N.B. The article was signed A.D.,J. The proof that these are the initials of Dr. Andrew Duncan (Junior) is to be found in a footnote in Dr. I. Yules' Pamphlet "Observations on the Cure and Prevention of the Contagious Fever now prevalent in Edinburgh", 1818 p. 58.

exceptionally extensive or virulent. It is interesting to notice that this article was written in 1817, and thus this alarm had been aroused even before the epidemic had reached its extensive extent in 1818.

In Alison's pamphlets there is a great amount of evidence about the extensive spread of the epidemics of "fever" in Scotland. These pamphlets, published to the public from 1840 onwards, had intended to convey fully to the country the alarming extensive picture of disease in the Scottish towns. Alison tells in them the story of these epidemics, and calls the attention with figures and statistics to their extensiveness, and to the degree to which they have become a frightful danger. In 1840, he tells that since many years past, epidemic fever has never been absent from Edinburgh, Glasgow and other Scottish towns. He also states that this has been the case in the last twenty-two years; and that in this period Scotland has suffered three great epidemics beginning in 1817, 1826 and 1836, each lasting more than three years. He states that in Edinburgh alone each of the two last epidemics has affected at least ten thousand people. He calls the attention that the extension and severity of these epidemics is increasing more and more. He illustrates that by stating, "that the mortality and the extent of the last of these has been greater than either of the former, having amounted in 1836 to no less than one in six of all the fever patients admitted into the Edinburgh Infirmary. "Moreover", he states, "the abatement of the disease between the last two

epidemics was less complete than between the two first".⁽¹⁾

Again, Alison, to prove the increased prevalence of disease in the Scottish towns, refers to the Reports of the Managers of Edinburgh Infirmary, especially the 1833 report. This report shows first that "the number of admissions has more than doubled within 25 years", i.e., the number of the destitute sick treated at the public expense in the infirmary has been more than doubled. That is while the population has only increased by 50%. But that is not all. The report further shows that the mortality in the cases admitted to the infirmary has increased from (1 in 21) to (1 in 8). This rise in mortality Alison takes to indicate that, while formerly the pressure on the infirmary was slight and thus cases with slight ailments were admitted, lately the pressure on the Infirmary increased so much that cases with slight ailments were refused admittance. And from this he concludes that the destitute sick must have thus increased much more than is shown by the doubling of the infirmary admissions. In this way Alison shows that the amount of suffering from the combination of poverty and disease had increased in a much greater proportion than the increase in population.⁽²⁾

(1) & (2) Alison, W.P., Illustrations of the Practical Operation of the Scottish System of Management of the Poor. (From J. Stat. Soc, 1840, Vol. III), London, 1840, p.13.

The Relationship Between Trends of Disease and Times of
Depressions and Unemployment

Alison, quite rightly, postulates that these great extensive epidemics of fever were the natural expected results of the increase of poverty and destitution of the people. He connects the occurrence of these epidemics with special periods of hardship and depression.

As regards Edinburgh, he calls our attention to the facts that the 1817 epidemic occurred after two bad harvests; that the 1826 one appeared after the great failures in 1825 and the sudden cessation particularly of building speculation in Edinburgh; and that the last epidemic of 1836 happened after the great depression of trade both in Glasgow and Dundee, with which towns the lower orders of Edinburgh were much connected

As regards Glasgow, he considers that even stronger evidence shows the same pattern, of pestilence following periods of depression. He gives the number of fever patients in the hospitals and shows how this is closely related to the economic conditions at different years. Thus for twenty years before 1815, when the town was prosperous and increasing in wealth, the number of fever patients was low. But the number rose during the years 1817, 1818, 1819, a period of depression; and fell again on return of prosperity. But after the failures of 1825, it rose to a high level again in the years 1826, 1827 and 1828. So also after the great failures and stagnation of trade in 1835-36, the epidemic spread extensively in the years 1836, 37 and 38. (1)

(1) Alison, W.P., Illustrations of the Practical Operation of the Scottish System of the Management of the Poor. (From J. Stat. Soc. 1840, Vol. III), London, 1840, p.12.

Dr. Cowan, in discussing the epidemic of 1837 in Glasgow follows the same line of reasoning and attributes the spread of fever to poverty. He says, "From the close of 1836, one of the periodical depressions in trade, arising from the state of our monetary system, has visited this city and deprived a large proportion of the population of the means of subsistence. A very large proportion of the inhabitants in addition to those already suffering from the state of money market, were suddenly deprived of employment, and, consequently the means of procuring food. The high price of coal was the means of diminishing the hours of labour, and consequently the amount of wages in numerous factories, and placed fuel beyond the reach of the lower classes for domestic purposes. And in addition to those sources of misery, the average prices of grain were much higher during 1837 than they had been for some years previously".

"Under such circumstances, it will not be a matter of surprise that fever should have increased most materially during last year, and accordingly we find that its ravages extended over fully more than one-eleventh of the inhabitants".

"The fever however was chiefly, nay, almost confined to the labouring classes, and to the districts which they inhabited".
(1)

(1) Cowan, R., "Statistics of Fever in Glasgow for 1837".
Lancet, 1838-39, Vol. II, p.145.

The 1843 Epidemic

The 1843 epidemic needs to be considered alone as it was the first time that the medical thought in Scotland became aware of a "nova pestis" quite different from typhus, viz., Relapsing fever. Alison describing 1843 epidemic which was mostly an epidemic of relapsing fever says, "In common with most practitioners, I long hesitated to believe that this epidemic fever, although obviously possessing peculiar characters, is really a "nova pestis", but repeated observation has now convinced me, and, I believe, most of those who have seen much of the disease, that this is really its nature, and that there are at present in Scotland two specific poisons, the one producing this peculiar fever, marked by the early crisis, the almost uniform relapse, the severe muscular pains, the absence of the peculiar typhoid eruption, and the presence, in severe cases, of the yellowness of the skin, and even of the black vomit, so frequent in the fevers of hot climates; the other producing that disease which is marked by the frequent typhoid eruption, the longer duration of fever, the greater affection of the brain, and less of the stomach, and the much less tendency to relapse".⁽¹⁾

This opinion was expressed in a postscript to Alison's pamphlet. In the pamphlet itself in earlier pages Alison had not yet been convinced of the idea of a "nova pestis", and was up

(1) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.59.

till then holding the belief of the "identity of the continued fever of this country under all its forms and modifications". (1)

This epidemic spread all over Scottish towns, in Edinburgh, Glasgow, Greenock etc., and was extremely extensive. In Edinburgh in six months ending 31st January, 1844, 3,162 patients with this fever were admitted into hospital, i.e., averaging about seventeen every day for the whole time, and "a very large number during part of these months were refused admittance, for want of room". (2)

In Glasgow, Dr. R. Perry estimated the number of cases afflicted by this epidemic in Glasgow as 32,000 cases in the last eight months of 1843, i.e., 11.63 per cent of whole population. In some districts occupied by the lower classes he estimated the cases of fever as being 23% or even 26% of the whole population. (3)

The following is a table of the number of people attacked in this epidemic in Edinburgh and Glasgow as estimated by Professor Alison and Dr. Perry and the proportion of these cases to the total population.

(1) & (2) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland, and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.5; p.56.

(3) Perry, R., Facts and Observations on the Sanitary State of Glasgow in 1843.
Cited in Alison, W.P., Observations on the Epidemic Fever of 1843, and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.67.

TABLE IV

Proportion of the Population of Edinburgh and Glasgow
attacked in the 1843 Epidemic

Town	Population (1841 census)	Estimated Number of Fever Cases	Estimated Proportion of the Population attacked in the Epidemic
(1) Edinburgh	137,172	9,000	6.56%
(2) Glasgow	275,000	32,000	11.63%

In order to prove the relationship of this epidemic to poverty and destitution, Alison organised an inquiry among the inmates of fever hospitals in Edinburgh, Glasgow and Greenock, to determine their state of employment before catching the fever. Among 1,768 fever patients, according to Alison taken indiscriminately in the Infirmaries of these towns, only 589 (about one-third) was in full employment, while 1,179 were either unemployed or "so partially employed that their earnings were generally stated as insufficient for their support, and their clothing and condition gave ample evidence of destitution".⁽³⁾

(1) & (2) Murchison, C., A Treatise on the Continued Fevers of Great Britain. 1st Edition, London, 1862, p.47.

(2) Alison, W.P., Observations on the Epidemic Fever of 1843 and its Connection with the Destitute Condition of the Poor. Edinburgh and London, 1844, p.67.

N.B. The figure for Glasgow is an estimate of the number of fever cases in the last eight months of 1843 only.

(3) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, pp.63.

He also states that the result of the inquiry shows that fever begins among the most destitute, but when spreads involves other strata of population. Thus of 646 fever patients in Edinburgh Infirmary in the beginning of the epidemic in July and August, 1843, only 237 had been fully employed, i.e., 36.6%, while of 630 patients at the end of September and in December, 275 had been fully employed, i.e., 43.6%. Alison concludes: "these facts I hold to be proof positive of the efficacy of destitution, as, in one way or other, the main cause of the diffusion of this epidemic fever in Scotland".⁽¹⁾

Dr. Alexander Watt furnishes us also with data to prove the relationship between poverty and the 1843 epidemic, in Glasgow, in his report about the Vital Statistics of Glasgow. These data are the total numbers of burials in 1843 and in 1842 in Glasgow, and how much of these burials were done at the public expense in each year. There is an increase of 2,340 burials in 1843 over 1842. Dr. Watt calculates that two-thirds of this increase is in the portion buried at the public expense. Further, he compares 1843 with 1844, which was a prosperous year in which mortality decreased. He finds that of the whole decrease that took place in 1844 in the amount of burials,⁽²⁾ 71.42 per cent has been among the burials at the public expense. Further, he observes that it is almost exclusively in the

(1) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, p.64.

(2) Watt, A., The Vital Statistics of Glasgow for 1843 & 1844. Glasgow, 1846, pp. 110, 112 & 113.

burying grounds of the working classes that the increase and decrease in the numbers of burials occurs in the years of depression and prosperity respectively. He concludes that the excessive mortality in Glasgow in years of depression is almost entirely confined to the poorest classes of the people; and that, "There is perhaps no town of a more healthy character than this city, for the wealthy and those in comfortable conditions".⁽¹⁾

There is further evidence of the relationship of this epidemic to the poverty of the working classes in Glasgow in Dr. R. Perry's work "Facts and Observations on the Sanitary State of Glasgow in 1843". In the answers of the district surgeons to the inquiry he has organised about the extent of poverty and disease in Glasgow in this year, we find that all the reporters in the same tune, state that they have found fever cases only among families, "who are very poor", among hand-loom weavers, stocking weavers etc., who are "suffering great distresses from want of employment", "whose means of subsistence are very precarious", or who are "living chiefly by begging". "In hundreds of cases, the only or chief support these wretched beings had, were the penny tickets" which the surgeons distributed among them".⁽²⁾

Alison, from all these evidences, concludes that

(1) Watt, A., The Vital Statistics of Glasgow for 1843 & 1844. Glasgow, 1846, pp. 110, 112 & 113.

(2) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, pp.73-75.

"in 1843, not only destitution, but destitution resulting chiefly from want of employment, or redundance of population, was the chief cause of the diffusion of fever, and the increased mortality in Glasgow".⁽¹⁾

(1) Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844, pp.73-75.

The Epidemic of 1847-48

The epidemic of 1847-48 needs also to be considered alone because it had its special circumstances. The source of the epidemic were the Irish who fled to the Scottish Cities, from famine and pestilence in Ireland, during the Irish Famine. In evidence of that, Alison gives a table showing that at the beginning of the epidemic the greatest majority of the patients in the Royal Infirmary in Edinburgh were Irish (80%) but as the epidemic spread more, Scottish people were involved (1) although the percentage of the Irish remained high. Again (2) in Glasgow it was shown that 57% of the cases were Irish.

The epidemic was exceptionally severe. It involved a large number of people and the rate of mortality was high. It was a mixture of typhus and relapsing fevers. The following is a table of the number of cases treated in Edinburgh and in Glasgow during this epidemic and the mortality rate in these.

TABLE V

Number of Cases and Rates of Mortality in the 1847-48
(3)
Epidemic in Edinburgh and Glasgow

Town	Number of Cases	Rate of Mortality in All Cases	Rate of Mortality in Typhus Cases
Edinburgh	19,254	13%	24.7%
Glasgow	11,245	14.41%	21.2%

(1) Alison, W.P., Observations on the Famine of 1846-47 in the Highlands of Scotland and in Ireland, Edinburgh and London, 1847, p.10.

(2) & (3) Murchison, C., A Treatise on the Continued Fevers of Great Britain, 1st Edition, London, 1862, p.49; p.50.

Although the source of the epidemic were the immigrating famished diseased Irish, yet it was the distress, and the general economic depression of the Scottish working classes in these years which helped the epidemic to spread. In the Highlands and Islands there was a famine, and in the manufacturing towns there was a special depression of trade and unemployment in this period. Besides, the failure of the potato crop, a deficiency of the corn crop, and a prevalent epizootic disease among cattle raised greatly the price of all kinds of provisions. This resulted in increasing the hardships of the lower classes and in rendering most of the necessary nutrients out of their reach. (1)

These were favourable conditions for the spread of epidemics. That is why it is not much exaggeration that Charles Creighton says, "But it is not so clear that England and Scotland would not have had an unusual amount of typhus in the same years, even if the Irish had been kept out by an ideally strict quarantine". (2)

Thus, it was poverty and destitution, whether that which prevailed in Ireland, or that in the Scottish towns which bred this epidemic as it had always done in the former ones. The poverty and the hardness of the time was reflected in the mortality in 1847. There was an exceptionally high mortality in this year in the Scottish towns as is clear from the following table.

(1) Stark, J., Report on the Mortality of Edinburgh and Leith for the year 1847, Edinburgh, 1848, pp. 8-11.

(2) Creighton, C., History of Epidemics in Britain, Cambridge, 1894, Vol. II, p.205.

TABLE VI

Deaths from All Causes in Scottish Towns in the years 1846,
 (1)
1847, 1848 and 1849

	Edinburgh	Glasgow	Dundee	Paisley	Leith	Greenock	Aberdeen
1846	4,594	10,854	1,531	1,429	801	1,087	1,315
<u>1847</u>	<u>6,706</u>	<u>18,071</u>	<u>2,520</u>	<u>2,068</u>	<u>955</u>	<u>2,214</u>	<u>1,466</u>
1848	5,475	12,475	2,146	1,552	<u>1,212</u>	1,289	<u>2,366</u>
1849	4,807	12,231	2,312	1,712	1,066	2,344	

This table shows the great increase in mortality in 1847 in all the Scottish towns without exception. This is evidence of the poverty and hardships during this year.

Again, the prevalent privations of the working classes resulted not only in epidemic fevers, but also in diseases of malnutrition. Scurvy was prevalent during this hard time. James Stark gives evidence as to the prevalence of Scurvy in Edinburgh in 1847 and on its influence in raising the mortality this year. He says that in this period, as a result of the rise in the price of provisions "to an exorbitant height", milk and animal food became too scarce to be obtained by the working classes and potatoes were very short. He states that this led to the appearance and the prevalence of Scurvy. He says that this was not confined to the working classes alone, though "it was among them that the severe forms of scurvy were remarked".

(1) Creighton, C., History of Epidemics in Britain, Cambridge, 1894, Vol. II, p.839.

He notices that there was an increase in the mortality in the first quarter of 1847 in Edinburgh (before the fever epidemic). He claims that this was due to the effect of Scurvy and malnutrition in diminishing the resistance of the people. In evidence of this view, he states that the increase in the mortality above the average was solely confined to deaths from respiratory diseases and from old age, which result from a lowered resistance to atmospheric changes. (1)

Again, there were many reports of the prevalence of Scurvy in the Highlands and Islands which suffered most from the failure of the potato crop. (2)

(1) Stark, J., Report on the Mortality of Edinburgh and Leith for the year 1847. Edinburgh, 1848, pp.8-11.

(2) Alison, W.P., Observations on the Famine 1846-7 in the Highlands of Scotland and in Ireland. Edinburgh and London, 1847, p.12.

V. The Trends of Mortality Rates

I have tried to give some evidence of the poverty and disease in the Scottish life in the 1820's - 50's. The trend of mortality rates, which is a sensitive index of the condition of the people, gives further evidence of the deterioration of the working classes' conditions during this period. It shows how the social and economic changes during this epoch had affected adversely the welfare and consequently the health of the people. J.H.F. Brotherston shows that the death rates were falling in Edinburgh for at least 80 years before 1820. He shows that this decline in death rates was due to the material progress and increasing prosperity during the second half of the Eighteenth Century in Scotland. (1)

But after the death rates had progressively declined for more than half a century, they began to rise again after 1820. This is demonstrated by James Stark in the death rates of Edinburgh. The following table which is quoted from Stark, with little alteration to add to it the death rate for the decennium 1840-49, shows that clearly.

(1) Brotherston, J.H.F., Observations on the Early Public Health Movement in Scotland. London, 1952, p.34.

TABLE VIITrend of Death Rate per 1,000 Edinburgh, 1780 - 1849

(1)

1780 - 89	.....	29.09 per 1,000
1790 - 99	.....	27.35 per 1,000
1800 - 09	.....	25.31 per 1,000
1810 - 19	.....	24.99 per 1,000
1820 - 29	.....	26.20 per 1,000
1830 - 39	.....	29.02 per 1,000
1840 - 49	.....	30.29 per 1,000

(1) Stark, James, Inquiry into Some Points of the Sanatory State of Edinburgh, Edinburgh, 1847, p.11.

N.B. The Death rate for the decennium 1840-49 was calculated from figures taken from the following references,

(a) Stark, James, "Contribution to the Vital Statistics of Scotland", J. Stat. Soc. 1851, XIV, p.75.

(b) Census of Great Britain 1851, Population Tables. Numbers of the Inhabitants in the years 1801, 1811, 1821, 1831, 1841, 1851 in Scotland and in Islands in the British Seas, 1852. Division XI, B.P.P. 1852-53 [1632] LXXXVI, p.98.

(c) Stark, James, Inquiry into Some Points of the Sanatory State of Edinburgh, Edinburgh, 1847, p.7.

I have tried to make a study of the death rates of Glasgow in the same period. Fortunately, this city had been one of the early cities in keeping and publishing its vital statistics. And it is from these early statistical reports by James Cleland, Alexander Watt, and John Strang that I calculated the following table.

TABLE VIII

Trend of Death Rates per 1,000. Glasgow 1781 - 1849 (1)

1781 - 90	.....	38.1 per 1,000
1790 - 99	.....	29.3 per 1,000
1800 - 09	.....	25.4 per 1,000
1810 - 19	.....	24.0 per 1,000
1820 - 29	.....	25.7 per 1,000
1830 - 39	.....	31.8 per 1,000
1840 - 49	.....	32.9 per 1,000

(1) This table had been calculated from the following references,

(a) Cleland, James, Statistical Tables Relative to the City of Glasgow. 3rd Edition, Glasgow 1823, pp. 9 & 16.

(b) Cowan, R., "Vital Statistics of Glasgow, illustrating the Sanitary Condition of the Population". J. Stat. Soc. 1840, Vol. III, p.265.

(c) Watt, A., The Glasgow Mortality Bill for the year 1840. Glasgow, 1841, p.32.

(d) Watt, A., The Vital Statistics of Glasgow for 1843 & 1844. Glasgow, 1846, p.87.

(e) Strang, John, Vital, Social and Economic Statistics of Glasgow for 1851. Glasgow, 1852, pp. 6 & 4.

(f) Strang, John, Vital, Social and Economic Statistics of Glasgow for 1861. Glasgow, 1862, p.4.

N.B. The rates up till 1822 were calculated from the total number of burials, which included the still-births.

The table shows that the trend of mortality in Glasgow follows the same pattern noticed in Edinburgh. The death rates had been falling in the period 1781 - 1819; but since 1820 they began to rise again. It is significant that the mortality rate in Edinburgh and Glasgow would follow the same trend and would show a similar progressive deterioration in the 1820's - 1840's.

Again, Alexander Watt states that the same deterioration had occurred in Glasgow in the death rates of children under 5. He shows that in the five years previous to 1831 the average annual number of deaths of children was 1 in 101.96 (compared with the population of 1831). However, the average, in the five years previous to 1841, amounted to 1 in 75.41 (compared with the population of 1841).⁽¹⁾ Watt comments on that saying,

"There can be no greater proof that something is necessary to be done to ameliorate the social condition of the people, than that the mortality among children is so high".⁽²⁾

He also says, "It may be proper here to remark that there is abundant material before me to prove that the great excess of deaths among children is peculiar to the working classes, who are frequently subjected to severe privations from a deficiency of employment".⁽³⁾

R. Cowan gives a table of the annual deaths under 5 years of age and their ratio to the population, from 1822-1839.

(1)(2) Watt, Alexander, The Glasgow Mortality Bill for the Year 1840. Glasgow 1841, p.6; p.34.

(3) Watt, A., The Vital Statistics of Glasgow for the Years 1843 & 1844. Glasgow, 1846, p.96.

This table, too, shows the progressive deterioration in the children death rates. ⁽¹⁾

The mean for <u>1822-30</u>	was	<u>1 in 90.07</u>
The mean for <u>1831-39</u>	was	<u>1 in 72.56</u>

Again on examining the annual death rates for Glasgow, one will find great fluctuations, and will notice that these fluctuations follow closely the curve of the economic conditions of the people. Thus in the periods of depression and prevalent privations, one finds invariably a considerable rise in the death rates. This is noticeable in all the years when there were great distresses and hardships among the working classes. I have given before evidence to show that there were such economic distresses in the periods 1827-28, 1831-32, 1836-37 and 1846-47. In these epochs, there was also a considerable rise in the death rates as is seen in the following table:

(1) Cowan, R., "Vital Statistics of Glasgow, illustrating the Sanitary Condition of the Population". J. Statist. Soc. 1840, Vol. III, pp.265 & 266.

TABLE IX

Annual Death Rate Per 1,000, Glasgow
Before, During and After Years of Economic Distress

(1) Year	Death Rate	(2) Year	Death Rate	(3) Year	Death Rate	(4) Year	Death Rate	(5) Year	Death Rate
1817	20.8	1826	24.5	1830	24.0	1834	27.5	1845	23.9
1818	30.8	1827	27.0	1831	29.5	1836	35.3	1846	33.8
1819	22.6	1828	30.2	1832	46.1	1837	41.5	1847	54.9
1820	20.4	1829	26.3	1833	27.9	1838	27.1	1848	37.0
		1830	24.0	1834	27.5	1839	28.5	1849	35.5

(1) Calculated from

Cleland, James, Statistical Tables Relative to the City of Glasgow, 3rd Edition, Glasgow, 1823, pp. 9 & 16.

(2) Cowan, R., "Vital Statistics of Glasgow, Illustrating the Sanitary Condition of the Population", J. Stat. Soc. 1840. Vol. III, p.265.

(3) & (4) Watt, A., The Glasgow Mortality Bill for the Year 1840. Glasgow 1841, p.32.

(5) Calculated from

Strang, John, (a) Report on the Vital, Social, Economic Statistics of Glasgow for 1851. Glasgow 1852, pp.4 & 6
and (b) Report on the Vital, Social and Economic Statistics of Glasgow for 1861. Glasgow 1862, p.4.

Moreover, although there was a rise in death rates in most of the Scottish towns during the 1820's - 1840's, yet they differed in the degree to which they were subject to this deterioration. Stark in 1851 gives the death rates of 7 Scottish towns in the period 1840-1-2 at different ages, and compares them together. He concludes from his tables that "just in proportion to the amount of misery and destitution in a town, (1) is the proportion of mortality to the population".

He states that Glasgow exceeds all towns in this respect, beyond all comparison. "Greenock, then Edinburgh follow, then Leith, Perth, Dundee and Aberdeen". (2) In a table furnished by A. Watt (3) about the death rates during five years previous to 1848, we find that the Scottish towns are arranged almost in the same manner as regards their favourableness to health.

(1) Stark, James, "Contribution to the Vital Statistics of Scotland". J. Statist. Soc. 1851, Vol. XIV, p.80.

(2) Ibid, p.80.

(3) Report from Her Majesty's Commissioners for enquiring into the Administration and Practical Operation of the Poor Laws of Scotland, 1844. B.P.P.1844 (557) XX, p.XXVIII.

OTHER INFLUENCES ON ALISONI. Medical Police and Johann Peter Frank

In the earlier pages I have tried to show how it was the environment and the background of the life in Scotland during the first half of the Century that was mainly responsible for inspiring Alison and determining his line of thought.

But, besides the effect of the environment, I think Alison was also influenced by the philosophy and thought of a great pioneer of Social Medicine who had affected to some extent the Scottish medical school at that time; I mean

(1)

Johann Peter Frank.

Frank was a great outstanding figure in the field of public health in the second half of the 18th Century in Europe. His thought had a great influence on contemporary European medical thought. His great classical "System einer vollständigen medicinischen Polizey" was one of the foundations

(1) Johann Peter Frank (1745-1821).

A great name in the history of Medicine. Studied at Heidelberg and Strasburg. "Was one of the most outstanding figures in the great public health movement that took place in the second half of the 18th Century". The author of a great work in Public Health "System einer vollständigen medicinischen Polizey". The publication of the first three volumes of this great work attracted attention to him. He became Professor in Göttingen (1784) and then in Pavia (1785). In 1786, he was appointed Protophysicus and Director General of Public Health of Austrian Lombardy and the Duchy of Mantua in addition to his chair in the University of Pavia. In this post he carried out a huge programme of Public Health reform. In 1786 he was charged with the administration of Vienna Hospitals. In 1804, he spent a short time in St. Petersburg as counsellor of State, then he returned to practice in Vienna where he died in 1821. (Sigerist, H.E., Bull. Hist. Med., 1941, Vol. IX, pp.81-87.)

of the science of Public Health. In tackling the public health problems of his time, he was quite aware of the importance of poverty on the health of the people. In all his works he showed that he was greatly impressed with the relationship between poverty and disease, and he always stressed the importance of raising the standard of living of the people for attaining a better public health. "The medical officer's main task", he says in 1790, "is to investigate assiduously the origin and chief causes of the various diseases that befall the states, but I shall briefly examine before this distinguished assembly only one, namely, the misery of the people as the most fertile mother of diseases". "Let the rulers, if they can, keep away from the borders the deadly contagion of threatening diseases! Let them place all over the provinces men distinguished in the science of medicine and surgery! Let them build hospitals and administer them more auspiciously! Let them pass regulations for the inspection of pharmacies and let them apply many other measures for the citizens' health - but let them overlook only one thing, namely, the necessity for removing or of making more tolerable the richest source of disease, the extreme misery of the people, and you will hardly see any benefits from public health legislation". "The extreme poverty of the people ... causes in the citizens a physical disposition for innumerable diseases and makes it very difficult or impossible to cure them, even with still better medical equipment! "Every social group has its own type of health and diseases, determined by the mode of living". ...

"The diseases caused by the poverty of the people, however, are so exceedingly numerous that in a brief address they can be discussed only in outline. The embryo has hardly been conceived for future misery in the mother's womb, when it soon is exposed to how many calamities! ... Sowed in exhausted soil, the fetus has hardly drawn the first juices through the animal roots of the placenta when, without resistance, it already is shaken and torn as a result of the awful physical labour imposed upon the ill-nourished mother. Or frustrated of the necessary food, it wastes away under the mother's laments and sighs before it had a chance to develop. ..."

"If the mother does not sell her breasts to foreign mouths, the scarcity of milk - consumed by excessive labour, - or her own frequent separation from the child will force her after a few months to prepare coarser food for the baby"

"Everybody must admit from his own experience that the human machine must break down in a very short time if food of the right kind and quantity does not replace what labour has used up every day, and sweats have consumed. Slave people are cachectic people. Starvation and sickness are pictured on the face of the entire labouring class" "Scarcity of food, however, and a quality of food that has no nutritional value make the citizens physically unfit for any sustained effort and predispose them for catching any matter of diseases. The weaker the organism and the more exhausted from troubles the human machine is, the sooner miasmas and contagions penetrate it like a dry sponge. Hence famine - sterility of the fields

increased under an unfortunate constellation - is immediately followed by epidemics in the provinces. They are to be attributed not so much to the poor quality of food as to the fatal readiness of the body to absorb germs of diseases".

"Physicians, surgeons, military commanders, or priests may be living in the corrupt atmosphere of the sick, coming in close touch with them, and yet they are less frequently affected by contagion than the poor, emaciated, and depressed citizens, and soldiers. Thus any epidemic or contagious disease generally takes its origin in the poorer class of the population, dominates there in a most severe way and is stamped out late. ... Even a light infection, localized in a small spot, soon develops into a deadly disease similar to jail or hospital fever, and spreads among relatives and friends who are exhausted by misery and predisposed by it....."

"I can touch only with one word the many troubles peculiar to the poor that arise from insufficient clothing, lack of fuel, bitter frost, sooty and unclean habitations or the filthy skin diseases due to neglect of cleanliness of the body and sluggish perspiration resulting from continuous distress".⁽¹⁾

I shall next state why I consider that Johann Peter Frank's thought had influenced Alison. The first separate course of public health in Edinburgh University was given by the Professor of Institutes of Medicine, Andrew Duncan (senior)

(1) Frank, J.P., "The People's Misery: Mother of Diseases", 1790. Translated from the Latin by Sigerist, H.E., Bull. Hist. Med. 1941, Vol. IX, pp. 88-100.

in 1801, under the name of Medical Police. This term is the translation of "Medicinische Polizey", and the course was much influenced by the work of Frank, "Complete System of Medical Police" (System einer vollständigen medicinischen Polizey), published at Mannheim from 1779 onwards. This is evident from the introduction given by Duncan to his course of lectures in 1801. In this introduction Duncan says "For the most minute consideration of the Politia Medica, and for its separation from the Jurisprudentia Medica, we are chiefly indebted to an eminent German author Dr. Frank, formerly Professor at Pavia, now at Vienna. His enlarged mind perceived, and fully vindicated the importance of this branch of medical knowledge. Several years ago, he began to publish an extensive and beneficent system on this subject, in the German language. This work soon attracted the notice of almost all Europe. Different volumes of it, as they appeared in succession, were speedily translated into the Italian, and other continental languages; and it has had the effect of calling the attention of legislators and magistrates to subjects of medical police, much more than at any former period⁽¹⁾".

Duncan then began to describe the work of Frank and to enumerate in detail the subjects dealt with in each of its volumes. The volumes which had been issued then of this work were four, and Duncan mentioned that two more volumes were going to be published according to the author's plan.⁽²⁾

(1) Duncan, A., (Elder), Heads of Lectures on Medical Police, Edinburgh, 1801, p.9.

(2) N.B. Frank's work was issued in six volumes with three supplementary volumes.

That Duncan was aware of and impressed with Frank's ideas upon the relation between poverty and public health is evident from his definition of "Medical Police". He says, "It is, perhaps, the most important branch of general police, for it extends over the whole population of the state; and it particularly regards the prosperity and happiness of those, on whom the gifts of fortune have been bestowed with the most sparing hand. Hence, for the protection and comfort of the poor, with every wise legislature, many of its principles have acquired the authority of laws". (1)

He also says, "It must, however, be allowed, that, among us, Medical Police has been cultivated only by a few. It has not been the subject of much publication; and it has never, as far as I know, been the subject of lectures."

"There are, however, few countries in which, from proper cultivation, more might be expected, than Britain... No nation is more generous in public charitable institutions and in no country does the individual more willingly appropriate part of his opulence for the relief of distress". (2)

He also says, "Can medical knowledge be more usefully employed, than in pointing out the means of improving and of preserving health, - of supplying proper nourishment to the indigent, especially in times of scarcity, - of securing to the diseased, the advantages intended by their benefactors". (3)

(1) (2) (3) Duncan, A., (Elder), Heads of Lectures on Medical Police, Edinburgh, 1801, p.7; p.10; p.13.

Thus it is clear that Medical Police, as was first taught in Edinburgh, was much influenced by Frank's concept of the relationship between poverty and public health. Now Alison was a student of Duncan (Senior), and later on became a joint professor of Institutes of Medicine with him in 1822. So it is natural to assume that Alison must have been influenced by Frank's views on this subject which were taught by Duncan. Besides it was as a Professor of Medical Police and Jurisprudence that Alison was first appointed in the professorship of the University of Edinburgh. The only professor that preceded him in this post was Andrew Duncan (Junior), [the son of Andrew Duncan (Senior)]. Duncan (Junior) also had gone to the continent and had met Frank,⁽¹⁾ and the Edinburgh Surgical and Medical Journal edited by him, shows that he was influenced by Frank's views and his father's teachings on the relationship between poverty and disease.

That is why I consider that Frank's teaching had influenced Alison through the effect it had on the science of "Medical Police" as it was first taught in Edinburgh.

II. Ireland and the Early Irish Medical Thought

There was another influence which must have been of importance in inspiring Alison and determining his characteristic line of thought. This was Ireland and its experience in famine

(1) Dictionary of National Biography, Oxford, 1921-22.

and pestilence. The relationship between poverty and disease could nowhere be clearly seen and recognised more than it could have been in this country. There, famine and pestilence used to occur in such dramatic outbreaks that anybody who would follow their story could not help being impressed with their intimate connection. There are many evidences to show that Alison had always been interested in the conditions of poverty and disease in Ireland. In many of his works he always refers to the state of Ireland in a way which impresses with his intimate knowledge of it. In 1836, on the appearance of a work by John Revans entitled "Evils of the State of Ireland, their causes and their remedy - A Poor Law", Alison published a very long commentary on this book and on the conditions in Ireland in two unsigned articles in the Blackwood's Edinburgh Magazine. ⁽¹⁾ In these two articles, in which he repeated his characteristic arguments, he discussed the problem of poverty and the need for a poor law in this country.

Besides following the course of events in this country, Alison's works show also that he studied the Irish medical literature about the epidemic fevers which were prevalent in that country. Most of the Irish medical men were impressed with the relationship between poverty and disease as a result of their striking experience of famine and pestilence there. Alison's works give evidence that he was following the publications of many of these Irish medical men. Besides, many of these publications were either published, or summarised and commented

(1) Blackwood's Edinburgh Magazine, 1836, Vol. XL, pp.494 & 812.

upon in the Scottish medical periodicals. So they must have had some influence on him. I shall quote some of these Irish publications that appeared early in the Century in order to show how they could have affected him.

(1)
 Professor John Cheyne says in the Medical Report of the Harwich Fever Hospital while speaking about the epidemic of 1816-19, "Where the disease was introduced among such communities as had little connexion with the higher ranks of society, and were destitute of employment, and consequently ill supplied with food, and clothing and fuel, among such as, from the severe pressure of the times were so dispirited as to be indifferent to the danger of infection, it spread with celerity and pertinaciously maintained its influence". (2)

An Irish work to which Alison had frequently referred was a Parliamentary report of a Select Committee on the epidemic of 1818-19, in which four eminent Irish doctors reported about

(1) Cheyne, John (1777-1836) Scottish by birth. Graduated in Edinburgh in 1795. From 1799 - 1809 practised in Scotland and was absorbed in an earnest study of Medicine. In 1809 left Scotland and settled in Dublin. In 1811 was appointed professor of the practice of physic at the College of Surgeons. Four years later appointed as physician to the House of Industry. His reports about the Harwich hospital during the 1817 Epidemic are interesting. Wrote with Dr. F. Barker "An Account of the Rise, Progress, Decline of the Fever lately Epidemical in Ireland", London, 1821.

(2) Cited in Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament, July, 1842, p.26.

the disease in the four Provinces of Ireland. The reports of these doctors are very interesting and show an understanding of the relationship between poverty and disease, which is really striking at such an early date. Professor J. Cheyne was one of the contributors and described the epidemic in Leinster. (1) Another contributor who exhibited the same trend was Dr. F. Barker, who reported on the Province of Munster. Dr. Barker, referring to the epidemic, says in his report, "It appears that it commenced, in most parts of the province, about the latter part of 1816, or beginning of 1817, with the scarcity of provisions, and general distress consequent thereon; and that the peculiar circumstances of the people, arising from want of employment, have greatly furthered its progress". (2)

It may be significant to notice that both Professor J. Cheyne and Dr. F. Barker studied Medicine in Edinburgh University and that they were much connected with the Scottish medical thought.

Dr. John Crampton, another contributor to that report, speaking about the epidemic in Connaught, says, "The classes of people who were, comparatively speaking, exempt from fever,

(1) Barker, Francis (d. 1859?) Irish Physician. Studied Medicine at Edinburgh. There, he became intimate with Sir Walter Scott. Opened the first fever hospital in Ireland in Waterford. Settled in Dublin, and in 1808 became Professor of chemistry there. Started the first Irish Medical Journal in conjunction with Dr. Todd. In 1804, elected senior physician to the Cork Street Hospital. His reports about this hospital during the 1817 Epidemic are very interesting. In 1821 published with Dr. Cheyne "An Account of the Rise, Progress, Decline of the Fever lately Epidemical in Ireland", London, 1821.

(2) First Report from the Select Committee on the State of Disease and Condition of the Labouring Poor in Ireland, B.P.P.1819 (314) VIII, p.23

were those who had abundance of good food, who were well supplied with clothing and fuel, who were less exposed to the inclemency of the seasons, and whose minds were at ease, or at least above the feelings of despondency".....

"The lower orders were almost the only sufferers from fever, in the first instance; they were precisely under those circumstances which rendered them highly predisposed to the disease; so that it only required that any of the usual exciting causes of fever should be applied to ensure a full development of the epidemic. They were feeble for want of sufficient sustenance to enable them to work; they often wanted food, they searched the fields for roots and herbs; ... they were chilled for want of comfortable clothing or fuel, they were dispirited and despondent for want of employment. All these circumstances exhausted their constitutions... Fever broke among them from the privations they suffered, and from their necessary exposure to wet and cold, and they disseminated it wherever they went".⁽¹⁾

Dr. James Clarke, the fourth contributor, describing the condition in Ulster, says "These privations, combined with want of employment, produced a great depression of spirits, under which they became highly susceptible of receiving the contagion of fever. There is great reason to apprehend that this predisposition to fever, will exist more or less, till the habits and manner of living of the lower orders be radically changed".

(1) First Report from the Select Committee on the State of Disease and Condition of the Labouring Poor, in Ireland, B.P.P.1819 (314) VIII, pp. 51-52.

"As a proof of the foregoing statement, it may be adduced that the poor were uniformly the greatest sufferers, and fever seemed to rage among them in a degree proportionate to the privations they had endured".⁽¹⁾

An Irish doctor, whom Alison quoted more than once in his works was Dr. Grattan, who, according to Alison was "one of the physicians who has seen the most and given the most accurate descriptions of the fever in Dublin". Dr. Grattan says, "Next to contagion I consider a distressed state of the general population of any district as the most common and the most extensive source of typhus fevers. The present epidemic is to be referred principally to the miserable condition of the poorer classes of this kingdom, and so long as their state shall continue unimproved so long will fever continue to prevail".⁽²⁾

Another Irish work, much referred to by Alison was "Historic Sketch of the Causes, ... of the Contagious Fever, Epidemic in Ireland, during the years 1817, 1818, and 1819" by William Harty. This author says in his book, "In this way it is that famine and fever are so intimately connected, not indeed directly, but indirectly. In the same way, though in a lesser degree, are fever and want of employment related".⁽³⁾

(1) First Report from the Select Committee on the State of Disease and Condition of the Labouring Poor, in Ireland. B.P.P.1819 (314) VIII, p.62.

(2) & (3) Cited by Alison in Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament July, 1842, p.30; p.29.

Dr. O'Brien, another Irish physician, says to the same effect, "The author is far from denying the powerful agency of want and misery in diffusing epidemic fevers; he has ever regarded those evils as in conjunction with certain moral habits, and he looks upon as their natural and inevitable consequences, to be the chief, the great, he would say it emphatically, predisposing causes of fever in this country. (The exciting causes of fever) will operate with tenfold effect on an impoverished and enfeebled multitude". (1)

It is significant to notice that Alison mentions the ideas of some of these Irish doctors and cites their experience as regards the relationship between famine and pestilence as early as 1821 in his lectures on "Medical Police" and "Practice of Medicine". (2)

Moreover he always referred and quoted them in his successive pamphlets in the 1840's.

III. Scottish Medical Thought Early in the Century

In considering the different influencing factors that might have inspired Alison and determined his characteristic line of thought, one must not forget that the Scottish medical thought in the early decades of the Century was specially

(1) Cited by Alison in Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament, July, 1842, p.30.

(2) Gregory, J., and Alison, W.P., Notes on a Course of Lectures on the Practice of Medicine Delivered from the Professorial Chair of Edinburgh. M.S. Lectures 1820-21, Roy. Soc. Med. Library, Vol. I, pp. 322 & 323.

favourable to the concept which was later fully developed by Alison. One can meet with many instances in the early Scottish medical literature and journals, in which it is evident that the writers were conscious of the responsibility of poverty for disease. And some of these instances were long before Alison began to publish his views. I shall try to quote some instances of this kind in the Scottish medical literature.

As early as 1810, we find a paper by Dr. C. Chisholm published in the Edinburgh Medical and Surgical Journal, ⁽¹⁾ in which he argues against the theory attributing contagious fever to effluvia from putrefied animal and vegetable matter. In this paper he says, "That famine is often the precursor of pestilence is an observation justified and sanctioned by the experience of all ages". He attributes that to "the extreme debility consequent upon the privation of the necessary quantity for the support of life". He gives an example to illustrate that "most fatal epidemics have proceeded from privation". That example is the epidemic in Bengal in 1770 in which natives perished in thousands. That was because of a dearth of rice, their accustomed food, and because their religion prohibited the use of any animal food. Chisholm further discusses the epidemic of Warsaw, 1757, and explains it in the following way, "The explanation is found in the crowded and wretched population

..... This, joined to privation of the necessary quantity of

(1) Chisholm, C., "An essay towards an Inquiry how far the Effluvia from Dead Animal Bodies, Passing through the Natural Process of Putrefaction, are Efficient in the Production of Malignant Pestilential Fevers". Edinburgh Medical and Surgical Journal, 1810, Vol. VI, p.389.

food for the support of life, and the distress of mind consequent upon the disappointed hope of an abundant harvest, the horrors of a cruel warfare, was abundantly sufficient for the production of a fatal epidemic pestilential fever".⁽¹⁾

Dr. Chisholm was one of the references frequently quoted by Alison in his discussions.⁽²⁾

Again in 1817 we find Andrew Duncan (Junior) saying in an article about the fever prevalent then in Edinburgh, "The state of health in Edinburgh varies with the season, with the abundance or scantiness of the means of subsistence, with the introduction of contagion, and some other circumstances"....

"I believe that it (typhus) is most easily communicated in a confined and foul atmosphere, where many diseased persons are collected, and to persons previously debilitated by fatigue, want etc."⁽³⁾

Another example of this trend of thought in Scottish medical literature is a pamphlet in 1818 about typhus by I. Yule, a physician to the Public Dispensary of Edinburgh. In this interesting pamphlet, the author clearly recognises the role of poverty and overcrowding in the prevalence of fever.

(1) Chisholm, C., "An essay towards an Inquiry how far the Effluvia from Dead Animal Bodies, Passing through the National Process of Putrefaction, are Efficient in the Production of Malignant Pestilential Fevers". Edinburgh Medical and Surgical Journal, 1810, Vol. VI, pp.413 & 415.

(2) Reports on the Sanitary Condition of the Labouring Population of Scotland. Presented to Parliament, July, 1842, pp. 18-20.

(3) Duncan, Andrew (Junior), "Report on the present state of Fever in Edinburgh". The Edinburgh Magazine and Literary Miscellany (A new series of the Scots Magazine), 1817, (see p.198) Vol. I, pp.347 & 350.

He says, "Poverty and pestilence are no new associates. The assault, unforeseen, would indeed be terrible. Let us then in time be on our guard. Look at Ireland".⁽¹⁾

He also says, "The contagious nature of this fever, tends rapidly to the increase of that poverty, and those privations under which it has originated; and admitting that the complete extermination of this disease must be necessarily attended with some degree of expense to the more opulent, let it be remembered, that their own health and safety is indisputably connected with that of the poor".⁽²⁾

Further, the author exclaims that the typhus epidemic prevalent then in Edinburgh is still mild. "But", he says, "if the labouring people should become still more depressed by poverty and privation of every comfort, if, instead of possessing two comfortable apartments as formerly, families of eight or more individuals should continue, during the ensuing winter, huddled into one confined chamber, what, under such accumulated misery, must be the necessary consequence? Even at present this is in many instances no imaginary picture; not one but several families may now be found crowded into a single apartment, each paying a sum of weekly rent". Consequently, he says the apartment soon becomes "differing from the sick ward of a ... hospital only in being ... more crowded and the whole inmates being in want of sufficient food. In such dwellings, the broken hearted mother ... no longer enjoys the decent pride

(1) & (2) Yule, I., Observations on the Cure and Prevention of the Contagious Fever now Prevalent in the City of Edinburgh, Edinburgh, 1818, pp.6 & 26.

of her past condition ... all now is sold, or in the hands of the pawnbroker, without hope of recovery ... whilst her poor dejected partner is uncertain of employment, in many cases, at scarcely half his former wages".

"From these preliminary observations, there seems no great difficulty in tracing the Domestic origin of Typhus Fever. Here then we have a brief view of what Physicians term predisposition to disease in general. But if to this be added other necessary results of extreme poverty, ... insufficient and unwholesome diet ... want of clean and proper clothing and bedding, ... the result is uniform. Numerous facts attest the origin of Typhus contagion, under such circumstances".⁽¹⁾

Again in 1817, we find evidence of this trend of thought in an article in Blackwood's Edinburgh Magazine entitled, "Remarks on the Diseases Lately prevalent in Edinburgh". In this article signed by J.W.T., we read the following, "Besides, when it is considered that it is universally acknowledged that close and ill-ventilated houses, crowded with inhabitants, who from poverty and want of employment, are debilitated in their bodies and depressed in their minds, are situations most favourable to the propagation of contagious fever, it does not appear difficult to explain the prevalence of typhus among the poor last winter or it occasioned communication

(1) Yule, I., Observations on the Cure and Prevention of the Contagious Fever now Prevalent in the City of Edinburgh. Edinburgh, 1818, pp. 3-5.

(1)
to their richer neighbours".

Again in the thirties, an example of this trend of thought is a pamphlet by Dr. Scott Alison. In this he says,

"Whatever tends to exhaust the strength of the body, favours the invasion of fever, by removing that energy that should resist its onset. Extreme fatigue, watching, and great mental anxiety, scanty and unwholesome diet, and dissipation, are all favourable to this disease,"

"Extreme fatigue operates most in the working classes; their labour is often very hard, requiring great bodily exertion, and is long protracted, often to twelve or sixteen hours, with scarcely the intermission of an hour"

"Scanty and unwholesome food is another cause of fever, and many other diseases to which you are subject. It favours its invasion by keeping the body so weak that it cannot resist the action of cold, and other causes of that disease. The body under bad and scanty diet becomes weaker and emaciated". (2)

Again in the Report of J.C. Symons, the Assistant Commissioner of the Handloom Inquiry, in 1839, we find evidence of this line of thought. Thus D. Austin, surgeon, Govan, near Glasgow, referring to the handloom weavers says,

"The lowness of their wages, - long hours of working, are sadly discouraging and detrimental to their health,; they

(1) J.W.T., "Remarks on the Diseases lately Prevalent in Edinburgh", Blackwood's Edinburgh Magazine, 1817, Vol. I, p.396.

(2) Alison, Somerville, Scott, Address to the Working Classes on the Prevalence of Fever and Disease in General. 3rd Edition, Edinburgh, 1838, pp.32-35.

are more liable to fever than any other class, from exposure to cold and privations they endure, and I uniformly find more sickness among them when a stagnation in trade takes place"

"I have been grieved of late to observe in calling on their families, a decided decrease of the comforts they used to enjoy. I seldom now find a pot of broth boiling for their dinner, or butcher's meat used as formerly."

"They are more liable to typhus fever and other epidemics than the class of field labourers or mechanics, from exposure to cold, undue exertion, want of solid, nourishing food, and spare clothing. The privations suffered at home, engender diseases of the lung and stomach, complaints which the nature of their employment and sedentary habits aggravate."

"Fever increases during bad times, and as I have stated before, the want of wholesome food, warm clothing and fuel, originates often fevers".
(1)

All the above quoted examples were written before Alison began to publish his ideas in 1840. And the first four of them were written even before Alison began teaching in the University in 1820. So they cannot be attributed to his influence and they tend to show that Alison had only developed an already existing trend in the Scottish medical school.

(1) Reports from Assistant Hand-loom Weavers' Commissioners. Reports by J.C. Symons on the South of Scotland and on France, Belgium and Part of Austria, 1839. B.P.P.1839 (159) XLII, p.20.

CHAPTER II

THE IRISH FAMINE - A GREAT TEACHER

THE BACKGROUND OF THE FAMINE

I have dealt with the early evolution of the idea connecting poverty and disease and with the pioneer of this new trend of thought in Britain, viz., W.P. Alison. I am going to deal now with a further stage of development of this concept. The further growth of understanding of this idea was to the credit of another great teacher. This teacher was not a scientist this time but a great secular event: the Irish Famine (1846-47). This famine which caused a huge amount of suffering and death, had at the same time a profound effect on thought and politics, especially on the subject of poverty. Among other things, it had much influence in impressing society with the relationship between poverty and disease, and there is no doubt that the growth of understanding in this subject owes much to the illustrative events of this Famine. It is these changes in the trends of thought produced by the Irish Famine which I intend to study in this chapter. And for this object, I am going to begin by studying its history, its effects, its causes, and its illustrative story of poverty and disease, in order to appreciate the depth of impression such events could leave on the mind of the generation.

The Depopulation After the Famine

The Irish Famine no doubt caused an immense loss of life in Ireland.

The population of Ireland in the 1841 Census was 8,175,124.

The population of Ireland in the 1851 Census was 6,552,385.

Thus the decrease in population in the whole country in 1851 was

19.8%.⁽¹⁾ However, in the parts which were most hit by the famine in the South and West, the decrease in population was much greater.

Thus, in Connaught it was 28.81% and in Munster it was 22.47%.⁽²⁾

Again in many of the remote parishes, the number of inhabitants fell to nearly a half. The following are the figures of population of some of the parts which suffered most from the famine:

(3)

Union of Loughrea, Co. Galway

1841 65,636

1851 33,698

Union of Clonakilty, Co. Cork

1841 52,125

1851 31,473

Union of Kanturk, Co. Cork

1841 61,238

1851 41,801

Union of Portumina, Co. Galway

1841 30,714

1851 19,747

Union of Skibbereen, Co. Cork

1841 57,439

1851 37,283

(1) & (2), The Census of Ireland for the year 1851. Dublin 1856, Pt. V, Vol. I, B.P.P.1856 XXIX, p.245; p.402.

(3) Creighton, C., A History of Epidemics in Britain. Cambridge, 1894, Vol. II, p.284.

1841 26,620

1851 16,566

Taking again the country as a whole, the 1851 census was 1,622,739 lower than that of 1841. If we take into account the natural growth of population which should have occurred during this decennium, then the actual loss of population during these ten years will be greater than that figure. Sir William Wilde, in the volume of the 1851 census, devoted to the famines of Ireland estimated ⁽¹⁾ that, but for the famine, the population in 1851 should have increased to 9,018,799. This would mean that the real loss in population was 2,466,414. This was calculated by assuming that the population of Ireland would multiply at the same rate as that of England and Wales during the same decennium.

This great depopulation of the country in the decennium 1841-1851 was partly due to the excessive mortality, and partly due to the emigration of large multitudes who fled to escape from starvation and pestilence. Nearly a million Irish emigrated beyond the United Kingdom in the six years preceding the 1851 census. ⁽²⁾ Besides a considerable number migrated to Liverpool, Glasgow, London, and other towns of England and Scotland. Thus from 15th January, 1847, to 4th May, 1847, 180,000 Irish paupers arrived in

(1) The Census of Ireland for the year 1851. Dublin 1856, Pt. V, Vol. I, B.P.P. 1856 XXIX, p. 245.

(2) Ibid.

(1)
 Liverpool. Again, from the 15th June to the 17th August, 1847,
 (2)
 26,335 landed in Glasgow. A considerable percentage of the
 emigrants from Ireland perished on the way or in the countries to
 which they emigrated from the diseases they had contracted in
 their home; and the numbers of these should be added to the
 casualties of the famine. Thus from 89,738 persons who emigrated
 to Canada in 1847, 15,330 or over 17% of the whole number died
 either on the ship, in the quarantine station or in the
 (3)
 Canadian hospitals.

Sir William MacArthur thinks that the casualties of
 the famine, or the extra mortality caused by it over and above the
 ordinary deaths in Ireland could not have fallen far short of
 one million (equal to about one-eighth of the population).
 (4)
 This is not an over-estimation of the victims of the famine.

(1) Medical Gazette 4th May, 1847. Cited in the Census of
 Ireland 1851, Dublin 1856, Pt. V. Vol. I, B.P.P.1856 XXIX, p.305.

(2) Extracts from Proceedings of Glasgow Parochial Board.
Cited in The Census of Ireland 1851, Dublin 1856, Pt. V. Vol. I.
 B.P.P.1856, XXIX, p.305.

(3) Trevelyan, Sir Charles, The Irish Crisis. London 1880,
 p.105.

(4) MacArthur, Sir William, "A Medical Survey of the Irish
 Famine of 1846". Ulster Med. J., 1951.

Vol. XX, p.13.

The following are the figures of mortality during the famine years given in the 1851 census under the more important headings related to the famine.⁽¹⁾

Deaths from Fever	192,937
Deaths from Dysentery and Diarrhoea	125,148
Deaths from Starvation	20,402
Deaths attributed to Dropsy	22,384
Deaths attributed to no cause	99,015

But these mortality figures were only compiled in 1851, from two sources, the heads of families and the hospital returns. There was no system of registration of deaths at that time in Ireland. The practice was to ask the householders during the census to fill forms about the deaths in the last ten years. In 1851, the details of deaths were collected after the famine, when the country was depopulated and desolate. Those who had most to tell, and who could have furnished the accurate casualties of the famine were either dead or had emigrated to other countries. Whole families had perished and had left no trace. Tens of thousands had died in their cabins without any notice being taken of them. Others died not in their homes but in other towns and places to which they migrated. Great numbers were found dead in ditches, in public roads, and in fields and were buried where they were found. Thus retrospective accounts of such deaths could not be but underestimates. Again, the hospital records were not always

(1) MacArthur, W, Op. Cit.

accurate. Through the chaos during the famine years, when large numbers of the staff caught disease, and died, and when the hospitals were subject to much pressure, the records of some hospitals were not kept with accuracy. (1)

For these reasons we should consider the figures of mortality during the famine years given in the 1851 census as underestimates of the real casualties of the famine. The Commissioners of the Census admit that. They say, "Inevitable deficiencies must result from any retrospective inquiry derived from the remnant of a population upon a certain day subsequent to the events to which it has reference". (2) They also say, "But no pen has recorded the numbers of the forlorn and starving who perished by the wayside or in the ditches, or of the mournful groups, sometimes of whole families, who lay down and died, one after another, upon the floor of their miserable cabin, and so remained uncoffined and unburied, till chance unveiled the appalling scene". (3)

Causes of the Famine

I shall next consider the causes of this famine. The direct cause was a fungus disease of the potato plant due to *Phytophthora infestans* which attacks the leaves and appears as black spots on them; and as whitish mould containing the spores

(1) MacArthur, W. Op. Cit. p.13.

(2) & (3) The Census of Ireland 1851, Dublin 1856, Pt. V. Vol. I, B.P.P. XXIX, pp.245 & 243.

on the undersurface. When it attacks the plant, the foliage withers, the stems fall, the growth of the tubers is arrested and they become rotten. Wet and warm weather favours the flourishing of this fungus while dry weather checks it. The disease appeared in North America in 1844 and reached Europe and the United Kingdom in 1845. (1)

The disease began to appear severely and extensively in Ireland in the Autumn of 1845. Suddenly the peasants were struck by the fields assuming a blackened appearance as if they had been burnt up. However, in this year the early crop, which was usually collected in September and October and which was estimated as one-sixth of the whole produce, had escaped the disease. (2)

Dr. Playfair and Mr. Lindley, the two scientists who were sent by the Government to investigate the disease in Potatoes say about the disease in 1845, "we can come to no other conclusion than that one half of the actual Potato crop of Ireland is either destroyed or remains in a state unfit for the food of man. We moreover feel it our duty to apprise you, that we fear this to be a low estimate". (3)

(1) Encyclopaedia Britannica, Chicago 1950, Vol. XII, p.612.

(2) O'Brien, W.P., The Great Famine in Ireland and a Retrospect of the Fifty years 1845-95, London, 1896, p.66.

(3) Report of Dr. Playfair and Mr. Lindley on the Present State of the Irish Potato Crop and on the Prospect of Approaching Scarcity.

1846, B.P.P. 1846 (23) XXXVII.33.

In 1846, the summer was damp, and of "unprecedented heat". (1) Thus the disease broke out again, this time much earlier and more extensively.

Consequently, there was an almost total destruction of the crop. At the end of July 1846, the land was covered by a luxuriant blooming growth; a week later the face of the whole country was changed, and the fields became covered by black withering putrefying vegetation. "Distress and fear were pictured on every countenance" and "the wretched people were seated on the fences of their decaying gardens, wringing their hands, and wailing bitterly the destruction that had left them foodless". (2) The food of the majority of the population completely vanished. The price of potatoes rose to 3½ times and later to 6 times their former price, when obtainable at all. (3)

The calamity was aggravated by the fact that the other crops, wheat, barley and oats were also unfavourable and below the average. (4) Besides, the people had not any means to avail themselves of grain in substitution of the potatoes.

In 1847 the disease broke out again, this time with less virulence and in a lesser extent. However, the amount of land cultivated this year with potatoes scarcely exceeded a sixth of the usual amount. (5) This was partly due to the intense despair

(1) MacArthur, Sir William. Op. Cit. p.3.

(2) Mathew, Rev. Theobald, cited in O'Brien, W.P. Op.Cit, pp.67 & 68

(3) MacArthur, Sir William. Op. Cit. p.3.

(4) O'Brien, W.P. Op. Cit. p.69.

(5) Ibid.

resulting from the terrible experience of the two previous years and also due to the involvement of the peasants in the work provided by the Board of Works to relieve the distress. That is why there was a shortage in the potato also this year.

The amount of loss due to the potato blight up till January, 1847, was estimated to be between 9 million and 10 million tons of potatoes. In money value the deficiency on the potato crop alone was estimated to be £11,350,000 while the deficiency in the crop of oats amounted to 4,600,000.⁽¹⁾

Naturally a much larger sum than that would be required to substitute the deficiency of food caused by the failure of potato as this was much cheaper and much more plentiful than any other substitute. Besides, the potato crop was not only the food of the poor classes but it was also the food of their pigs and poultry and thus its failure resulted in a great loss in the animal stock too.

(1) The Speech of Marquis of Landsdowne in the House of Lords, January 15th, 1847.
Cited in O'Brien, W.P., Op. Cit., p.69.

The Deeper Causes of the Famine

The potato blight was the direct cause of the Famine, but the basic deeper cause was the socio-economic conditions in Ireland and the low standard of living of a great proportion of the Irish people.

Agriculture was the main resource of the country. The great majority of the population was dependent on it in a most miserable pattern. The total population in the 1841 census was 8,175,124.

More than 3 millions of these were in the class of labourers who possessed no land, and led the lowest form of human life.⁽¹⁾ The whole mass of this class looked to agricultural employment, and to it alone, for subsistence. And no doubt the supply of labour greatly exceeded the demand. It was estimated in 1836, according to the 1831 census, that there were in Ireland about five agricultural labourers for every two in Great Britain for the same quantity of land. Moreover it was calculated that the number of labourers in Ireland was more than four times the number of labourers in Great Britain relative to the produce.⁽²⁾ As a result of this redundancy of labour, the wages were very low and the employment precarious. The supply of labour being much greater than the demand, the employers were able to rate the wages at the lowest amount that will support life.

It was estimated in 1836 that the number of persons in Ireland out of work and in distress during thirty weeks of the year was no less than 585,000 and that the number dependent upon them at no less than 1,800,000, making the whole 2,385,000.⁽³⁾

It was also estimated that the average wages of the agricultural labourer when employed was about 8½d. a day or between 2s.0d. and 2s.6d. a week. This was one-fourth of the average wages of the

(1) MacArthur, Sir William, Op. Cit., p.2.

(2) & (3) Third Report of the Commissioners for Inquiring into the Condition of the Poorer Classes in Ireland 1836. B.P.P.1836 [43] XXX, pp.3-5; p.5.

(1) same class in England at that time. In some Connaught districts the wages were even as low as 4d. a day in winter. (2) Thus the agricultural labour in Ireland could not support the life of this huge class of labourers. The only secret why this class was kept from starvation was the potato! This produce proved to be a plentiful source of food; a small scrape of land was sufficient to supply potatoes enough for a whole family all the year. And it was in this way, and in this way alone that a great portion of the people could exist. "Considerably more than one-third of the population" (3) depended for subsistence only on cultivating small plots of land with potatoes. That was the way and the only way of living of a great class in the country. Various expedients were adopted by this class for getting these plots of ground to support their lives. To describe these methods we may divide the labourers into two sections.

The first one was the cottiers. These were labourers living on the farms of their employers in cabins to which are attached small plots of ground. These plots were used by the cottiers to supply themselves with potato for subsistence all the year. In return for the hovels in which they lived and the patches of ground attached to them, they were bound to pay extravagant rents. "This rent was payable in the form of labour,

(1) Third Report of the Commissioners for Inquiring into the Condition of the Poorer Classes in Ireland, 1836.

B.P.P.1836 [43] XXX, p.4.

(2) O'Brien, W.P. Op. Cit. p.33.

(3) Ibid. p.26

calculated at the lowest rate of wages in the district and at the most pressing seasons".⁽¹⁾ The cottiers were habitually "treated with much unfeeling severity" by the farmers who "almost invariably took advantage of the helplessness of their dependants to drive a hard bargain".⁽²⁾

The other section was a much lower one formed by labourers of no fixed work and holding only a wretched cabin. These labourers were supported by the precarious employment they could get and by hiring small patches of ground, to supply them with enough potatoes for their subsistence all the year. Home employment for this class was exceedingly uncertain and irregular and the scale of wages was extremely low. "They were in general unable to obtain employment even at the lowest rate of wages".⁽³⁾ They thus depended completely for existence on the potatoes raised on the small plots of land taken in con-acre. The con-acre system was one under which the labourers would hire from neighbouring farmers small plots of land, usually manured, but sometimes unmanured, for one season, in return for high rents payable usually in cash. It was not a demise but rather a licence to occupy the land for the raising of one crop. This system enabled the labourers who had no demand on their labour to be able to raise a stock of potatoes for their families.

(1) Kennedy, J.P., Digest of Evidence taken before Her Majesty's Commissioners for Inquiry into the State of Law and Practice in Respect to Occupation of Land in Ireland. Dublin 1847. Pt.1, p.474

(2) O'Brien, W.P., Op. Cit. p.32.

(3) Kennedy, J.P., Digest of Evidence taken before Her Majesty's Commissioners of Inquiry into the State of the Law and Practice in Respect to the Occupation of Land in Ireland, Dublin 1847. Pt. 1, p.475.

Besides it enabled them to get a market for their labour in case^{240.} they were permitted to pay in labour. These small patches were capable of supplying a poor family with food in the form of potatoes, but, as was found during the famine, they were quite inadequate for the subsistence of the family under any other crop. The rents paid for these con-acres were very high especially when they were hired under the middlemen system.⁽¹⁾ When the crops used to fail, the indigent labourers used to suffer extreme hardships and privations. This class of labourer was thus described by the secretary of Devon Commission as "the most wretched amongst the many wretched classes in Ireland".⁽²⁾

If one looks through the reports and the minutes of evidence of different official commissions on Ireland, one will meet large amounts of evidence showing the extreme poverty and distress of this class. The great majority of witnesses examined by these commissions used to give moving portrayals of the wretched condition of these labourers and the unfair treatment they used to get from the farmers and owners of land.⁽³⁾

The descriptions made of the conditions of this class reminds one of another, who was living in very much similar condition; the Egyptian peasants.

(1) Evidence taken before Her Majesty's Commissioners of Inquiry into the State of the Law and Practice in Respect to the Occupation of Land in Ireland, 1845. Pt. I, B.P.P.1845 [606] XIX, p.25.

(2) Kennedy, J.P., Digest of Evidence Taken before Her Majesty's Commissioners of Inquiry into the State of the Law and Practice in Respect to the Occupation of Land in Ireland, Dublin 1847, Pt. I, p.475.

(3) H.B. I am going to quote a sample of the evidence that one meets frequently in the minutes of evidence of different Commissions in Ireland. A witness in front of the Devon

Commission in 1843 says, "The labourers are the most wretched people upon the face of the globe. I do not believe that any race on the face of the earth would suffer the privations they do under the farmers.(1) Another says,

"there is not a more oppressed set of people in the world than the labourers in this country. I have been a long time in the Commission of the Peace - nearly thirty years - and I never set a Court day without witnessing some act of oppression on the part of the farmer on his labourer". (2)

Another says, "The most oppressed and most severely rented tenants, on the middleman system, are the unfortunate cottiers, labourers of farmers. Their employers hold their farms at a fair value, but they extort from the poor labourer, for the very worst bit of land on the farm, a rent four or five times as great as they pay themselves". (3)

Another witness, a medical man, when asked whether labourers are improving answers, "Quite the reverse, nothing can be more wretched The value of the commodity (labour) is so reduced, in price that they are not able to pay their rents, and they are lying naked and in such a state that it would hardly be believed. I am obliged to visit the people, being a medical man, and go in where no gentleman would go. They have no bedstead; they are lying on a small quantity of straw - sometimes rushes, they have no covering over them, or one blanket amongst six ... (the wages of labour) is generally 6d. when fed, but it is a common thing for a man to offer himself without any price, merely to be fed, at this season of the year". (4)

Another witness says, "when the necessaries of life rate high in the market, the Irish labourer even with employment, still worse without, is, of all miserable beings, the most miserable. I wish to make an observation upon what I conceive to be in some cases the total absence of comfort among the peasantry and the labouring classes, which generally obtains in the north of Ireland; I have seen instances in which there could not be more human wretchedness in an Indian hut, where there is nothing, or where the whole effects would not realise 1s.;

Labourers rent from farmers a rood or half an acre, and generally charge for the same an exorbitant rent, and I candidly confess, while there is an outcry against landlords; as far as I have noticed, one cause of the outcry is the disposition upon the part of the farmers to charge too high". (5)

If one looks at the Index to the Minutes of Evidence taken before Devon Commissioners, under the word labourers, he cannot but become greatly impressed with the extreme poverty of this class. In this index there is accumulated all the statements given about the labourers. Thousands of witnesses, in the same language, all over Ireland speak about their extreme wretchedness, their deteriorating conditions and their starvation. (6)

(1) & (2) Evidence taken before Her Majesty's Commissioners of Inquiry into the State of the Law and Practice in Respect to the Occupation of Land in Ireland, 1845, Pt. II, B.P.P.1845 [616] XX, pp. 919 & 935.

(3) Ibid., Pt. III, B.P.P.1845 [657] XXI, p.477.

(4) Ibid., Pt. II, B.P.P.1845 [616] XX, pp.270-271.

(5) Ibid., Pt. I, B.P.P.1845 [606] XIX, p.560.

(6) Ibid., Pt. V, B.P.P.1845 [673] XXII, pp.231-256.

As a result of this deplorable state of affairs in Ireland, the class of labourers, in order to eke out an existence, used to migrate periodically in certain seasons to England and Scotland to get employment there. Unable to find employment in their home country, or to get enough potatoes to sustain their existence and to pay their rents, they used to shut their cabins and beg their way to the harvest fields of these countries at the time of harvest. There they used to work very hard and to live a very low type of life in order to save as much money as would suffice to pay their rents on return and to supply them with the necessaries of life. The harvest in Ireland, especially in the mountainous districts of the west, were later than in England and Scotland. This enabled the Irish labourers to go to these countries to help the farmers there in their harvest operations and to return back in due time to collect their own harvests. Thus one of the frequent scenes in Ireland was the scene of armies of Irish labourers migrating and begging their way to England and Scotland or returning back to their homes. (1)

In addition to the agricultural labourers there was another class which although better off was still suffering from "much privation and at times of very severe trial and difficulty" (2). This was the class of small peasant farmers renting between one and five acres of the ground. This class constituted then a

(1) See The narrative of J.C. Kohl of these migrations. Cited in O'Brien, W.P., Op. Cit., pp.37-40.

(2) O'Brien, W.P., Op. Cit., p.31

substantial part of the population of the country. The total number of farms exceeding one acre were found in the 1841 census to be 691,202; and out of these 310,436 were holdings between 1 and 5 acres. (1)

The cause of suffering of this class was sometimes the very high rents they were required to pay for their patches under the middleman system. These middlemen used to hire the land from the owners and then subdivide it and sublet it at much inflated prices to the small peasants.

Moreover their holdings were too small sometimes to offer them a comfortable life. This was the result of the subdivision of farms, a phenomenon which was very noticeable at that time. Among the factors contributing to this was the practice of subletting of farms to small peasants. Another factor was that the tenants used to subdivide their holdings among their children on their death. (2)

The evidence taken before Devon Commission show that the condition of the small peasants was "in general very wretched". "Many witnesses asserted that the condition of this class was even lower than that of the labourers". (3) That is why they also used to join the armies of migratory labourers to England and Scotland during the harvest times. (4)

(1) O'Brien, W.P., Op. Cit., p.29.

(2) & (3) Kennedy, J.P., Digest of Evidence Taken before Her Majesty's Commissioners of Inquiry into the State of the Law and Practice in Respect to the Occupation of Land in Ireland. Dublin 1847, Pt. I, pp. 418 & 364.

(4) O'Brien, W.P., Op. Cit., p.31.

The low standard of living of the Irish peasants seemed to perpetuate itself in a vicious circle. It is a well established economic doctrine, which had long been advocated by Alison and by some economists that the low standard of living acts as a stimulus for increase of population. The more the people get used to such a low kind of life, the more it will be easy for them to marry and make families. When a whole family in Ireland could live on cultivating a small plot of land with potato, anybody that could get such a strip, was able to marry and raise a family. That is why Ireland became relatively over-populated. And overpopulation in turn led to a lower and lower standard of life. It was a vicious circle as it is always the case in similar countries, like Egypt for example, where the people live a low kind of life.

And it is this low standard of living of the people which really caused the famine. It was not the disease of potato but it was the disease of society which really precipitated this great disaster. It was not the shortage of food but it was the lack of means to procure food in place of the destructed self-produced potato which resulted in the famine. The Irish labourer was so unemployed that if he could not get free food from his small strip of ground, he would starve. The Famine was not an accidental event but was a symptom of a long-standing malignant disease in the country: poverty. In evidence of that it may be stated that

in spite of the potato failure, the total food produced in Ireland during the famine would have been quite sufficient to feed the whole population. The lower classes were starving not because the food was short, but because they could never afford to buy food at all and could only live when their plots of ground would afford them with sufficient potato. It is a fact that during the time when the people were starving, Ireland was exporting huge quantities of its food products abroad. Thus Scrope showed in March 1846, that "since the failure of the potato crop in 1845 Ireland has exported to the United Kingdom (up to 5th February, 1846) 258,000 quarters of wheat, 701,000 cwt. of flour, 1,000,000 quarters of oats and oatmeal, all since the failure of the potato crop".⁽¹⁾

Daniel O'Connell gave the figures for the total imports of Corn into Great Britain from Ireland in 1845. They showed a definite increase over the imports in previous years. They were as follows: Wheat 372,719 quarters, Barley 93,095 quarters, Oats 1,679,958 quarters, Wheat Meal or Flour 1,422,379 cwts., Oatmeal 1,059,185 cwts.⁽²⁾

And strangely enough, the areas which suffered most from starvation like Skibbereen were centres for corn milling and considerable export in corn meal and flour.⁽³⁾

(1) Hansards Parliamentary Debates 1846, Vol. LXXXIV, p.1169.

(2) Ibid., Vol. LXXXIII, p.1054.

(3) Creighton, C., Op. Cit., Vol. II, p.230.

Some Sidelights Upon The Condition of the People before the Famine

The official reports and the numerous parliamentary papers made about Ireland before the Famine can throw much light on the condition of the people there and their great privations.

Some of the figures of 1841 Census can be of help in this respect. The total number of houses was found in this census to be 1,323,839 houses. Out of these there were 1,024,575 mud-houses and among these, there were 491,278 mud cabins containing only one room. (1)

Again the total number of families was 1,472,739. Out of these, 625,356 families lived in single room (fourth class accommodation). (2) The number of persons belonging to families living in single rooms was 3,466,338. (3) This was $42\frac{1}{3}\%$ of the total population (8,175,124).

Again the population was classified into four classes. The third class was constituted by labourers and small farmers holding up to 5 acres. The fourth was constituted by those who had no specified means.

Out of 1,472,787 families, 926,501 belonged to the third class and 39,823 to the fourth one. In the rural areas the third class constituted 68% of the whole families. (4) This is evident from the following table.

(1) Report of the Commissioners Appointed to take the Census of Ireland for the Year 1841, 1843. B.P.P.1843 [504] XXIV, p.432.

(2) Ibid., p.439 & XVI.

(3) Smyth, George, Lewis, Ireland Historical and Statistical, 1844. Vol. I, p.3. ^{London}

(4) Report of the Commissioners Appointed to take the Census of Ireland for the Year 1841, 1843. [504] XXIV, pp.433-435.

TABLE X

The Numbers and Percentages of Families Belonging to
Different Classes both in Ireland as a Whole and in
the Rural Districts alone

(1)
 (1841 Census)

	No. of Families in the First Class	%ge. of Families in the First Class	No. of Families in the Second Class	%ge. of Families in the Second Class	No. of Families in the Third Class	%ge. of Families in the Third Class	No. of Families in the Fourth Class	%ge. of Families in the Fourth Class
The Whole of Ireland	38,657	2.6%	467,806	31.8%	926,501	62.9%	39,823	2.7%
Rural Districts	23,215	1.8%	350,604	28.3%	840,968	68%	23,254	1.9%

(1) Report of the Commissioners Appointed to take the Census of Ireland for the year 1841. 1843. B.P.P.1843 [504] XXIV, pp.433-435 & XIX.

N.B. The Third Class is defined as follows; Heads of families without capital in either money, land, or acquired knowledge, and persons who obtain the means of existence by employments which require little or no instruction. This may include small farmers up to 5 acres.

Again, the Commissioners for Inquiry into the condition of the poor in 1836 estimated the number of persons in Ireland out of work or in distress during thirty weeks of the year at no less than 585,000, and the numbers dependent on them as no less than 1,300,000, making in the whole 2,385,000.⁽¹⁾

The Commissioners described the condition of the people in the following way:

"The evidence annexed to our former Reports proves to painful certainty that there is in all parts of Ireland much deep-seated distress..... A great proportion of the working classes are insufficiently provided at any time with the commonest necessaries of life. Their habitations are wretched hovels, several of a family sleep together upon straw or upon the bare ground, sometimes with a blanket, sometimes even without so much to cover them, their food commonly consists of dry potatoes, and with these they are at times so scantily supplied as to be obliged to stint themselves to one spare meal in the day. There are even instances of persons being driven by hunger to seek sustenance in wild herbs. They sometimes get a herring, or a little milk, but they never get meat, except at Christmas, Easter and Shrovetide. The wives and children of many are obliged to beg ... and in general go to a distance from home that they may not be known".⁽²⁾

(1) Third Report of the Commissioners for Inquiry into the Condition of the Poorer Classes in Ireland. 1836.

B.P.P. 1836 [43] XXX, p.5.

(2) Ibid. pp.3-5.

Again the reports of George Nicholls, the English Assistant Poor Law Commissioner in 1837, gave similar evidence about the poverty in Ireland, although the presentation and the explanation of these evidences was naturally influenced by his specific outlook - the outlook characteristic of the Chadwick school. He states that there was an increase of misery and destitution among a large portion of the people or even "among the majority". He says, "Towns, exhibiting every sign of increased wealth, are encircled by suburbs composed of miserable hovels, sheltering a wretched population of mendicants"⁽¹⁾.

Again he states that "a kind of famine, more or less intense, occurs annually in Ireland, between the going out of the old, and the coming in of the new crops" and that the peasantry "are left without food before the new crop is ripe ... and misery and disease are the consequences". This is because, he says, "the peasantry are the sole providers for their own necessities; each out of his own small holding; being all alike hard pressed by poverty, and prone, therefore, to endeavour 'to pull through' as they call it with the smallest amount of means"⁽²⁾.

(1) Report of G. Nicholls, Esq., to His Majesty's Principal Secretary of State for the Home Department on Poor Laws, Ireland First Report 1837, B.P.P. 1837 [69] Ll. pp.5-9.

(2) Report of Geo. Nicholls, Esq., to His Majesty's Principal Secretary of State for the Home Department, on Poor Laws, Ireland First Report. 1837. B.P.P. 1837 [69] Ll, pp.9 & 5.

He also says that there was no "regular demand for labour, the only protection against actual want" and that "the only means by which a man could procure food for his family, was by getting and retaining possession of a portion of land He must get possession of a plot of land, on which to raise potatoes, or starve!"⁽¹⁾

He also observes that "a mass of filth, nakedness and misery, is constantly moving about, ... addressing itself to every eye, and soliciting from every hand".⁽²⁾ But as would be expected of him he thinks that these poor were assuming the semblance of misery in all its revolting varieties, in order to appeal to the sympathies! He regards that "much of the dirty and indolent habits observable in the cabins, clothing, and ... general conduct of the peasantry may probably be traced to this source": mendicity!⁽³⁾

Again, the report of the Devon Commission in 1845, presented just before the famine, says describing the poverty of the people:

"In adverting to the general condition of the different classes of occupiers in Ireland, we noticed with deep regret the state of the cottiers and labourers in most parts of the country from the want of certain employment".

(1) & (2) Report of Geo. Nicholls, Esq., to His Majesty's Principal Secretary of State for the Home Department, on Poor Laws, Ireland. First Report. 1837. B.P.P. 1837 [69] L1, pp. 9 & 5.

(3) Ibid. p. 5.

"It would be impossible to describe adequately the privations which they and their families habitually and patiently endure".

"It will be seen in the evidence that in many districts their only food is the potato, their only beverage water, that their cabins are seldom a protection against the weather, that a bed or a blanket is a rare luxury, and that nearly in all cases their pig and manure heap constitute their only property."

"When we consider this state of things, and the large proportion of the population which comes under the designation of agricultural labourers, we have to repeat that the patient endurance which they exhibit is deserving of high commendation, and entitles them to the best attention of Government and of Parliament We deeply deplore the difficulty which exists in suggesting any direct means for ameliorating their conditions!"⁽¹⁾

These official reports, added to each other, can give one a picture of the state of Ireland before the famine. I shall proceed in the next part to give a picture of Ireland during the famine and tell the story of poverty and pestilence at that time.

(1) Report from Her Majesty's Commissioners of Inquiry into the State of the Law and Practice in Respect to the Occupation of Land. 1845. B.P.P. 1845 [605] XIX, p.35.

THE STORY OF THE FAMINE: POVERTY AND DISEASE

The results of the destruction of the only means of support of the Irish peasantry was disastrous. The lower classes of Ireland were faced with the dreadful fate of starvation. If one examines the Irish Press from 1846 to 1847, and the reports of their local correspondents from different areas of the country, one can form a picture of the increasing distress which had existed then and which gradually extended more and more to incredible extents. One will find that the picture of misery, privation and starvation got darker and darker, and gradually involved greater and greater areas of the country until it became almost universal.

From the early months of 1846, one begins to meet news in the Irish papers about extreme distresses in different parts of the country and reports about cases of deaths from starvation here and there. These gradually became greater in number until there came a time when deaths from starvation became so numerous that they were no longer reported. (1)

The deaths from starvation during the famine years according to the 1851 Census were 20,402, to which should be added most of the 22,384 deaths attributed to dropsy. (2) The following table gives the yearly figures:

(1) O'Rourke, J., The History of the Great Irish Famine of 1847 with Notices of Earlier Irish Famines. Dublin 1875, pp.415 & 416.

(2) MacArthur, Sir William, Op. Cit., p.13.

TABLE XI

Registered Deaths from Starvation in Ireland1844 - 1850⁽¹⁾

Year	Deaths from Starvation	Deaths from Dropsy
1844	268	1,700
1845	516	2,078
1846	2,041	2,774
1847	6,058	5,246
1848	4,678	4,027
1849	4,717	4,407
1850	2,392	3,852

In evidence of the degree of distress that prevailed at that time, it is stated that nearly as much as three million people (out of a population of about eight millions) received food gratuitously from the hands of the relieving officers in Ireland in one day in July, 1847. In addition nearly as many as 100,000 rations were sold at part of the cost to another part of the population on the same day.⁽²⁾

(1) The Census of Ireland 1851. Dublin 1856. Pt. V, Vol. II, B.P.P. 1856 [2087 - 11] XXX, pp.660 - 663.

(2) Ibid, p.245

This is all in addition to the numbers who were relieved in the workhouses all over the country. At one period 800,000 were relieved daily at the charge of the poor rates. (1)

Within the space of two years, 131 workhouses with their hospitals gave shelter, food and raiment to 1,027,602 persons. (2)

Again, the public works in March, 1847, gave employment to 734,000. The Census Commissioners remind us in this respect that in selecting the men for employment on public works, "those known to have even one meal a day were excluded from the number by the universal shout of the multitude". (3)

The amount of employment afforded was not decided by the total number of those who needed it or applied for it but by the limits of the grants given by Government; and "the officers of the Board of Works were obliged to dismiss the less destitute to make room for those in great want". (4)

Moreover, one cannot fail to appreciate the significance of the fact that the price of potatoes in the winter of 1846-47 rose to 7 shillings per cwt., while the price in 1845 was only 2 shillings per cwt. (5)

(1) & (2) The Census of Ireland 1851. Dublin 1856. Pt. V, Vol. II, 1856 [2087 - 11] XXX, p.245.

(3) Ibid. p.271

(4) Ibid. p.271

(5) Report of the Commissioners of Health: Ireland on the Epidemics of 1846 to 1850. Dublin 1852. B.P.P.1852-53 [1562] XLI, p.24.

Another evidence of the extreme distress and utter destitution of the population was their strong rush and pressure on the workhouse all over the country. The workhouses were compelled to accommodate very much larger numbers of people than the numbers for which they were built. And in spite of this, multitudes of starving poor were crowded round their closed doors waiting for a chance to enter. This had a particular significance, as it was a much reported fact that the Irish peasantry had at that time an utter dislike to enter the workhouse. It had often been reported that many of the people used to die of want in their cabins, and to suffer their children to die, rather than go there.

An example of the extreme pressure on the workhouses at that time is to be found in the recollections of a clerk of the Westport Union on the famine years. He mentions that the workhouse there was built to accommodate 1,000 people. However, he states that he had repeatedly seen as many as three thousand persons seeking admission on a single day. Pointing to the wall opposite the workhouse gate he says,

"There is where they sat down, never to rise again. I have seen there of a morning as many as eight corpses of those miserable beings, who had died during the night. Father G..... used to be anointing them as they lay exhausted along the walls and streets, dying of hunger and fever".⁽¹⁾

(1) O'Rourke, J. Op. Cit. p.393.

The parts of Ireland which suffered most and earliest were the south and west Counties in Connaught and Munster. It happened that the state of extreme poverty and distress round Skibbereen, the extreme south western part of Ireland was brought most under the public notice. (1)

But although the distress in the Skibbereen district attracted most of the attention in the beginning, yet it is believed that in the Counties of Galway, Clare, Kerry etc., in the extreme west equally terrible conditions could be pictured at an equally early period. (2)

There are many portrayals which were written about the condition of the people in different parts of Ireland during the famine. Some of these were written by members of the Society of Friends, e.g., W. Forster and J.H. Tuke, who travelled all over Ireland to administer relief. Some others were written by Count Strzelicki, who made great efforts to help the distressed peasantry on behalf of the British Relief Association. (3)

Besides, the newspapers and periodicals of Ireland and of England and Scotland at that time are full of such portrayals. One need not quote these descriptions as they all convey the same picture, and one can imagine for himself the picture of "famine" in a country, in which social conditions were like those of Ireland at that time. (4)

(1) One of the moving descriptions of the state of affairs in this area was a letter from N.M. Cummins to the Duke of Wellington, a letter which was published and which produced profound sensation. Cited by O'Brien, W.P., Op. Cit., pp.77-80.

(2) Creighton, C., A History of Epidemics in Britain, Cambridge, 1894, p.286.

(3) (a) Distress in Ireland. Narratives of Visits made in 1846 and 1847, by Members of the Society of Friends, in the Distressed Districts, London, 1846.

(b) Tuke, J.H., A Visit to Connaught in the Autumn of 1847.

(4) Strzelicki, P.C., Count de, Letters to the Subscribers to the Fund Raised in June, 1849, for the Relief of Distress in Ireland, 1849.

A factor which added considerably to the hardships and the distresses of the poor during the famine was the process of "eviction" of the peasants from the land by the landlords. As the potato cultivation was extinguished, the small peasants could not pay any rents to the landlords. Many of these therefore took legal measures to evict the tenants for arrears of rent. In this way a considerable part of the Irish peasantry were ousted from the land in the different counties of Ireland. As the famine strengthened its hold, this process of eviction became more and more frequent and almost universal. Thousands and thousands of people who had for generations lived and multiplied on the land, "were suddenly turned adrift, without a provision, to find a living where there is no living to be found".

(1) This system aroused a profound sensation and feeling and excited a great amount of discussions in Parliament. (2) A considerable number of members sympathised with and fought for these miserable beings, who were cast out of their homes to perish by the roadside. It also excited and aroused strong angry feeling against the Irish Landlords. Throughout the famine years there was a strong movement against the Irish landlords, especially the absentee or non-resident ones, who did nothing to help the peasantry during the famine, and in addition added to their miseries by these wholesale clearances and evictions.

The enactment of the Poor Law Relief Act, 1847

(1) O'Rourke, J., Op. Cit. pp. 265-266.

(2) Hansards Parliamentary Debates 1846, Vol. LXXXIV, pp. 1169-1172 & 1181.

(Justice to Ireland Act) ⁽¹⁾ stimulated and gave a strong impetus to the system of eviction. This Act gave the right of relief, including outdoor relief, to the unemployed able-bodied.

This meant that the Landlords were compelled to pay for the support of the destitute on their lands. Thus in order to avoid this burden and to decrease the poor rates, the landlords took every step to evict these destitute peasants and to pull down their cabins in order to get rid of their burden.

There are many evidences of this clearance system and the unbelievable misery and sufferings it had led to. Thus the Chancellor of Exchequer in Parliament on 12th February, 1847, stated that he had received (with pain he could scarcely describe), an account of the evictions in Co. Mayo. "There", he said, "I find, so far from subscriptions having been entered into to maintain their people, that the landlords, or their agents, are pursuing a system of ejection, under processes for rent, to an extent beyond what had ever been known in the country". ⁽²⁾ He stated that the number of processes entered at the quarter sessions exceeded very considerably, anything they had been before. He mentioned that at the barony of Ballina, 6,400 processes had been entered, of which 4,000 were at the suit of the landlords for rent. He quoted the report he received on this subject saying "These proceedings have almost depopulated the country, the people having fled with all they

(1) 10 Vic C 31.

(2) Hansards Parliamentary Debates 1847, Vol. LXXXIX, pp.1247 & 1257.

possessed to prevent their property being seized, or themselves thrown into prison, under decrees. There are districts in this barony where the townlands hitherto occupied by 400 or 500 persons are now uninhabited".⁽¹⁾

In 1849, after a tour in England, Scotland, and Ireland, G.P. Scrope, the man who espoused heartily the case of the Irish peasantry, describes the effects of the process of eviction. Taking the example of Kilrush Union, he states that there had been in progress a system of extermination of the people. "Extermination", he says, "not in the sense of extrusion merely, by compulsory emigration to other lands, the means being provided for the purpose - but extermination by the destruction of the lives of the people - by their deprivation of the means of living, of shelter, clothing, and of a sufficiency of food. Nor is it the mere pulling down of the houses of a few defaulting tenants, to whom the workhouse is open, and for whom the Poor Law offers a certain resource against destitution. It is the general and systematic depopulation of the whole country, by the razing of entire villages, and the expulsion of the inhabitants - not into the workhouses, for they are choke-full, and will hold no more - but upon the bare road, or into the wretched huts reared in ditches and bogs, where they die by inches".⁽²⁾

(1) Hansards Parliamentary Debates 1847, Vol. LXXXIX, p.1248

(2) Scrope, G.P. Some Notes of a Tour in England, Scotland and Ireland, Made with a View to the Inquiry, Whether our Labouring Population be Really Redundant. London, 1849, pp.26,

Scrope was informed by the Poor Law authorities that the number turned out and ejected in this way during the previous two years in one Union, had been above 20,000 out of a population of ⁽¹⁾ 82,000.

Scrope, therefore, asks "And where were those on whom that sentence had been already executed - the 20,000 evicted destitute poor of the last two years? Where indeed! My informants assured me that, to the best of their knowledge, the greater number of these are DEAD!" ⁽²⁾

He further says, "What I saw confirmed me in the belief of this otherwise almost incredible fact. Wherever I went - and I drove in many directions over the Union, I passed continually the traces of the 'levellers'. Sometimes eight or ten broken gables of stone-built houses were seen to rear their blackened and skeleton frames against the sky, betokening what had once been a comfortable hamlet - now a pile of ruins. Sometimes a few mere heaps of dirt, almost choked by the weeds which grew around, announced the wreck of a mud hovel. Some were single, some in twos and threes. At times a whole street in a village had been destroyed. I seemed to be tracking the course of an invading army. I drove through more than one village in which the sheriff, and his posse, and the landlords' bailiffs with their crow-bars, were expected that day

(1) & (2) Scrope, G.P. Some Notes of a Tour in England, Scotland and Ireland, Made with a View to the Inquiry, Whether our Labouring Population be Really Redundant. London, 1849, pp. 28 & 29

or the morrow, and the inhabitants - in the unresisting apathy of despair - were awaiting the execution of the sentence which would deprive them of home and shelter for ever".⁽¹⁾

He also gives similar evidence in the case of Galway Union. He states the number of poor evicted and their homes levelled within the last two years is 4,000 families. In other words again in this Union 20,000 human beings were thrown out upon the road, houseless and homeless.⁽²⁾ "To me", he concludes, "some parts of the country appeared an enormous graveyard - the enormous gables of the unroofed dwellings seeming to be gigantic tombstones. They were, indeed, records of decay and death far more melancholy than any graveyard can show".⁽³⁾

Again Count Strzelicki, who showed great sympathy with the Irish peasantry, says to the same effect, "While hundreds of thousands were deprived of food and health by the failure of the potato crop, 90,000 holders of lands had lost their hearths by eviction or voluntary surrender, and become houseless; some taking refuge in the workhouse; others in a state of emaciation, nudity and sickness hardly credible - crowding together, and crouching under heaps of rotten straw from their unroofed cabins, under bridges, burrowing on the roadside, or in ditches in the cold and wet bogs. Perishing from the want of food unfortunately was the lot of many".⁽⁴⁾

(1) (2) (3) Scrope, G.P., Some Notes of a Tour in England, Scotland and Ireland, Made with a View to the Inquiry, Whether our Labouring Population be Really Redundant. London, 1849, p.29; p.43; p.43.

(4) Strzelicki, P.C., Count de, Letters to the Subscribers to the Fund Raised in June, 1849, for the Relief of the Distress in Ireland, 1849. Cited in Alison, W.P., Observations on the Reclamation of Waste Lands and their Cultivation by Croft Husbandry. Edinburgh and London, 1850, p.8.

Poverty the mother of Disease

Naturally, as the story always ends, this prevalent extreme distress bred pestilence and disease. As early as February, 1846, the medical reports began to show an increased incidence of disease almost all over the country. A report submitted to the Government in March 1846 by the "Commissioners" appointed in reference to the apprehended scarcity" and containing abstracts from the reports of the Irish medical officers was the first alarming sign of the progressing pestilence. In this report more than a hundred medical superintendents of public institutions recorded an increase of fever, dysentery, diarrhoea, etc., all over the country. The occurrence or the increase of fever was reported in many places in the following countries. (1)

Munster: Clare, Cork, Kerry, Limerick, Tipperary,
Waterford.

Connaught: Galway, Leitrim, Mayo, Roscommon.

Leinster: Dublin, Meath, Queen's, Wicklow.

Ulster: Antrim, Armagh, Cavan, Donegal.

Again, dysentery and diarrhoea were reported in a greater number of localities in all these counties. In addition it was also reported from some counties from which fever was not reported, such as King's County, Westmeath and Wexford in Leinster.

(1) Abstracts of the Most Serious Representations Made by the Several Medical Superintendents of Public Institutions (Fever Hospitals, Infirmaries, Dispensaries) in the Provinces of Ulster, Munster, Leinster and Connaught. 1846, B.P.P.1846 (120) XXXVII. 479, pp.1-9.

Most of the reports connected the increase in the incidence of disease, with the privations which the people were enduring.

The language of these reports was striking. All of them in the same tone stated that fever was very prevalent, or rife, or alarmingly on the increase and that dysentery or (bloody flux) had appeared as an extensive epidemic.

Some of them stated that the numbers of patients in their institutions had increased, in one case as much as ten to one. Others reported an appreciable increase in mortality in their areas. Some reports stated that the increase of disease was so alarming that special meetings of the subscribers were called for its consideration. (1)

The Commissioners who presented these reports to Government on 7th March, 1846, introduced it in the following way:

"The Commission having given their deep and serious consideration to the last Reports from Medical Dispensaries etc. in confirmation of the increase of fever and dysentery throughout the country, solicit his Excellency's attention to this alarming exigency". (2)

This report alarmed the Government and led to the introduction of a Bill to appoint a Board of Health and to provide fever hospitals and other measures of prevention. (3) The

(1) (2) Abstracts of the Most Serious Representations Made by the Several Medical Superintendents of Public Institutions (Fever Hospitals, Infirmaries, Dispensaries) in the Provinces of Ulster, Munster, Leinster and Connaught, 1846, B.P.P.1846 (120) XXXVII.479 pp.1-9; p.1.

(3) An Act to make Provisions, until the First Day of September One thousand eight hundred and forty-seven, for the treatment of poor Persons afflicted with Fever in Ireland [24th March, 1846] 9 Vic. Cap. 6.

Government introduced the Bill in an atmosphere of urgency and importance. Sir James Graham said, "I ask this favour (of making the motion) under circumstances of urgency. If the House had met yesterday, it was my intention to have made the motion then".⁽¹⁾ He then declared the spread of disease in Ireland saying,

"Only yesterday morning the Government received from the Lord Lieutenant a Report from the Commission appointed to watch the advance of distress arising out of the failure of the potato crop, announcing that, in all the provinces, almost in every county, and in various localities of different counties, dysentery, to a very formidable extent, had made its appearance, attended by fever in many instances, and adding an apprehension that the fever would become general. Under these circumstances, the Members of Her Majesty's Government were of the opinion that it was absolutely necessary to make some special provision, and I now ask leave to bring in a Bill for the object already stated".⁽²⁾

(1) & (2) Hansard's Parliamentary Debates 1846, Vol. LXXXIV, pp.980-981.

But in 1846 the epidemic was still in its infancy. It continued to develop and spread aided and helped by the complete failure of the potato crop in the autumn of 1846 and the consequent social conditions in the country, until in 1847 the whole country was engulfed in one of the severest epidemics of history. The year 1847 was the darkest of the dark years of the famine. During this year poverty and pestilence worked hand in hand to destroy the labouring classes of Ireland. The portrayals made of the conditions in different places by different medical and other witnesses who chronicled the period give a strong impression of the extensiveness and destructiveness of the epidemics in this year. (1)

(1) I am going to cite some of these portrayals as they may compensate for the deficiency in figures and statistics in this respect and as they give a picture of the life at that time. Dr. J. Callanan speaking about Cork says,

"From the commencement of 1847, however, Fate opened her book in good earnest here, and the full tide of death flowed on everywhere around us. During the first six months of that dark period, one-third of the daily population of our streets consisted of shadows and spectres, the impersonations of disease and famine, crowding in from the rural districts, and stalking along to the general doom - the grave-- which appeared to await them at the distance of few steps or a few short hours".

[Cited in The Census of Ireland for the Year 1851.
Dublin 1856, Pt. V, Vol. I, B.P.P.1856, XXIX, p.301]

The condition of fever in Sligo in June, 1847, was described by a correspondent of the Times. He says,

"The town and its environs are in a truly awful state. Out of all the houses upon 10 townlands in the district of Ransborough not a single house is free from infectious distemper. ... We are surrounded upon all sides with fever; it is everywhere, and it is growing hourly worse; it is not only increasing, but it is assuming a more malignant character. We really do not know what will become of the unfortunate inhabitants of this town. Many of them now in health are doomed to death,

for the contagion is running like wildfire, and those free from it today may be delirious tomorrow. The fever hospitals are crowded, so are the fever sheds, and outside of the doors on the cold earth may be seen a number of fever patients, varying from 10 to 15, every day and every night".(1)

The spread of pestilence resulted in a panic amongst the people, who rushed to the hospitals and dispensaries to escape the grasp of death. At that time, the accommodation for patients was still very deficient compared with the pressure of disease. Thus most terrible scenes of starving prostrated patients waiting and dying in front of the closed doors of choked-up hospitals and workhouses were described in Dublin, Cork, Waterford, Galway, and other large towns.(2)

"There", says the Census Commissioners, "day after day, numbers of people, wasted by famine and consumed by fever, could be seen lying on the footpaths and roads waiting for the chance of admission, and when they were fortunate enough to be received, their places were soon filled by other victims of suffering and disease".(3)

Dr. Curran, speaking about Dublin in August 1847, says to the same effect, "At the gate, leading to the temporary fever hospital, erected near Kilmainham, were men, women, and children, lying along the pathway, and in the gutter, awaiting their turn to be admitted..... whilst in the centre of the road stood a cart containing a whole family, who had been smitten down together by the terrible typhus, and had been brought there by the charity of a neighbour". Inside the hospital enclosure was a small open shed, in which were "thirty-five human beings, heaped indiscriminantly on a little straw thrown on the ground. Several had been thus for three days, drenched in rain &c. Some were unconscious, others dying At the doors of all fever hospitals (of Dublin) miserable wretches may be seen lying, hopelessly waiting for admission. I have recently quoted more than a dozen cases of fever at a time lying outside the gate at Glasnevin Temporary Hospital...the sick poor are everywhere dying for want of relief".(4)

The Irish towns during the Famine became the seat of great chaos and disorganisation. The masses of pestilence in the country were drained into these cities and towns where relief was more available and hospital accommodation possible. The country people suffering from starvation and disease fled from their cabins into the neighbouring towns in an attempt to escape

(1) Times, 23rd June, 1847, p.6b.

(2) & (3) & (4) The Census of Ireland for the Year 1851. Dublin 1856, Pt. V, Vol. 1, B.P.P.1856 XXIX, p.248; p.248; pp.297-298.

death in their home-land. This helped more the spread of the epidemic and added more to the chaos in the Irish towns. The towns of Ireland at that time presented some of the most melancholic scenes recorded in history. The following is a graphic picture of the state of affairs in one of these towns (Cork) described by Rev. Theobald Mathew, the well-known apostle of temperance. He said in his evidence before the Select Committee of the House of Lords on Colonisation from Ireland:

"No tongue can describe - no understanding can conceive - the misery and wretchedness that flowed into Cork from the western parts of the county; the streets were impassable with crowds of country persons. At the commencement they obtained lodgings, and the sympathies of the citizens were awakened; but when fever began to spread in Cork they became alarmed for themselves, and they were anxious at any risk to get rid of these wretched creatures. The lodging house keepers always turned them out when they got sick. We had no additional fever hospitals; the Workhouse was over-full, and those poor creatures perished miserably in the streets and alleys. Every morning a number were found dead in the streets; they were thrown out by the poor creatures in whose houses they lodged. Many of them perished in rooms and cellars, without its being known, and without their receiving any aid from those outside.... The calamity was so great and so overwhelming, that it was impossible to prevent these calamities. At one instance, I may mention that one Sunday morning I brought Captain Forbes... and several other persons, to show the state of neighbourhood in which I resided, and to show them the thousands whom we were feeding at the depot. While we were going round a person told me 'There is a house that has been locked up two or three days'. It was a cabin in a narrow alley. We went in, and we saw seventeen persons lying on the floor, all with fever, and no one to give them assistance. Captain Forbes was struck with horror, he never thought there could be in any part of the world such misery. That was in the south suburbs. A poor, wretched widow woman resided there; she let it out for lodgings, and received these people as lodgers, who all got the fever. We three gave what relief we could, and got them conveyed to the hospitals, but they all died".....

"These poor creatures, the country poor, are now houseless and without lodgings; no-one will take them in; they sleep out at night. The citizens of Cork have adopted what I consider a very unchristian and inhuman line of conduct. They have determined to get rid of them. Under the authority of an Act of Parliament, they take them up as sturdy beggars and vagrants, and confine them at night in a market place, and the next morning send them out in a cart five miles from the town and there they are left, and a great part of them perish, for they have no home to go to. When they fled from the country, their houses were thrown down or consumed for fuel by the neighbours

who remained, and these poor creatures have no place to lay their heads".(1)

The accounts from Skibbereen district were among the most horrible accounts of the famine in Ireland. It was said that the people used to "fall in the streets through exhaustion".(2) At the town itself, the dead were so numerous that the dead were carried in a shell and laid without coffins in a large pit.(3) Outside the town the dead were sometimes buried near their cabins. This is in spite of the fact that the Irish at that time used to attach great religious importance to the coffins and the traditional ways of interments. The same things are reported from other parts of the country. "In the parish of Skull there was said to be at one time, a person dead or dying in every house".(4) There were not enough coffins for all the dead, and thus many were tied up in straw, and so interred.(5)

Moreover, all the witnesses from different parts describe in the same language how the poor died unnoticed in their cabins and how they were only discovered long after their deaths. Whole families were sometimes discovered dead in their wretched cabins. Besides, there are many reports of dead bodies met in deserted houses, in fields and in ditches or in the roads and waysides. One road inspector in Mayo reported that in the neighbourhood of Clifden, they had secured the burial of 140 corpses found lying by the wayside".(6) A witness in Bantry says,

"At the time of the Famine I have seen one of these hinged coffins, which had borne more than three hundred corpses to the grave. I have seen men go along the roads with it, to collect dead bodies as they met them".(7)

Among the reports of the medical officers on the epidemic of 1847, that give evidence of the extreme severity and wide prevalence of the disease, was that of Dr. Jones Lamprey.

(1) Report of the Select Committee of the House of Lords on Colonisation from Ireland, 1847. B.P.P.1847 (737.737-II) VI, pp.243-244.

(2) The Census of Ireland for the Year 1851. Dublin, 1856, Pt. V, Vol. I, B.P.P.1856. XXIX, p.295.

(3) Creighton, C., Op. Cit., Vol. II, p.287.

(4) The Census of Ireland for the Year 1851. Dublin, 1856, Pt. V, Vol. I, B.P.P.1856, XXIX, p.295.

(5) O'Rourke, J., Op. Cit., p.401.

(6) Tuke, J.H., Cited in O'Rourke, J., Op. Cit., p.384.

(7) O'Rourke, J., Op. Cit., p.4-18.

He was sent in March, 1847 by the Board of Health to investigate the condition of the parish of Skull. He states that the parish was "in a frightful state of famine and fever". Dysentery had been extremely prevalent in this district. "It was eaily known", says Dr. Lamprey, "if any of the inmates in the cabins of the poor were suffering from this disease, as the ground in such places was usually found marked with clots of blood". (1)

Again Dr. H. Kennedy states that at the Cork Street Hospital, nearly 12,000 cases applied during a period of two months. But he cautions that this number is a very imperfect underestimate of the real total amount of disease. He states that those who were familiar with the poor and who used to visit them in their homes can give evidence to the vast numbers of the sick who remained at home. He assures that the greatest majority of the sick remained in their cabins either because of the shortage of hospital accommodation, or because they never thought of applying to the hospital. He says, "It was quite common to find three, four, or five ill in a house, where application had been made but for one. He thinks that the lowest estimate of those who sickened in Dublin cannot be less than 40,000". (2)

Dr. Pemberton describes the prevalence of disease in Ballinrobe, Co. Mayo saying, "there was not a village and scarcely a cabin in this district that escaped its desolating influence. I have often seen whole families, consisting of seven or eight individuals, lying in the fever at the same time, with perhaps a child of eight or nine years of age the anxious nurse-tender of his father, mother, and from four to six brothers and sisters, - ministering to them the cool water of the spring (having nothing else) to quench their burning thirst; the child itself scarce able to walk from starvation, or having just risen from the bed of sickness to tend these dear objects of its affection. The people were completely prostrated by the disease which was in many instances protracted to an indefinite period, for the want of that nourishment and care suitable to their convalescence". (3)

J. Kidd, in a letter to the Times in May, 1847 states that the weekly mortality of Bantry was 70 times higher than that of London. He mentions that the population was estimated on 1st November, 1846, to be 4,500. He then says that "this has now been reduced to about 3,200 by the united efforts of famine and disease, although upwards of a thousand strangers from the country, near the town have moved into it from time to time, very few of whom are living".

(1) Lamprey, "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849, Vol. VII, p.104.

(2) Kennedy, H., "Report on the Epidemic Fever in Ireland",
Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, p.48.

(3) Pemberton, "Report on the Epidemic Fever in Ireland",
Dub. Quart. Journ. Med. Sc. 1849, Vol. VII, pp.368-369.

He then states that the weekly mortality in the town alone is upwards of 100 (i.e., a weekly death rate of 375 per 1,000).

The writer attributes this high mortality to the scanty diet of fever patients and convalescents. He says,

"The condition of the fever patients is indeed deplorable... In the greater number of cases they are for one half of the week without drink or nourishment of any sort except cold water, ... It seemed to me pitiable in the extreme, to find the convalescents from fever starving on three pounds of rice a week, the utmost which their limited funds can allow to one person. The mortality in fever is not more than 1 in 30; but very close observation, I can safely say, that the mortality in convalescents from fever is at least 5 in 30; and entirely owing to the scanty supply of proper food, and to the use of that which is improper".(1)

(1) Kidd, Joseph, Times, 6th May, 1847, p.7f.

Scurvy was also one of the diseases which became prevalent during the famine. Dr. J.O. Curran states that Scurvy, was one of the "very rarest" of diseases in Ireland before the famine. (1) But since 1846 it had begun to make its appearance in various towns and rural districts and at last it became exceedingly prevalent in all parts of the kingdom.

One of the earliest who reported its appearance was Dr. O'Brien in the Dublin Hospital Gazette on 15th January and 1st February, 1846. (2)

Again on April 15th, 1846, Dr. McCormick reported that it was exceedingly prevalent in the county of Donegal. (3)

Dr. French also reports that Scurvy was very prevalent in his district in Co. Galway "So general", he says, "was it, that I entered it as an epidemic of the season". (4)

Dr. Little also reports "the epidemic" occurrence of scurvy in his district in Co. Galway in the same year. (5)

Dr. Tabutsau of Portarlinton also reported the prevalence of scurvy in the Autumn and winter of 1846. (6)

(1) (2) & (3) Curran, J.O. "Observations on Scurvy as it has lately Appeared throughout Ireland and in Several Parts of Great Britain". Dub. Quart. Journ. Med. Sc. 1847, Vol. IV, p.84

(4)(5) The Census of Ireland for the Year 1851. Dublin 1856.

Pt. V, Vol. I, B.P.P. 1856 [2087-1] XXIX, p.276.

(6) Curran, J.O. Op. Cit. p.84.

Again Dr. Pemberton reports that in the Ballinrobe district, County Mayo, Scurvy was very prevalent in 1846, being "evidenced by the purple hue of the gums, with ulceration along their upper thin margin, bleeding on the slightest touch, and deep and sloughing ulcers of the inside of the fauces, with intolerable fetor, which attacked both sexes indiscriminantly, and the child as well as the adult". (1)

It is also reported that Scurvy made its appearance in the same year in the criminal prison at Perth where it was found necessary to cease using potatoes from its scarcity at the beginning of that year. (2)

Thus evidences show that Scurvy began to be prevalent in 1846. It was a disease unknown to most of the Irish doctors and at first it was not diagnosed and its symptoms were often mixed with other diseases or regarded as complications of fever. However in 1847 it became extremely prevalent and it was diagnosed and reported from almost every part of the country. Dr. Curran states that in 1847 there was information about the prevalence of Scurvy "in all the cities and large towns of Ireland". "In Waterford, Cork, Kilkenny and some other localities", he says, "such was the prevalence of the disease, that Dr. Tanner informs me he has frequently prescribed for twenty scorbutic patients per day at the South Cork Infirmary". (3)

(1). Pemberton, "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849. Vol. VII, p.369.

(2) The Census of Ireland for the Year 1851. Dublin 1856.
Pt. V, Vol. I. B.P.P.1856, XXIX, p.249.

(3) Curran, J.O. Op. Cit.

It is a strong proof of the anti-scorbutic properties of the potato, that although it was the exclusive food of millions of the Irish, yet Scurvy was almost unknown in Ireland until the famine and the failure of this crop.

One of the diseases of malnutrition which appeared during the famine was the famine dropsy and anasarca. It was reported from almost every county in Ireland. In the pictures made of the distressed and the miserable poor during the famine, one of the common descriptions was that they were swollen. Thus a clergyman in Skull says in February, 1847,

"Frightful and fearful is the havock around me. Our medical friend, Dr. Sweetman, informed me yesterday that if he stated the mortality in my parish at an average of thirty-five daily, he would be within the truth. The children in particular, he remarked, were disappearing with awful rapidity. And to this I may add the aged, who, with the young - neglected, perhaps, amidst the widespread destitution - are almost without exception ⁽¹⁾ swollen and ripening for the grave".

Naturally they were "swollen" by the famine dropsy and anasarca. In the accounts of the medical men famine dropsy was reported from almost every district. ⁽²⁾ For example a report from Skibbereen says in April, 1847,

(1) Cited by Lamprey, Jones, "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849, Vol. VII, p101.

(2) Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849, Vol. VII & VIII.

"few houses can be said to be altogether free from either fever or dysentery. A new disease appears to have arisen here under the form of Anasarca swelling of the lower extremities, without previous fever or dysentery".⁽¹⁾

The Census Commissioners in summarising the medical reports on the famine say, "In addition, anasarca or general dropsy was very common in all ages and sexes, apparently arising in many cases, from bad or insufficient diet".⁽²⁾

In 1847, the number of deaths from Dropsy, according to the 1851 census were 5,246. In the famine years 1847, 1848, 1849, 1850, and the first three months of 1851, the number of deaths from dropsy amounted to 18,653.⁽³⁾

(1) Reports of the Commissioners of Health, Ireland, on the Epidemics of 1846-50, Dublin, 1852, B.P.P. 1852-53 [156] XLI, p.12.

(2) The Census of Ireland for the Year 1851. Dublin 1856. Pt. V, Vol. I, B.P.P. 1856, XXIX, p.295.

(3) Ibid p.453.

The available statistics about the epidemics of this period are mainly those given in the 1851 census. As I have said before, these were obtained retrospectively in 1851 for the whole decennium; heads of families being required to fill in all the deaths, with causes, ages, years, season etc. This method is especially untrustworthy for this epoch, as a large number of families had emigrated, and many places had been stripped of nearly half their inhabited houses either as a result of death, emigration or eviction.

A large part of the people of Ireland were gone before the Census, and those who had gone were those who could have told most about the famine. Thus we have to look at these statistics with these facts at the back of our minds.

The following is a table of the registered deaths from the specific diseases of the famine together with the prices of food in different years.

TABLE XII

Deaths from All Causes and From Fever and Dysentery
and the Average Price of Potatoes and Oatmeal in Ireland
 (1)
 (1844 - 1850)

Year	Total No. of Deaths	Deaths from Fever	Deaths from Dysentery and Diarrhoea	Average Price of Potatoes per cwt.	Average Price of Oatmeal per cwt.
1844	75,055	7,841	2,098		
1845	86,900	9,833	3,191	2s. 2d.	12s. 4d.
1846	122,889	17,145	9,087	4s. 10d.	16s. 10d.
1847	<u>249,335</u>	<u>57,095</u>	<u>36,474</u>	8s. 4d.	21s. 3d.
1848	208,252	45,948	25,694	7s. 0d.	12s. 11d.
1849	240,797	39,316	29,446	6s. 11d.	11s. 9d.
1850	164,093	23,545	19,224	4s. 4d.	10s. 5d.

(1) The Census of Ireland for the Year 1851. Dublin 1856.
 Pt. V, Vol. I, B.P.P. 1856, XXIX, pp. 235, 265, 278, 305, 314,
 323, 330 & 328.

The preceding table shows that the total death returns of 1847 were more than three times the deaths of 1844 and more than twice the deaths in 1846. It also shows how the epidemic of fever and dysentery has gradually become more and more extensive and severe from 1845 onwards. It is also clear that these epidemics continued to prevail and to slaughter large numbers of people even after the abatement of the disease in potato. Thus there was 23,545 deaths from fever in 1850. It is interesting to notice the explanation of the Census Commissioners for that. They say, "Even in 1850 the mortality from fever had not lessened to the extent which might have been anticipated, - the pestilence continued to prevail, and the people still tottering under the depressing effects of the recent calamity, were unable to resist the influence of ⁽¹⁾ disease for which years of privation had predisposed them".

Again it is interesting to notice that the Commissioners of Health explain the fact that fever was still prevalent in 1850 by saying, "It is impossible not to be struck by the coincidence between the scarcity and consequent high price of potatoes and the prevalence of fever. The price of potatoes, although having fallen considerably in 1850, still averaged, it will be observed, double the price of 1845; but the injurious effects that would otherwise have still followed from the continued comparative scarcity and high price of potatoes, were counteracted to a very considerable degree by the cheapness of

(1) The Census of Ireland for the Year 1851. Dublin 1856.

oatmeal, which fell, in the autumn of 1849, to 10s.6d. per cwt; (1)
and averaged during 1850, only 10s.5d. per cwt."

The following table is drawn from the statistics of the temporary fever hospitals during the famine years.

TABLE XIII

Number of Patients Admitted Monthly in Temporary

Fever Hospitals

(2)
From July, 1847, to August, 1850.

Month	No. of Patients	Month	No. of Patients	Month	No. of Patients	Month	No. of Patients
<u>1847</u>		<u>1848</u>		<u>1849</u>		<u>1850</u>	
		January	12,332	January	6,494	January	4,450
		February	10,799	February	8,046	February	4,783
		March	12,171	March	10,363	March	6,269
		April	14,909	April	8,328	April	5,008
		May	12,972	May	9,134	May	5,271
		June	8,595	June	11,043	June	6,135
July	21,352	July	9,884	July	6,980	July	4,455
August	17,683	August	6,053	August	6,239	August	2,680
September	14,958	September	6,715	September	6,535		
October	15,863	October	4,631	October	4,653		
November	10,568	November	4,783	November	4,201		
December	10,592	December	6,534	December	5,119		

(1) & (2) Reports of the Commissioners of Health: Ireland, on the Epidemics of 1846 - 1850. Dublin, 1852, B.P.P.1852-53 [1562] XLI, pp.24; 68-69.

The total number of fever hospitals erected under the Act 10 Vic. Cap. 22, was 373 in which 332,462 patients were treated. Of these 95,890 were admitted in 1847 while 110,381 were admitted in 1848. The mortality in these hospitals in the years 1847-50 averaged 10.4%.
(1)

In addition to these fever cases in the temporary fever hospitals, there were considerable numbers in the workhouses. According to the weekly returns of the workhouses, the fever cases in the workhouses were fluctuating between 9,000 and 10,000 cases from April to June, 1847. In the week ended 1st May, 1847, they reached the maximum of 10,226. The returns also show that the weekly total number of sick in the same period was fluctuating between 22,000, and 25,000 while the total inmates were between 101,000 - 104,000.
(2)

The number of deaths in the workhouses in 1847 was 66,890, while the total number relieved was 332,140 (i.e., a ratio of 20.1%). Out of these deaths there were 30,158 deaths attributed to fever, dysentery, diarrhoea and dropsy.
(3)

(1) Report of the Commissioners of Health: Ireland, on the Epidemics of 1846-1850. Dublin 1852. B.P.P.1852-53 [1562] XLI, pp. 3 & 4.

(2) First Annual Report of the Commissioners for Administrating the Laws for Relief of the Poor in Ireland. Dublin 1848. B.P.P.1847-48 [963] XXXIII, p.22.

(3) The Census of Ireland for the Year 1851. Pt. V, Vol. II. Dublin 1856. B.P.P.1856 [2087-11] XXX, pp.116-118

The figures of patients in the temporary fever hospitals cannot give an accurate idea about the degree of extensiveness of the epidemic. This is because these numbers were naturally influenced by the accommodation afforded. (1) There are many reports which prove that the numbers of patients in hospitals was only a small percentage of the total numbers afflicted by disease. I have referred to some of these reports and I may mention now another one. On March 22nd, 1848, Sir A. Brooke mentioned in Parliament that the Medical Board of Health in Dublin instituted certain inquiries into the condition of the fever hospital and the progress of fever in the M.P.'s district (Fermanagh). The inquiry revealed that there were a great many cases of fever in the district, but that there was only one in the hospital. The medical superintendent's explanation of that was that "the poor people were so afraid of having their houses pulled down by their landlords whilst they were in the hospital, and having no place to go to upon coming out, that they would not enter the hospital, but preferred lying at home". (2)

Again, because the figures in the preceding table were most influenced by the available accommodation, they cannot give an accurate idea about the relative prevalence - of disease in different years.

(1) The Census of Ireland for the year 1851. Dublin 1856.

Pt. V, Vol. I. B.P.P.1856, XXIX, p.247.

(2) Hansard's Parliamentary Debates 1848. Vol. XCVII, p.861.

However, according to what had been stated by different medical reporters, the wave of the epidemic began to increase greatly in 1847 in the spring months in some places and in the summer months in others. (1)

The Census Commissioners estimated that about 1,595,040 of the whole population have suffered from fever in 1846-49. They calculated this number on the basis of the registered number of deaths from fever and by assuming that the rate of mortality was 10%. I think this is great underestimation of the actual numbers who caught the disease. The Census Commissioners themselves admitted that the recorded deaths from fever cannot be taken as a basis for calculation, as "no pen has recorded the numbers of the forlorn and starving who perished by the wayside or in the ditches, or of the mournful groups, sometimes of whole families, who lay down and died, one after another, upon the floor of their miserable cabin, and so remained uncoffined and unburied, till chance unveiled the appalling scene" (2)

We can have an idea about the incidence of fever and dysentery in the labouring population of Ireland from the statistics of the Irish emigrants to Canada during 1847. Sir Charles Trevelyan gives the incidence of disease and mortality among these emigrants. He states that "one-third of those who arrived in Canada were received into hospital". (3)

(1) "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849. Vol. VII & Vol. VIII.

(2) The Census of Ireland for the year 1851. Dublin 1856. Pt. V, Vol. I. B.P.P. 1856, XXIX, p.243.

(3) Trevelyan, Sir Charles. The Irish Crisis. London 1880, p.105.

I think that the incidence of disease in this sample of the Irish peasantry may be taken to represent the general prevalence of disease among the poor in Ireland. It may be objected that the conditions and the overcrowding in the emigrant ships were especially favourable conditions for the spread of disease and that these emigrants, therefore, cannot be regarded as a representative sample. But I think that the conditions in the country itself and the overcrowding of the poor in front of the relief depots and of the fugitives in the markets and lodging houses were as favourable conditions for the spread of disease. The following is a table of the mortality among the emigrants to Canada.

TABLE XIV

(1)

Deaths among British Emigrants to Canada in 1847

Total Number of Emigrants	89,738
No. Died on the Passage	5,293
No. Died at the Quarantine Station	3,452
No. Died at the Quebec Emigration Hospital	1,041
No. Died at Montreal Emigration Hospital	3,579
No. Died at Kingston and Toronto	<u>1,965</u>
Total	<u>15,330</u>
Mortality per 1000	170.8 per 1000

(1) Trevelyan, Sir Charles. *The Irish Crisis*. London 1880, p.105.

However, the severity of the epidemic varied much in different parts of Ireland. The great weight fell on the counties of the west and south-west in Connaught and Munster. This is significant as it was in these parts that the people were poorest. However, among the counties that suffered most from pestilence were one from Leinster, Queen's County, and one from Ulster, Co. Cavan. ⁽¹⁾ But, the severity of epidemic was less in those parts of Ulster where the standard of living was higher and where a small percentage of the people led that low type of life of being totally dependent for living on cultivating a patch of ground with potato. This relative freedom from pestilence of these relatively prosperous parts, adds more evidence to the effect of the standard of living on the spread of disease. The counties which suffered less severely in this province were Co. Down, Co. Tyrone and Fermanagh. ⁽²⁾ The decrease of population in the 1851 Census than that of 1841 in different counties and provinces can give an idea about the amount of suffering shared by each part during the famine. Thus in Whole Ireland, rural population decreased by 53 persons to square mile of entire area

"	Connaught	"	"	"	"	60 persons	"
"	Munster	"	"	"	"	57 persons	"
"	Ulster	"	"	"	"	48 persons	"
"	Leinster	"	"	"	"	45 persons	"
"	Co. Roscommon, Connaught	"	"	"	"	<u>86</u> persons	"
"	Co. Donegal, Ulster	"	"	"	"	<u>22</u> persons	" (3)

(1) & (2) MacArthur, Sir William Op. Cit. pp.12-13.

(3) The Census of Ireland for the Year 1851. General Report, Pt. VI, B.P.P.1856 [134] XXXI, p.xii-xiii.

Factors that Helped the Spread of DiseaseI Pest Houses

It is of importance to analyse the different ways in which poverty during the famine years determined the spread of pestilence in Ireland. One of these ways was that it compelled the poor people to run away from starvation and to congregate and crowd in the workhouses. As the poverty and distress was universal and extreme, there was a strong pressure over these institutions. They, therefore, became extremely overcrowded. In order to give refuge to even a part of the multitudes who fled from their homes to them, they became filled far beyond their capacity. They were compelled to do so as the only alternative was to leave the poor to starve to death outside the doors. This overcrowding of famished half-starved destitute multitudes was extremely favourable for the spread of pestilence. Moreover, the state of the workhouses themselves, their sanitation and the insufficient scanty relief afforded in them, were typical conditions for the breeding and propagation of disease. No isolation in these workhouses was possible as all their rooms and even their stables were overflowing with the sick. That is why the workhouses were called at these times the "Pest-Houses". To resort to one of these at that time only meant to the poor the exchange of perishment from hunger to death from pestilence. ⁽¹⁾ The mortality of the inmates and the officials in these workhouses was extremely high. This is no

(1) MacArthur, Sir William, Op. Cit., pp.9 & 10.

wonder when we read the descriptions made of these pest houses by the many witnesses who chronicled this period.

Thus Dr. Stephens, who was sent by the Board of Health to report on the Bantry Workhouse says,

"Language would fail to give an adequate idea of the state of the fever hospital. Such an appalling, awful and heart-sickening condition as it presented I never witnessed, or could think possible to exist in a civilised, or Christian community. As I entered the house, the stench that proceeded from it was most dreadful and noisome; but, oh! what scenes presented themselves to my view as I proceeded through the wards and passages: patients lying on straw, naked, and in their excrements, a light covering over them - in two beds living beings beside the dead, in the same bed with them, and dead since the night before. There was no medicine - no drink - no fire. The wretched creatures, dying from thirst, were constantly crying 'Water, water' but there was no Christian hand to give them even a cup of cold water".⁽¹⁾

There were very many similar portrayals of different workhouses by different medical men. One of them, much quoted is about the Ballinrobe workhouse by Dr. Pemberton.⁽²⁾ Others, quoted by the Census Commissioners, 1851, are about

(1) O'Rourke, J., Op. Cit., pp.417-418.

(2) Pemberton, "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc., 1849, Vol. VII, pp.369-370.

the workhouses in Cork, Fermanagh, Galway, Limerick and
 (1)
 Waterford.

M. French, M.P., for Roscommon in a speech in Parliament in 1849 brought the subject of the Irish workhouses under the notice of the House. The evidence he gave and quoted conveyed a frightful picture of these buildings. It was the same everywhere, in all the instances he described: extreme overcrowding, miserable accommodation, and great chaos; and in almost every case he gave evidence from the reports of the medical officers of the increase of disease and mortality which was invariably attributed (2) by these officers to the conditions of the workhouses.

The pictures given of the Irish workhouses could give an idea about the role they must have played in the spread of epidemics. But there can be no stronger proof that they were really pest houses than their figures of mortality. The following is a table abstracted with some alteration from the 1848 report of the Poor Law Commissioners of Ireland.

(1) The Census of Ireland for the Year 1851. Dublin, 1856, Pt. V, Vol. I, B.P.P.1856, XXIX, pp.299-300.

(2) Hansard's Parliamentary Debates 1849, Vol. CIII, pp.1332-1334.

TABLE XV.

Mortality Rates per 1000 in Union Workhouses; Ireland in
(1)
April - June, 1847

Week Ended	Total No. of Paupers in Workhouses	No. of Weekly Deaths	Weekly Rate of Mortality per 1000 (2)	Monthly Rate of Mortality per 1000
17th April 1847	104,200	2,551	294	235
24th " "	101,566	2,330	276	
1st May, 1847	102,135	2,224	264	219.8
8th " "	101,713	2,063	243.6	
15th " "	103,629	1,803	208.8	
22nd " "	104,867	1,722	196.8	
29th " "	103,983	1,630	186.0	
5th June, 1847	104,711	1,459	168	166.2
12th " "	102,981	1,448	169.2	
19th " "	104,083	1,468	169.2	
26th " "	102,131	1,350	158.4	

(1) First Annual Report of the Commissioners for Administering the Laws for Relief of the Poor in Ireland. Dublin 1848. B.P.P.1847-48 [963] XXXIII, p.242.

(2) N.B. In the original table, the weekly rates of mortality were calculated by dividing the number of weekly deaths by the total number of Inmates. By the weekly rate in the above table it is meant the annual death rate, if the deaths every week throughout the year were to be the same as that of the week in question.

Again, the extreme poverty and destitution of the Irish peasantry during the famine helped the spread of pestilence in another way. It forced the starving rural populations to flee from their homes and to migrate in order to escape certain death from hunger. To the voluntary migrants were added others evicted and set out from land by the landlords. Thus the roads became full of crowds of these fugitives travelling for long distances, looking for a refuge from perishment. Thousands of them fled to the neighbouring towns and cities in the hope of finding relief there. This state of affairs resulted in complete chaos and terrible disorganisation in the society. These fugitives were not always accepted in the towns and they were often turned out again to the roads. (1) These migrations were some of the most active means of spreading the epidemic all over the country. The fugitives used to transmit disease from one place to another. Indeed, it is reported that many of them developed frank attacks of disease on their journeys, and some of them fell dead on their way. As the predominant epidemic was relapsing fever, many of them had the disease in too mild a form to prevent them from continuing their journeys. Dr. H. Kennedy reports that he had seen many pass through fever while they were literally walking about. (2) Wherever the fugitives went, they brought the disease with them, and that is why the epidemic was called the "Road Fever".

(1) Report of the Select Committee of the House of Lords on Colonisation from Ireland. 1847. B.P.P. 1847 (737.737-II) VI, pp. 243-244.

(2) Kennedy, H. "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849. Vol. VIII, p. 50.

Most of the accounts written about the spread of epidemic in the different cities and towns attributed the spread of disease to these fugitives. Thus Dr. John Popham speaking about the spread of fever in Cork says,

"The pressure from without upon the city began to be felt in October; and in November and December the influx of paupers from all parts of this vast county was so overwhelming, that, to prevent them from dying in the streets, the doors of the workhouse were thrown open and in one week, 500 persons were admitted, without any provision, either of space or clothing to meet so fearful an emergency. All these were suffering from famine, and most of them from malignant dysentery or fever.... As it originated with the vast migratory hordes of labourers and their families congregated upon the public roads, it was commonly termed 'the road fever'".⁽¹⁾

It was these fugitives who were responsible for the universal spread of disease even to the counties which did not suffer much from the failure of the potato crop. The role of migration in spreading disease is best illustrated in the case of a wealthy district in Ireland; Trim in Co. Mayo. Dr. Jones Lamprey describes this district as being "situated in the centre of one of the wealthiest and comparatively least populated counties of Ireland".⁽²⁾ He states that the people

(1) Popham, John, "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, p.279.

(2) Lamprey, Jones, "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, pp.74-81.

of this district were generally comfortably circumstanced, well-housed, and engaged mainly in breeding animal stock. "Hence", he says "the failure of the potato crop, moreover, not altogether complete in this locality, - was not attended with the same consequences, nor did the people exhibit the same aspect as those living in other famine-stricken districts". (1)

In spite of these favourable conditions, disease became prevalent there. The only explanation that Dr. Lamprey could give for this prevalence was the influx of fugitives harbouring the disease from the west. He says in his own words, "By far the chief agent in propagating it (perhaps the origin of the epidemic is due to the same cause) was the constant practice that the people of the western and more stricken counties had of migrating towards the eastern parts of the island. These poor creatures, obliged from their poverty to sleep in the open air, in ditches and other wretched places, carried the fever, at the time more prevalent in the west in their own persons, and, mixing with the people attending markets or fairs, for the purpose of begging, imported the disease to them. I have often observed whole families belonging to distant counties lying in fever on the road side". (2)

Naturally, whenever these migratory fugitives were able to find any shelter other than the roads and streets, the only shelters they could get were the overcrowded cheap lodging houses. These lodging houses consequently became breeding foci

(1) & (2) Lamprey, Jones, "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, pp.75-81

of pestilence in all the towns and cities in Ireland. Thus Dr. John Popham speaking about Cork City, says, "the chief haunts of fever, all through the epidemic, were the cheap lodging houses in the suburbs, which were always densely crowded by paupers flocking to the city, chiefly from the western district, en route for England".⁽¹⁾

Again Dr. Lamprey says, "A wretched house in the town of Trim, which had been used as a place for accommodating poor travellers with lodging, soon became notorious on account of the number of persons that sickened in it, as all those who made it their temporary abode were attacked with fever, and many cases received into the hospitals were derived from this house, which in short, was a focus of contagion".⁽²⁾

(1) Popham John, "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, p.279.

(2) Lamprey, Jones, "Report on the Epidemic Fever in Ireland",
Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, p.81.

THE FAMINE LESSONS REFLECTED IN THE IRISHMEDICAL THOUGHT

The Irish Famine was a vivid striking illustration of the relationship between poverty and disease. Nothing could be more impressive of this relationship than the current of events during this famine. So the medical men, who were engaged in combating the pestilence among the poor during these years and who therefore witnessed poverty breeding disease under their eyes all the time, could not but be strongly impressed with their intimate connection. That is why the Irish medical literature of the period strongly advocated the concept regarding poverty the mother of disease. This was really an obvious character that distinguished the Irish medical thought at the time. And as the great Irish Famine (1846-47) was only one of a long series of similar famines to which Ireland had been subjected since olden times, we find that this trend of thought had even been characteristic of the Irish medical school since the early decades of the last Century.

But it was during the great Irish Famine that this line of thought became so general and obvious in the Irish medical literature. It was almost a universal way of thinking, shared by the great majority of medical men in Ireland. The most well-known advocate of that way of thinking was

(1)
 D.J. Corrigan. In 1846, he published a pamphlet titled "On Famine and Fever as Cause and Effect in Ireland". This pamphlet was a strong support of the concept relating poverty and disease. The way of reasoning adopted by the author in this pamphlet was to review the history of all the epidemics that had inflicted Ireland since 1723 and to note the circumstances that accompanied or preceded each. He ascertains that in all the epidemics, there was one condition invariably present - and that was "Famine". He argues that it is a maximum in philosophizing, to assign like causes to like effects, and therefore the condition which is invariably present in all the epidemics must be their general cause. He finds out that "No matter how climate altered, or seasons revolved, ... so surely as want appeared, so certainly did pestilence follow. The two have also ever kept pace with one another, as the degree of want, so has been the extent of fever". (2)

(1) D.J. Corrigan. (1802-1830) Studied Medicine in Edinburgh and was graduated M.D. there in 1825. In 1833, became lecturer on medicine in Carmichael School in Dublin. From 1846-1866, physician to the House of Industry Hospitals. Attained large practice and was made physician in ordinary to the Queen in Ireland. In 1846, was appointed a member of the Board of Health during the Famine, and was said to be the most active member on this Board. He has been spoken of as the discoverer of the disease "aortic regurgitation", and the first describer of the peculiar pulse which accompanies it (Corrigan's pulse). But it is thought that it was Hodgkin in 1827 and Vieussens in 1715 who really got the credit in this subject. "He was the first prominent physician of the race and religion of the majority in Ireland and the populace were pleased with his success". (Dictionary of National Biography, Oxford 1921-22).

(2) Corrigan, D.J. On Famine and Fever as Cause and Effect in Ireland, Dublin, 1846, p.14.

During the space of a hundred years, whenever want increased, he finds that "with increased want, came increasing fever".⁽¹⁾

He also notices that the epidemics had always endured just as long as famine, and that when famine had ceased, disease had soon disappeared.⁽²⁾

He gives the example of an epidemic which was occasioned by a great scarcity during a certain year. He then adds "As if to make the cause of epidemic fever so palpable as not to be passed over, unless by the most obstinate blindness, in the following year, when bread (became cheap), there was hardly a case of fever to be seen among the lower classes".⁽³⁾

He also holds that the relative prevalence of epidemics in different parts of the country affords a "further confirmation of the opinion that famine and fever are related as cause and effect".⁽⁴⁾

He shows that fever raged earliest and with the greatest violence in 1816 in the country parts of Connaught where the bulk of the people were more dependent on the immediate potato crop and where want immediately ensued on the failure of a crop. The more thriving towns, however, remained free from the epidemic until a later period when the distress and want became general.

In Wexford and Dungle, where the inhabitants enjoyed comparative abundance from the fisheries, and from a flourishing linen trade, epidemic fever was later by a year than in other parts of Ireland.⁽⁵⁾

(1) Corrigan, D.J. "On Famine and Fever as Cause and Effect in Ireland". Dublin 1846. p.14.

(2) Ibid p.17

(3) Ibid p.14

(4) Ibid p.18

(5) Ibid p.18

Moreover, Corrigan compares the prosperity and the health of Amsterdam, Paris, London, New York etc., at different times. He considers that the state of these towns show the "very intimate connexion that exists between the prosperity of a country or city, and its health"⁽¹⁾. He regards this a further evidence "of the influence, which the comforts of living exert in warding off disease"⁽²⁾. He states that "the health of a city very often bears a direct ratio to its prosperity"⁽³⁾. Corrigan at the end concludes,

"I have, I trust, shown enough to prove the intimate connexion between want and fever, and sufficient to prove that want stands paramount beyond all other causes. It is not my province to go farther. It is for the political economist, when the medical observer has pointed out this cause, to devise the measures best calculated to take away, or lessen the cause. To him whom fortune or station has called to such a task, there is high incitement to serve his country. He will have the gratification of feeling, that while promoting the prosperity and wealth of his country, he is its best physician, diminishing deaths and dispensing longevity"⁽⁴⁾.

(1) Corrigan, D.J., On Famine and Fever as Cause and Effect in Ireland, Dublin, 1846, p.22.

(2) Ibid., p.22.

(3) Ibid., p.22.

(4) Ibid., p.23.

This pamphlet which I was discussing was published in 1846. However it was almost a reprint of a paper by Dr. Corrigan published in the Lancet in 1830. The paper and the pamphlet, with few exceptions, are similar word for word. There are only a few passages which were in the paper but were omitted from the pamphlet. One of these passages was the following interesting one.

"In 1826 a committee was appointed to superintend in the metropolis the distribution of funds collected for the purpose of meeting the epidemic. They were not impressed with the intimate connexion between want and disease, and believed themselves acting for the best when they confined the exhibition of food to those who had gone through hospital, or had struggled through fever in their own homes. The distribution of food, even thus, was attended with good results, but not equal to those which would have appeared, had the food been given not as a restorative to the invalid, but as a preventive to the man in health. It is much better and easier to prevent the accession of disease than to remove it. Instead of waiting until the

tradesman had caught fever, and then supporting him through, perhaps, a long illness, a tedious convalescence, and frequent relapses, food should have been administered previously. Instead of time being allowed to pass by until the tradesman's family had been deprived of his assistance, gratuitous support being then required for them, the parent should have had nourishment to enable him to continue his labours, or at least to preserve his health until employment should offer. There is an objection to such a plan by many on the score of economy, but it is only an apparent objection..... The only question then is, whether it is cheaper to feed them, and thus keep them in health, or to allow them to catch disease, and then support them during their recovery. Another objection apparently of more weight, is, that the distribution of food on such an arrangement would open ways to the slothful and undeserving to live on the contributions of the charitable. ... But would the amount of imposition practised be more than equivalent to the good obtained? It certainly would not".⁽¹⁾

It was understood by some that Corrigan meant in his pamphlet to prove the theory that deficient nutrition originates fever, and that fever is generated in individuals when they get malnourished independently of any communication with each other. Corrigan might have been favourable to this theory which had been originally advocated by Bateman. But I do not

(1) Corrigan, D.J. Lancet 1829-30, Vol. II, p.604.

think that he wanted to support this or any other theory about the origin of fever. He was careful not to give a definite opinion on that, and he clearly avoided entering into a theoretical discussion on this subject. His object in this pamphlet was not to discuss the theories of how fever is generated, but it was to attain the practical end of pointing out the dangers of famine. And for this purpose he did not follow the usual pattern of books written at that time on fever and he clearly kept away from speculation on the theoretics of the subject. This attitude is evident from the following passage,

"It is not my intention in this essay to go into a laboured or obscure discussion on the nature of fever. My object is a practical good. It matters little for the end to be attained, the prevention or removal of fever, whether the cause which shall be proved to be paramount in its production, be, in the language of medicine, a proximate or a remote, a predisposing or an exciting cause".⁽¹⁾

One of those who understood that Corrigan's pamphlet meant to show that fever was originated by deficiency of nutrition was Dr. H. Kennedy.⁽²⁾ Therefore he wrote a pamphlet in answer to Corrigan titled "Observations on the Connection between Famine and Fever in Ireland and Elsewhere".

(1) It seems to me too that many who were supporting Corrigan, and taking his side, like Wakley, understood him in the same way.

(2) Corrigan, D.J., On Famine and Fever as Cause and Effect in Ireland, Dublin, 1846, p.10.

This pamphlet too is a document in support of the concept relating poverty and disease. For my purpose, I regard both pamphlets as corroborating the same principle and exhibiting the same trend of thought. Naturally in the light of our modern knowledge, one can find in both much to disagree with. What interests me is that both writers perceived the connexion between poverty and disease and it does not matter much how they explained this connexion.

The following were some of the conclusions of Dr. Kennedy:

(1) "That, with our present knowledge we are not justified in attributing other results to the use of bad or deficient food, than that, in the first instance, it injures the health, by weakening the bodily frame, and, if pushed further, will cause death from starvation.

(2) That, in the first degree, bad or deficient food predisposes to the engendering of several diseases, fever amongst the rest.

(3) That, should fever exist and famine with it, the latter will aggravate the former, just as a very inclement season, or want of fuel or clothing will do".⁽¹⁾

The same ideas were expressed by Dr. Kennedy in a report on the epidemic fevers during the Famine, published in the Dublin Quarterly Journal of Medical Science in 1849. He says in this report,

(1) Kennedy, H. Observations on the Connection between Famine and Fever in Ireland and Elsewhere.
Cited from Dub. Quart. Journ. Med. Sc. 1847. Vol. IV, pp.150-151.

"Wherever misery, in its widest sense, existed, but above all, where overcrowding took place, there the fever prevailed. At the time the epidemic commenced, the people had but too generally been suffering from the effects of want, and this predisposed them to take the fever wherever they happened to come in contact with it. Starvation in fact, is, or at least seems to be within certain bounds, an excellent preparation for the onset of epidemic fever"⁽¹⁾.

These words emphasise that Dr. Kennedy was quite clear and convinced that poverty plays a role in predisposing for the spread of epidemic fever.

But, there can be no better evidence of the prevalence of this trend of thought among the Irish medical men than an official report presented to the Government in 1846. This report was furnished by "the Commissioners appointed in reference to the apprehended scarcity in Ireland" about the state of health in this country during February of that year. It was the result of an inquiry among the medical superintendents of public institutions all over the country, and it contained abstracts from the medical reports of all these medical men. The greatest majority of these abstracts showed a deep conviction with the connection between poverty and disease. They all, or almost all,

(1) Kennedy, H. Report on the Epidemic Fever in Ireland. Dub. Quart. Jour. Med. Sc. 1849. Vol. VIII, pp.48, 49 & 50.

in the same language, attributed the prevalence of disease to the privations of the poor, and anticipated that disease would increase with the increase of the poverty and distress of the lower classes.

(1)
The following are some extracts from this report. Each abstract is preceded by the name of the district about which the medical report was made.

- Randalstown Jaundice and Diarrhoea exist from unsoundness and insufficiency of food. Breaking out of disease apprehended where destitution exists.
- Co. Antrim
- Verner's Bridge, Diarrhoea to a considerable extent exists in district If provisions keep high, fever and other diseases are feared to break out.
- Co. Armagh
- Belturbet Cottiers are without even tainted potatoes for food. Many unemployed poor of district are in a starving condition. Breaking out of disease apprehended with certainty from destitution arising from scarcity of food, "It cannot be otherwise".
- Co. Cavan
- Mullagh Apprehends breaking out of disease where scarcity exists; the people being unemployed are unable to purchase food.
- Co. Cavan
- Swanlinbar Several cases of typhus fever recently appeared; insufficiency of food the cause in most instances Fever will break out to a frightful extent in the event of scarcity of food.
- Co. Cavan

(1) Abstracts of the Most Serious Representations Made by the Several Medical Superintendents of Public Institutions (Fever Hospitals, Infirmaries, Dispensaries &c.) in the Provinces of Ulster, Munster, Leinster & Connaught, 1846.
B.P.P.1846 (120) XXXVII-479, pp.1-9.

- Moville Typhus fever prevails. Apprehends the
Co. Donegal breaking out of fever from destitution, arising
from failure of potato crops.
- Kelkee Fully three-fourths of the labourers unemployed
Dispensary for the last three months. An outbreak of
Co. Clare disease apprehended, if measures to avert the
threatened famine be not adopted.
- Ennis Gaol No doubt but pestilence will manifest in the
& Fever hospital absence of prompt relief measures.
Co. Clare
- Boherboe Kanturk.. An outbreak of disease apprehended from scarcity
Co. Cork of food.
- Crookhaven An immense number unemployed, without food,
Co. Cork clothing, or fuel. Typhus fever and dysentery
will become extensive, if relief be not afforded.
- Ballyhooly Typhus fever and other diseases increased. An
Dispensary, outbreak of fever apprehended, in consequence of
Co. Cork scarcity of food. Suggests immediate employment.
- Timoleague An immense number of unemployed poor in district
Co. Cork in the deepest poverty. If some decisive relief
be not afforded, the amount of disease consequent
on the want of food, cannot be conjectured.
- Tarbet, Disease apprehended as consequent on the
Co. Kerry destitution arising from the insufficiency of
food.

- Castle Gregory A considerable number of labourers are
Co. Kerry unemployed. A great scarcity apprehended
and consequently a spread of typhus fever and
dysentery.
- Patrick's Well States there is more sickness this year than
Dispensary, usual. Apprehends disease on scarcity of food
Co. Limerick
- Bonmahon A great increase of fever in district.
Dispensary, A considerable increase of fever apprehended
Co. Waterford. from the scarcity and high price of food.
- Tanmore A great number of poor unemployed; fever,
Co. Waterford apprehended as the concomitant of poverty.
- Thomastown Typhus fever apprehended as consequent on
Dispensary, famine.
Co. Tipperary
- Thurles Fever Labouring classes wretchedly off for want of
Hospital, employment. Fever of a malignant type
Co. Tipperary apprehended as consequent on the approaching
famine.
- Waterford Gaol Fears the present epidemic of fever will be
Co. Waterford greatly aggravated by the scarcity of food.
- Freshford Fever If immediate measures be not taken to supply
Hospital, food at moderate prices we shall have fever.
Co. Kilkenny Suggests the establishment of provision
Dr. James Cullenan stores.

- Graigie Dispensary ... Fears prevalence of disease in summer months, from scarcity and dearness of provisions.
Co. Kilkenny
- Clara Dispensary Fears that disease will spread as provisions become scarce. Suggests giving of employment.
Co. King's
- Carlinsford Fears very much breaking out of fevers, dysentery and diarrhoea in spring and summer, as food is now nearly exhausted, and people have no means of procuring it.
Co. Louth
- Fethard Dispensary ... Has serious fears that disease will break out with much severity, from scarceness of food.
Co. Wexford.
- Maryboro's County A good number unemployed. Unless employment
Infirmiry,
Co. Queens and a supply of good food be secured, famine with its attendant disease, is to be feared.
- Raheen Dispensary Disease has broken out already to a very considerable extent. Fears it will be dreadfully aggravated when actual scarcity arrives.
Co. Queens
- Kilbeggan Dispensary ..Average number of patients increased one-sixth since commencement of year attributable in many instances to scarcity of food.
Co. Westmeath
- Blessington Apprehends that amongst small farmers there
Dispensary,
Co. Wicklow will be much destitution, and consequently disease.

- Clifden Dispensary ... States that when only partial want ...
Co. Galway prevailed in 1842, fever and dysentery were prevalent, and caused many deaths.
- Ardahan Dispensary ... Apprehends great scarcity in May next,
Co. Galway followed by fever, which is at present on the increase.
- Glenamadda and Williamstown Dispensary, Nearly all the labourers unemployed.
Co. Galway Apprehends scarcity of food, followed by fever.
- Killian Dispensary ... Many of the population unemployed. Apprehends
Co. Galway the breaking out of the disease as the food gets scarce, which is now commencing.
- Carrick-on-Shannon Gaol, ... States that fever has manifested itself
Co. Leitrim rather in a greater rate than usual since November last, which he attributes to unsound and scanty supply of food.
- Castlebar Dispensary, States that typhus fever is beginning to
Co. Mayo. manifest itself more generally than in former years. Apprehends serious consequences, and a vast increase of disease, in consequence of unsoundness and insufficiency of food.
- Loughlin Dispensary .. States that fever is beginning to prevail.
Co. Roscommon Numbers unemployed. Apprehends the breaking out of fever in a short time from scarcity of food.

It is interesting to notice that the medical officer of Saggart and Rathcoale Dispensary, Co. Dublin, in his report referred the Commissioners to Dr. Corrigan's pamphlet. He urged that Dr. Corrigan's suggestions were the best means of preventing the spread of disease. (1)

As a consequence of this report the Act 9 Vict. Cap 6, was issued and a Board of Health with Corrigan among its members was formed in March, 1846. But this Board was dissolved in August 1846. However, it was reappointed again in February, 1847, and from that date until August, 1850, it continued to perform its duties. (2)

The medical members of the Board were Dr. Dominic John Corrigan, Sir Robert Kane and Sir Philip Crampton; and to these were added Sir Randolph Routh (who was in charge of the Commissariat operations in Ireland), and Edward Twistleton (Chief Commissioner of the Poor Laws). (3)

The report furnished by the medical members of this Board in 1852, is another official document speaking loudly and strongly

(1) Abstracts of the Most Serious Representations Made by the Several Medical Superintendents of Public Institutions (Fever Hospitals, Infirmaries, Dispensaries &c.) in the Provinces of Ulster, Munster, Leinster, and Connaught, 1846. B.P.P.1846 (120) XXVII-479, p.6.

(2) Reports of the Commissioners of Health: Ireland on the Epidemics of 1846-50. Dublin, 1852, B.P.P.1852-53 [1562] XLI, pp.1 & 2.

(3) It seems that another medical member was added later, (H. Marsh, M.D.), as the circulars of the Commission on 7th December, 1848, were signed by this medical man as well. In the report of the Board in 1852 we find the signature of H. Marsh too, while that of Sir Robert Kane is missing (see the Report pp.75 & 42).

of the relationship between poverty and disease. This was probably the influence of Dr. Corrigan who was reported to be the most active member on the Board. (1) Or perhaps the whole credit goes to the story of the Irish Famine itself. One of the interesting parts of the report reads as follows:

"It is impossible not to be struck with the coincidence between the scarcity and consequent high prices of potatoes and the prevalence of fever. In 1845, there was no epidemic. In 1846, the scarcity was first felt, and fever began to show itself, and as prices still continued to rise in the winter of 1846, and spring of 1847, the effects of want of food were seen in an alarming increase of fever, and during the years 1847 and 1848, and greater part of 1849, the prices continued so high as to deprive the poor of their accustomed food, and notwithstanding all the long continued and benevolent exertions of Government and individuals, an epidemic of unparalleled severity and extent continued its ravages". (2)

"....In 1850,But for this lowered price of oatmeal, it seems certain that the same amount of distress and disease would have continued to prevail in 1850 as in previous years" (3)

The report illustrates these statements with the following figures of the prices of potatoes every year in the period (1845-50) and the respective number of patients admitted into the Temporary Fever Hospitals.

(1) MacArthur, W. Op. Cit. p24.

(2) Reports of the Commissioners of Health; Ireland on the Epidemics of 1846-50. Dublin 1852. B.P.P.1852-53 [1562] XLI; pp.22-24.

(3) Ibid

p.24.

TABLE XVI

Numbers of Patients Admitted into the Temporary Fever Hospitals and the Average Price of Potatoes during the
(1)
years 1845-1850.

Year	Average Price of Potatoes per cwt.	Number of Patients Admitted to Temporary Fever Hospitals
1845	2s. 2d.	
1846	4s. 10d.	
1847	8s. 4d.	95,890
1848	7s. 0d.	110,331
1849	6s. 11d.	87,135
1850	4s. 4d.	39,056

The Commissioners of Health also published in their report a communication from one of the Relief Committees to corroborate their views about the intimate relationship between Poverty and Health. This communication states that in the districts where "eating houses" were provided on a large scale, there was a great improvement in the health of the people. It reports that fever and dysentery assumed a much milder form than hitherto, and that the deaths became comparatively few, "especially in those districts where cooked food has been adopted for any length of time". In their own words, "There has been

(1) Reports of the Commissioners of Health; Ireland on the Epidemics of 1846-50. Dublin 1852. B.P.P. 1852-53 [1562] XLI, p. 24.

a marked improvement in the health of the people generally since relief has been administered in food. ... The districts most free from fever are those where cooked food has been the longest in use".

"It is a remarkable fact, that in those divisions where cooked food is not used, fever and dysentery are, or have been, most rife"⁽¹⁾.

It is evident also from their report that the Commissioners of Health were guided in their procedures and their measures by a belief in the relationship between poverty and disease. This was the basis of their policy. They paid a great amount of attention to measures of relieving the privations of the people. They did not restrict their activity to the fever hospitals and the removal of nuisances as other bodies of a similar nature would probably have done. They conceived that for the abatement of the epidemic, the most essential thing was to relieve the poverty of the people. That is why they extended their activities to the field of relief measures. They took upon themselves to guide and direct the relief committees and to advise them on the necessity of supplying the poor with liberal sufficient relief. We can find evidence of this attitude of the Board of Health in their circulars and letters to the Relief Committees, appended to their report. Thus on one occasion the Commissioners of Health noticed that the diet distributed by the

(1) Reports of the Commissioners of Health; Ireland on the Epidemics of 1846-50. Dublin 1852. B.P.P.1852-53 [1562] XLI, p.22.

Relief Committees although bulky, could not supply the necessary nutriments. So they wrote calling the attention of the Relief Committees to that. Their letter shows clearly their conviction in the connexion between deficient nutrition and disease and their zealously in making relief liberal and sufficient. They said in this letter, "The Board of Health are fully aware how necessary, and how pressing at the present time, is the exercise of the strictest economy, but they are also convinced, that if the use of a diet be permitted containing too large a proportion of fluid, deficient in the due quantity of nutritious elements, and deriving its solidity principally from the presence of starch, the result must necessarily be, in those living on it, debility of constitution with consequent inability to resist disease, and ultimately, increased expenditure in the cost of relief, instead of saving".⁽¹⁾

In another circular, the Board of Health calls the attention to Scurvy, and advises on the ways of prevention. This circular runs as follows,

"While on the subject of diet, the Board of Health deem it of importance, through the medium of the Relief Commissioners, to draw the attention of relief committees, and of the people generally, to the fact, that a form of disease, now very prevalent among the people, resembling in many particulars sea scurvy, is connected with or dependent on a defective nutrition, arising

(1) Report of the Commissioners of Health; Ireland on the Epidemics of 1846-1850. Dublin 1852. B.P.P.1852-53 [1562] XLI, p.20

not from deficiency of quantity, but from deficiency of quality or variety in the food.

...With this principle in view, the Board of Health, as the season of the year now gives facilities for it, strongly recommend the admixture of onions, leeks, scallions, or shallots, in cooked meal rations or stirabout. ... On every opportunity, the importance to health of using vegetables, such as carrots, parsnips, turnips, and cabbage, along with meal should be impressed on the people".
(1)

I shall further look into the Irish medical journals to show that not only the official reports but the whole of the Irish medical literature at that time exhibited the same line of thought relating disease to poverty. The greatest majority of the medical men thought in these terms and this can only be attributed to the deep impression made on them by the striking incidents during the famine years. If they differed in opinions at all, they did not differ about the importance of poverty in spreading disease. The only difference of opinion between them in this respect was that one group of them thought wrongly that deficient nutrition was per se the origin of fever while the other group held that it was only a predisposing cause. Of the latter group was Dr. Lalor from Kilkenny. He says,

"The observation I have made as to the use of such innutritious articles of diet as turnips, the roots and leaves of various vegetables, thin soup &c. have led me to infer that,

(1) Report of the Commissioners of Health, Ireland, On the Epidemics of 1846-50. Dublin 1852. B.P.P.1852-53 [1562] XLI, p.21.

in proportion as they were deficient in nutritive qualities, they contributed to render those who habitually used them more susceptible of the febrile poison, whether produced by ... atmospheric influence or by contagion, but that they never ... directly or per se produced typhus, gastric, or gastro-purpuric fever."

"My observations likewise have led me to set down the influence of deficiency in the quantity of food in the development of fever, as the same with that of deficiency in its nutritive qualities. I have seen many persons reduced to an extreme state of debility, from the actual want of food of any description, who exhibited no symptoms of typhus or gastro-purpuric fever."

"Dysentery and diarrhoea were very prevalent during the winter of 1846-47, particularly among the frequenters of the soup-kitchens, and of course they frequently preceded fever. This precession appeared to me to be sometimes merely accidental, and unconnected with the subsequent fever, at other times as ancillary to the development of the febrile poison by lowering the constitutional powers; and at other times the diarrhoea and dysentery ran their own course, with accompanying febrile symptoms very like those of the prevailing fever⁽¹⁾."

Again, Dr. Daly from Longford remarks that he does not think there was any further connexion between the epidemic and famine, except that persons weakened by want of food were in a bad condition to resist disease.⁽²⁾

(1) Lalor, "Report on the Epidemic Fever in Ireland",
Dub. Quart. Journ. Med. Sc. 1849. Vol. VIII, pp.33 & 34.

(2) Daly, Ibid., p.6.

Dr. Seaton Reid also says,

"It could not be said that scarcity of food, or want of employment, was the originating cause of our epidemic here, because our working classes were fully employed, and provisions unusually cheap, till the early part of the year 1847. No doubt the reduction in the stamina of our population, by the subsequent deficiency of nourishment, was one of the chief causes of the diffusion of fever, by facilitating the action of contagion". (1)

One of the strong expressions on the relationship between poverty and disease was the report of Dr J. Callanan on the Famine. He says in this report,

"Amongst the poorer classes, the fever of 1847 admits of no question as to its severity and its appalling mortality, but it should be recollected and admitted that this mainly arose and was derivable from an almost unprecedented state of privation, involving of necessity, in their issue, the very first rudiments and principles of fatal and intractable disease - hunger, cold, impure air, deficient clothing - in short, intense want, in its most comprehensive and extended meaning, and in its most withering effects both on mind and body"

"Between these two fearful agents of death and desolation (famine and fever) it now matters little where the preponderance lay. . . . But it perhaps remains for a wise and beneficent legislation to take a lesson from the past, and in its mercy and consideration, to endeavour, as much as in it lies, by averting

(1) Reid, S. "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849, Vol. VIII, p.290.

hunger and distress through the numerous and legitimate channels of creating employment for the labouring and agricultural classes, to prevent the perpetuation, and, in future, to avert the return of that state of suffering and wretchedness which has made the very name of this unhappy country a modern proverb for poverty, disease and humiliation, in the eyes and on the tongues of the civilised world".⁽¹⁾

Another medical man, Dr. Cronin says,

"Want of wholesome and sufficient food appeared to have influenced the disease, fever following rapidly in those persons who had suffered from privation, while wholesome and sufficient food rendered others more capable of resisting its attacks".⁽²⁾

Dysentery, too, was related to privation. Thus the reports from Derry, Ulster, state that dysentery had prevailed in this county before the outbreak of the epidemic fever. The reports remark that it chiefly attacked those in a debilitated state from the effects of privation or bad health and that it was the lower classes which were chiefly attacked.⁽³⁾

Again, fever, dysentery and purpura were related to privation by Dr. Eustace. He says in his report on Cork Street Hospital,

(1) Callanan, J., "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849. Vol. VIII, p.271 & 270.

(2) Cited in The Census of Ireland for the Year 1851. Dublin 1856. Pt. V, Vol. I, B.P.P.1856, XXIX, p.302.

(3) "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc. 1849, Vol. VII, p.105.

"The year 1847 will be memorable in the annals of Ireland, as a year of famine and pestilence, such as it is believed never before desolated the land. Dysentery and typhus prevailed everywhere, the unfailing attendants of famine. . . . Purpura was a concomitant of typhus in many cases, in others it appeared sporadic, no doubt produced by an insufficiency of food, destitution, and that utter prostration of body and mind, such as few but medical men, whose public duty requires them to visit the habitations of the poor, can ever witness or adequately describe".⁽¹⁾

The only extensive area that escaped the famine epidemic altogether was the district of Warrenpoint and Rostrevor in County Down. The explanation which the medical officer of that district gave for its immunity from fever is very illustrative of the medical trend of thought in Ireland at that time.

He says, "In reply to your favour relative to the late epidemic of fever, I am happy to say that it was not prevalent in this neighbourhood, As a reason for this, I may state, first, that here starvation (or indeed, I may say, want) is seldom or never known; our gentry are numerous, rich, and charitable, and give a great deal of employment to the poor".⁽²⁾ It is significant that the same area also escaped the Famine epidemic of 1816.⁽³⁾

(1) Cited in The Census of Ireland for the Year 18 . . .

(2) Ross, "Report on the Epidemic Fever in Ireland".
Dub. Quart. Journ. Med. Sc. 1849, Vol. VII, p. 67.

(3) MacArthur, W. Op. Cit. pp. 5-6.

It is interesting that in Wexford, fever broke out in two distressed areas in April, 1847, but in the rest of this county where there was little actual starvation, the disease did not appear generally for more than another year. (1)

Even diseases of the eyes were connected by Irish Doctors with malnutrition and privations. During the famine there occurred in the workhouses an epidemic of "ophthalmia". The following were the official figures of the workhouses.

In 1849	<u>13,812</u>	caught the disease		
In 1850	<u>27,200</u>	"	"	"
In 1851	<u>45,947</u>	"	"	" (2)

Prof. Arthur Jacob, the eye specialist, who was asked to investigate this epidemic wrote a very illustrative report. He says,

"Of the nature of this ophthalmia, I have to state that it is not in general a very formidable or destructive species of the disease; it is what is called mild purulent or catarhal ophthalmia; but when it attacks persons of feeble constitution, or labouring under derangement of the general health, it becomes most destructive!

"In alluding to the causes of this disease, it is of great importance that it should be well understood that a defective state of the general health or constitution predisposes to it, and when it occurs renders it much more destructive. It is equally important that it should be well understood that

(1) MacArthur, Sir William, Op. Cit., p.5.
(2) Cited in O'Brien, W.P., Op. Cit., p.236.

such defective state of general health is produced by
 injudicious arrangements as to diet".⁽¹⁾

This prevalent belief in the connection between poverty and disease was also shared by the Census Commissioners. Their report and especially that volume of the Census, which was devoted to the history of Famines and Pestilence in Ireland (Pt. V; Vol.1) show that clearly. Thus for example they say,

"Concurrent with the foregoing state of famine and the disruption of the social condition of the people, pestilence came upon the nation. ... Respecting the mooted question of famine and fever being cause and effect, ... it is scarcely possible to lessen the physical strength of a people by withholding their customary amount of food, ... without rendering them liable to epidemic disease; while it is without the range of all probability that depression of mind, amounting to the despair, consequent upon parents witnessing the lingering starvation of their offspring, or children observing the haggard looks and wasted forms of their parents and near relatives, could occur without producing fatal effects on the human frame. Furthermore, it is an established fact, that we cannot congregate together human beings, in crowded masses, whether in camp or in huts, in barracks or workhouses, in overcrowded cities, or even upon public works, without pestilence of one kind or another being generated. And when once epidemic disease has sprung up under any of the foregoing circumstances

(1) Cited in O'Brien, W.P.

Op. Cit.

pp.231-233.

experience proves that it will spread rapidly and extensively unless checked by moral combined with physical treatment, such as the substitution of hope and happiness for misery and despondency - of nutritious dietary, for the unusual, insufficient innutritive, and often unpalatable food which want and necessity may have forced upon the people".⁽¹⁾

It was reported by many medical men in their accounts on the epidemic that the proportion of fatalities from fever was greater in the better classes. This may be explained by the fact that the rich were more liable to contract typhus rather than relapsing fever; and the former was definitely more deadly than the latter. This liability is because typhus can be contracted, without having lice on the body, as the faecal dust of lice which contains Rickettsia can be diffused and blown about, and is capable of producing infection by inhalation or through the mucous membranes and skin. On the other hand, relapsing fever can only be contracted by having lice on the body, as the spirochaetes causing the disease remain within the body fluid of the insect, and can only infect when they are set free by damaging the body of the louse during scratching for example. And naturally the rich were not usually liable to pick up the infected lice from the fever patients, but they could not help the typhus infection conveyed by the faecal dust.

Again, this supposed higher proportion of fatalities among the better classes may also be explained by the fact

(1) The Census of Ireland for the Year 1851. Dublin 1856. Pt. V. Vol. I, B.P.P.1856, XXIX, p.246.

that most of the victims of fever among these classes, were medical men, clergy, members of charitable societies, magistrates etc., who were naturally elderly or middle-aged. It is a fact that typhus is more deadly to the elderly and middle-aged than to the young. Thus the victims of fever from the better classes were from a specially unfavourable age-group as regards fatality.

Another explanation may be that the lower classes acquire some immunity against typhus during the epidemic by being subjected continuously to subinfective doses of Rickettsia. In favour of this idea, is the observation that in the places where typhus is endemic, like gaols, the newcomers suffer more severely from the disease than those who have lived long in these places. But if it is true that any immunity is acquired by the lower classes in this way, I rather think that it must be a transitory immunity, which may be enough to lessen the virulence of the attack but is not enough to prevent infection, as it has always been observed that typhus infection spares none of those who are exposed to it among the lower classes.

There may be some truth in all these explanations. But I rather think that this prevalent impression among the Irish doctors that typhus is more fatal to the rich is to be mainly explained on psychological grounds. The death of a rich man, especially in such a society, - and at such a time was a notable striking event, while the death of thousands of the poor could

(1) MacArthur, Sir William,

Op. Cit.,

p.8.

attract very little attention. Moreover, the medical men at that time naturally thought that they were of some benefit to their typhus patients. That is why they would be naturally inclined to attribute the death of their rich patients to the virulence of the disease, while they would be prone to attribute the death of the poor to their inability to procure medical care and help. I rather favour this explanation, especially as there were hardly any comparative figures given by the Irish doctors to support their view.

Most of those doctors who were attending the rich were not in a position to be able to make any statistical comparison of the virulence of disease in comparative groups of rich and poor. The only class of medical men who were able to make any comparison of the virulence of disease in homogenous samples were the medical attendants of temporary fever hospitals. And it was ascertained by a large number of these that the virulence of disease and its fatality increased with the increase of privation. We can find the views of these medical attendants in the Report of the Board of Health. A large percentage of them were connecting between the high rates of mortalities and the severe poverty of the poor. The following are some extracts of their reports in this respect. The medical officer of Gort hospital explains the high rate of mortality during a certain period in the following way,

"During this period, destitution among the poor was peculiarly intense; the constitutions of many on coming to hospital were so weakened by previous starvation and disease, as to preclude all hope of recovery".

The medical officer of Ahascragh explains high mortality rates in the following way,

"The deaths attributed to the debilitated state of the patients for want of proper food prior to admission into hospital".

That of Yonghal hospital says,

"The high mortality was induced partly by previous privations, and partly by disease having progressed too far previous to admission".

The medical officer of Killaloe hospital says,

"The mortality attributed to the debilitated condition of the patients, many of whom were brought to hospital in a hopeless state". That of Rathcormack explains the high mortality in the following way,

"The mortality is principally attributed to the debilitated state of the patients from destitution prior to the attack of disease".

That of West Skull says,

"The mortality attributed to starvation and disease induced thereby".

That of Eyrecourt says,

"The deaths attributed to the destitution prevailing in the district".

The medical officer of Parsonstown says,

"Mortality attributed to patients of fever being also attacked by diarrhoea, and their inability to resist such attacks from their constitution having been debilitated by want".

The medical officer of Moycullen explains the high mortality in the following way,

"The mortality attributed to the debilitated state of the patients from destitution and previous disease". (1)

(1) Reports of the Commissioners of Health; Ireland on the Epidemic of 1846-1850. Dublin, 1852, B.P.P. 1852-53 [1562] XLI, pp. 6-11.

INFLUENCE OF FAMINE LESSONS ON LEGISLATION

"A more solemn reflection is suggested by the consideration that, but for the existence of the famine in Ireland, all the arguments that could have been employed would certainly have been ineffectual in establishing an effective Poor Law there. The man of Science may sometimes flatter himself with the hope that, by explaining 'quantum e naturae ordine re vel mente observaverit', (all he could learn from nature with his experience and thought), he may render a service to the legislator, but the pride of both may well be humbled by the thought, that it is only when the judgments of Heaven are upon earth that the great majority of mankind will learn righteousness".⁽¹⁾

These are W.P. Alison's words. He had striven hard for years to convince the country of the relationship between poverty and health and that it is for the sake of the health of the whole community that poverty should be prevented. But all his writings and works and all his arguments and scientific proofs could not achieve what the Irish Famine did. Its language was more convincing and effective and its teachings were more striking. It had a deep impression on the political and social thought of the time. It succeeded in impressing on Parliament and the people the connection between the poverty of the poor, and the public health. And in this way it was able to produce some change in the attitude of the state and the

(1) Alison, W.P., Letter to the Chairman of the Edinburgh Parochial Board on the Present Position of the Question Relative to the Claim of the Able-Bodied Unemployed to Legal Relief in Scotland, 1848, p. v.

legislator towards poverty. Its lesson was so striking that nobody could fail to perceive it. The breeding of disease by the poverty of the people was a palpable process going on every day under the eyes of everybody. And thus the legislator, alarmed by the dangers of poverty on public health, was induced to look with a different eye on poverty and to take a different attitude to its problems.

My aim in this section is to show how the course of legislation and the attitude towards poverty were affected and directed by the famine lessons. I shall try to ascertain how far the famine was able to impress on Parliament the relationship between poverty and the public health and how far this was reflected in the statute book.

The Parliamentary debates during the years 1846-48 are interesting. There was no period in which the idea relating poverty and health echoed more strongly and continuously in Parliament. Most of the credit for that goes to the famine itself but part of the credit goes to T. Wakley, M.P. for Finsbury, and G.P. Scrope M.P., for Stroud, besides some others. These espoused the concept connecting disease

(1) Wakley, Thomas, (1795-1862), Studied and Practised Surgery in London; Medical Reformer. Became acquainted with William Cobbett who influenced him greatly. Founded the "Lancet" in 1823. Radical politician. Known for his strong attacks on the English Poor Law, 1834, and its administration, and on the Corn Laws.

(2) Scrope, George, Julius, Poulett (1797-1876), geologist and political economist. Well known for his very numerous pamphlets on social questions, on free trade and on Poor Laws. Travelled a great deal and published important geological works.

to privation and adopted the campaign against the poverty in Ireland.

As soon as reports began to come from Ireland about the spread of disease there, Wakley, and Scrope began a strong movement in the House to convince it that the only way to prevent the spread of disease was to find a solution for the problem of poverty there. Thus on the 18th March, 1846, when alarming accounts of fever and dysentery in Ireland were published, Wakley made a long impressive speech in the House to prove that these epidemics were bred by poverty. In this speech he quoted extracts from D.J. Corrigan's pamphlet, to which I have referred previously, "On Famine and Fever as Cause and Effect in Ireland". He pointed out to the House, Corrigan's views "that famine is the paramount cause of the epidemic fevers of Ireland" and that "employment and wholesome food will be the best prevention, aided, should the necessity arise, by hospitals to extinguish contagion". (1) Wakley asked Government to be guided by these views and to relieve want in order to prevent disease. He noticed that while Ireland was threatened with starvation, and therefore with pestilence, the only measure proposed by the Government was to establish fever hospitals. He regarded that this measure alone was not enough. "What he wanted to see were measures adopted adequate to prevent the spread of disease, or, what was far more important, the origination of disease". (2)

(1) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, p.1200.

(2) Ibid. p.1200.

And the only measures that could achieve that purpose, he assured, should be measures to prevent poverty.

Among the parts Wakley chose from Corrigan's pamphlet were extracts showing that the diseases created by poverty were not restricted to the poor but that they spread to the upper ranks of society. Thus one passage read, "the epidemic fever, originate as it may, soon acquires . . . a power of generating itself, and thus involving all, rich and poor, in the country, in one common danger". (1)

Another passage described how the 1817 epidemic, bred by poverty, was propagated to the upper classes, and how it paralysed all intercourse in business and arrested all trade. (2) Wakley meant by these extracts to arouse the concern of the ruling classes and to make them feel that it was in their own interest to prevent this pestilence which could threaten their health and welfare. But how could this be prevented? Wakley gave the answer for this question by quoting Corrigan:

"Little need be said of the means best adapted to guard us against (fever). It remains for others than the physician to provide the preventive; it is to be found not in medicine, but in employment; not in the lancet but in food; not in raising lazarettes for the reception of the sick, but in establishing manufactories for the employment of the healthy. This is the true mode of banishing fever from this country". (3)

(1), (2) & (3) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp.1200, 1196 & 1199.

The representative of the Government during the discussion mentioned that he had read Dr. Corrigan's pamphlet. Hansard's related this as follows: (1)

Wakley: "The Right Hon. Gentleman opposite ought to be made acquainted with the substance of that pamphlet".

Sir James Graham: "I have read it".

Wakley: "Then it was much to be regretted that the perusal of that publication had produced so very little effect upon the mind of the Right Hon. Gentleman; there had been no fruits from his study of it. He did not appear to have adopted a single suggestion proceeding from the pen of Dr. Corrigan". (2)

The same pamphlet was also quoted in length by Daniel O'Connell on 17th February, 1846, in a speech on the state of famine and disease in Ireland. (3) Daniel O'Connell too adopted strongly the idea connecting poverty and disease, and quoted Corrigan in support of this idea. He said that "He wished the House to understand that scarcity in Ireland had always been attended with typhus fever and the disease ... always ceased when food became abundant. Thus, cause, effect, and cure were obvious. The cause, was want of due nourishment; the effect, typhus fever; and the cure, a supply of the necessaries of life". (4)

Again, Wakley, on 13th March, 1846, put forward the same views. Discussing the Fever Bill (Ireland)

(1) & (2) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp. 1196.

(3) & (4) Ibid., Vol. LXXXIII, pp. 1065-66, 1064.

he declared that "prevention was better than cure". (1) He asked "why not give the people provisions, which was much better than giving them physic". He stated that the experience of medical men have proved that "do what you will to prevent (the progress of fever), but one remedy was successful, and that remedy was a supply of food". (2) He recommended that every means should be applied to procure food to the people of Ireland. "The disease", he said "was now only commencing; it was in an incipient state.... This was the very time, then, to prevent the spread of fever by the spread of food. The question was between fever and food. Where fever had not yet made its appearance, let it be kept away by food.... Let it be borne in mind, that the great principle of prevention, in cases of fever, and, indeed, in all other cases, was better than cure". (3)

G.P. Scrope was another Member who espoused the idea relating poverty and health and joined in impressing the House with it. Thus in the debate on the Fever Bill (Ireland), he criticizes that the bill, proposed by Government, allowed the Boards of Guardians to grant relief only to the sick "who had been prostrated by disease, and were actually stretched upon the fever bed". (4) He thought it unwise and uneconomic to wait until the poor are sick in order to administer relief to them. He claimed that the relief of the poor while they were healthy would prevent them becoming sick, and thus this would be "a much wiser and a more humane proceeding". (5) He therefore asked that they

(1), (2), (3), (4) & (5) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp. 981 & 982; 982; 982; 1003; 1003.

"should not refuse the poor man in Ireland the food that was necessary to keep him in health until he was suffering from fever and then relieve him as a fever patient".⁽¹⁾ For this purpose he moved the following instruction to the House when it had resolved itself into Committee, "That it be an Instruction to the Committee that they have power to make provision therein that the Guardians of the several Poor Law Unions in Ireland be required to relieve with food all such destitute persons within their Unions as may be in danger of perishing from want, or from disease the consequence of want".⁽²⁾

In response to Wakley's and Scrope's efforts, or more probably in response to the illustrative lessons of the famine, the House became cognizant of the connection between poverty and disease. All the sides of the House, Left and Right, Government and Opposition, admitted that connection and concurred with Corrigan, Wakley and Scrope in their views on this subject. Thus, beginning with the members of Government, Sir James Graham said in reference to Wakley's speech,

"I quite agree with the Hon. Member for Finsbury. I believe that the fever in this case, as almost always in Ireland, may be traced either to an insufficiency of food, or to the use of tainted kind. The great object, therefore, is to check the progress of fever, by providing better food. The best mode of

(1) & (2) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp.1003, 1167.

doing this, in reference to the people there, is by providing them with work, and giving them wages for work".⁽¹⁾

The Prime Minister, Sir Robert Peel said,

"I think nothing can have been more marked than the disposition of this House to introduce and adopt every measure which could, by possibility, mitigate the evils of scarcity, and of disease consequent upon that scarcity".⁽²⁾

On another occasion he said,

"I assure him that both with respect to famine, and what is to be expected as its consequences, fever, we have taken all possible precautions".⁽³⁾

Sir James Graham said on another occasion,

"But within the last week the Government has received from the Executive in Ireland, a representation that there is reason to apprehend the spread of fever in that country which will require an extension of means on the part of the Government to arrest its progress. I am afraid, under the circumstances of the present scarcity of food, or of the unwholesome nature of the food of the people, that the apprehensions of the Lord Lieutenant are well grounded, and that an extension of the power to provide relief, in cases of fever, is expedient."⁽⁴⁾

The other M.P.'s outside Government also concurred with the opinions. Thus Lord George Bentinck, one of the leaders of the protectionist Tories, who were opposing Peel's

(1) (2) (3) & (4) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp. 987; 989; 783; 1178.

government, although he differed with Government on other points, yet he agreed with it, and with Wakley in this subject. He said,

"He quite concurred with the Hon. Member for Finsbury, in thinking that it was for want of food that the evil of fever was arising; and the best mode of remedying that evil was to take care that those who were in want should immediately receive food to relieve it".⁽¹⁾

The Irish members, needless to add, were of the same opinion. Thus W. Smith O'Brien said,

"The obvious course to be adopted was that recommended by the Hon. Member for Finsbury, to send the starving people supplies of food, thereby avert the necessity of sending them physic".⁽²⁾

On another occasion he also said,

"They were all agreed that it was desirable to take measures to prevent the epidemic which would result from the failure of the potato crop in order to meet future contingencies.... In 107 Unions distributed over twenty-five counties, the reports proved there was fever, diarrhoea, and all manner of complaints arising from scanty and diseased food".⁽³⁾

W. Sherman Crawford, an English Member spoke to the same effect:

"Those who stood in the way of the people of Ireland getting cheap food were responsible for all their afflictions and miseries, and for the disease and death, which were the necessary consequences".⁽⁴⁾

(1) (2) (3) (4) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, p.983; p.1047; pp.1186 & 1187; p.794.

One of the factors that helped to impress on Parliament the connection between poverty and disease was the official report which was presented to Parliament in March, 1846 about disease in Ireland. (1) I have tried to show in earlier pages how striking this report was. And it seems that it had made a great impression on Government and Parliament. The influence of this report in impressing on Government and Parliament the connection between poverty and disease is obvious from the frequent reference, comments and quotations from it on all debates on this subject. (2) Again this is evident from the way this report was presented to Parliament and the immediate urgent introduction of a Fever Bill with it. (3) This urgency and the speech with which the Bill was introduced talks clearly of the success this report had attained in affecting the views of Government. Again this report was one of the documents which the Government and its supporters took to justify the "Repeal of Corn Laws" Bill as I shall try to show later on. (4)

(1) Abstracts of the Most Serious Representations Made by the Several Medical Superintendents of Public Institutions (Fever Hospitals, Infirmeries, Dispensaries &c.) in the Provinces of Ulster, Munster, Leinster, and Connaught, 1846. B.P.P. 1846 (120) XXXVII.479.

(2) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp.1200, 1186, 1187, 1047; Vol. LXXXV, pp.52, 53, 171, 177, 178.

(3) Ibid., Vol. LXXXIV, p.980.

(4) Ibid., Vol. LXXXV, pp.171-178.

The solution Wakley and Scrope advocated to prevent the poverty and the subsequent disease in Ireland was the same as had been advocated by Alison for Scotland since 1840. It was a liberal Poor Law that would secure the lower classes against poverty, that would give the right of relief not only to the infirm and aged, but also to the able-bodied unemployed, that would provide this relief not only in the workhouse but also outside it in the form of labour, and that would make the whole community legally responsible for the prevention of poverty. Thus, Wakley and Scrope followed the same pattern as Alison in his movement in Scotland, they fought for an exactly similar object and used the same argument: "For the sake of the health of the whole community". The Poor Law of Ireland at that time was the law 1 and 2 Vic. C56. It was enacted in July, 1838, as a result of the Poor Law Commission Inquiry and the Inquiry and suggestions of George Nicholls, the English Poor Law Assistant Commissioner. However it was not until 1845, just at the beginning of the famine, that it was possible to bring the provisions of this law everywhere into practical operation. This delay was because, a long time was necessary for building workhouses, and the introduction of the new system of this law. However, the law became everywhere in full and active operation throughout the country before the close of 1845.⁽¹⁾

This Law introduced into Ireland the workhouse system. However

(1) O'Brien, W.P.

Op. Cit.

p.6.

it did not make relief compulsory. It did not give the right of legal relief to the unemployed able-bodied who constituted the greatest mass of poverty in Ireland. It also restricted relief to the workhouses and did not allow outdoor relief. And as the capacities of workhouses were extremely small in comparison with the amount of poverty, this limited to a great extent the amount of relief provided in Ireland.

So Wakley and Scrope fought in Parliament and outside it to change this law, and to give the able-bodied unemployed the right of relief in the form of work outside the workhouse. Thus Scrope in 1846 introduced a Bill "Destitute Poor (Ireland) Bill". This Bill proposed to give the able-bodied unemployed a right for relief and to allow outdoor relief outside the workhouse to all those who are in need of it. (1)

In moving the second reading of this Bill, Scrope made a long speech to justify his measure. He stated that in England the number of destitute persons was about 10% of the total population, and that no less than six-sevenths of these were relieved by outdoor relief. In Ireland on the other hand, where "the amount of destitution was no doubt beyond that of England", the Irish Poor Law could allow relief to no more than 1% of the total population. That was because relief was restricted to the workhouses and these could not accommodate more than 90,000 persons. Scrope concluded that as long as relief was confined to the workhouses, "which would barely contain one per cent of the

(1) Hansard's Parliamentary Debates 1846.
Vol. LXXXV, pp. 383-396.

population of Ireland, it was beyond doubt,... that not only the extraordinary destitution that occasionally occurred in that country, but the permanent destitution could not be relieved by the present system". He added "Under the present law, when the Union workhouses in Ireland were filled, the guardians were prevented from affording relief to the poor, who could not be received into the workhouses, though they might be at the point of starvation, and death might ensue. He proposed that the guardians should have the power to give relief to the able-bodied in the shape of work".⁽¹⁾

Wakley gave strong support to Scrope's Bill. However, it was put off as it did not get the support of either Government or Opposition.⁽²⁾

This was not the only attempt made by Scrope to induce Parliament to amend the Irish Poor Law. On every suitable occasion, he used to try to press his views of securing the Irish poor legally against poverty. Thus on the discussion on the Fever Bill (Ireland) proposed by Government, he said that "what the Irish people wanted was not physic, but food, to prevent the impending famine, and what arose as a consequence;"⁽³⁾ and therefore he proposed that the Government in order to prevent fever, should not only supply fever hospitals, but should also give legal relief to the poor, and for this purpose he moved the following amendment to the Fever Bill.

(1), & (2) Hansard's Parliamentary Debates 1846. Vol. LXXXV, pp. 383-396; 400-412;

(3) Ibid. Vol. LXXXIV, p.1048.

"That in order to avert the impending famine from the people of Ireland, it is expedient to enlarge the provisions of the Irish Poor Law, so as not merely to secure medical relief to the poor in the sick hospitals, but, likewise, by timely supplies of food, to prevent their being reduced to that state of starvation".⁽¹⁾

When this amendment was not passed, Scrope moved an instruction, when the House resolved itself into Committee to achieve the same purpose but this also was not accepted.⁽²⁾

These are some of the efforts made by Scrope in Parliament for giving Ireland a Law to secure all its poor against poverty. In addition to these parliamentary efforts, Scrope published a score of pamphlets on the question of poverty in Ireland.⁽³⁾ These very many pamphlets show that he had espoused this cause since 1829.⁽⁴⁾

(1) & (2) Hansard's Parliamentary Debates 1846. Vol. LXXIV, pp.1048; 1167.

(3) (a) Scrope, G.P., Plan of a Poor Law for Ireland with a Review of the Arguments For and Against it. London, 1833.

(b) Reply to the Speech of the Archbishop of Dublin. Against the Poor Relief (Ireland) Bill, London, 1847.

(c) The Irish Relief Measures, Past and Future, London, 1848.

(d) Draft Report Proposed by Mr. Poulett Scrope.. on the Irish Poor Law, London, 1849.

(e) The Irish Poor Law, How Far it Failed and Why? London, 1849.

(f) Remarks on the Irish Poor Relief Bill, London, 1847.

(g) Letters to the Right Hon. Lord John Russell, on the Expediency of Enlarging the Irish Poor Law to the Full Extent of the Poor Law of England, London, 1846.

(h) How is Ireland to be Governed. London, 1846.

(i) The Irish Difficulty and How it must be Met. London, 1849.

(j) A Plea for the Rights of Industry in Ireland. London, 1848.

(4) Scrope, G.P., A letter to the Agriculturalists of England on the Expediency of Extending the Poor Law to Ireland, London, 1830.

One of the numerous pamphlets which Scrope published in 1847 on Ireland was a reply to a speech in the House of Lords by the Archbishop of Dublin, who had headed a strong movement by the Irish landlords against the introduction of a liberal Poor Law into Ireland. It is interesting to notice that the arguments of the Archbishop of Dublin against a legal security from poverty were the same as those of Dr. Chalmers and his followers in Scotland: mainly that this will "demoralise the mass of the people, and permanently destroy their habits of industry and self-dependence, and increase to a frightful extent the amount of pauperism and crime in Ireland".⁽¹⁾

And the opposing reasoning of Scrope was very similar to that of Alison on the same subject. This illustrates how the two opponent trends were continuously clashing in every field and on every occasion of progress of social legislation.

Wakley joined the campaign fighting for a new Poor Law in Ireland. In many instances in Parliament, he tried to convince the House, that the condition of poverty and consequent disease in Ireland was calling for the amendment of the Poor Laws in Ireland and for offering the poor there the right for liberal relief. In one of these instances he said, "It appeared from all reports that the fever owed its

(1) Reply to the Speech of the Archbishop of Dublin ... Against the Poor Relief (Ireland) Bill. London, 1847, p.10.

origin to want of food....; he wanted to know why the poor Irish and the poor English should receive different treatment under the same Government. He should propose that the Poor Law should be at once amended in preference to their passing any fever Bills. If that were not done, he for one (although he acknowledged that what the Government was doing with respect to supplying the Irish poor with fever hospitals was very right and proper), ... thought that one paramount duty was being neglected, namely that the law should be made to provide for the poor of Ireland. ... It was admitted by nearly every one who had furnished these statistics, that the cause of fever was to be found in the deficiency of food. He had stated on a previous night that prevention was ... better than cure, and he considered it the Government's bounden duty to adopt such measures as would, for the time coming, render the sister Country less liable to the visitation of famine, and consequently, of fever".⁽¹⁾

In another instance, Wakley spoke to the same effect, ...

"He thought it positively disgraceful that England, Scotland and Ireland should have different laws for the Government of their poor....., in Ireland, even a destitute man, starving almost to death, was not entitled to relief. The Right Hon. Baronet said, he was entitled to beg! What a splendid boon to the Irish to be entitled to beg..... Now the thing to be desired was, that there should be a Poor Law in Ireland that would make a provision for the destitute labourers".⁽²⁾

(1) Hansard's Parliamentary Debates 1846.
Vol. LXXXIV, pp.1049-1053.

(2) Ibid pp.1189-1190.

He then gave statistics showing that in England the number relieved by outdoor relief out of the workhouses in 1839, 1840 and 1841 was 87% of the total number. In 1842 it was 86% and in 1843 it was 85%. That was while "in Ireland no one received any relief out of the workhouse".⁽¹⁾

He thus concluded,

"Every advantage had been given to the English labourer by the Act of 43 d Elizabeth, the principle of which had been carried out for the last 250 years; and, until they had such a law for Ireland, the social, physical and moral condition of the Irish would not be improved".⁽²⁾

(1) Hansard's Parliamentary Debates 1846.
Vol. LXXXIV, p.1192.

(2) Ibid. p.1202.

Wakley's and Scrope's efforts at last succeeded in attaining their object, and Ireland was given a Poor Law approaching at least on paper what they had been advocating. This was the "Justice to Ireland Act" (10 Vic. C31) of the 8th June, 1847. (1) This law allowed the relief of all the poor, including the able-bodied unemployed, either in the workhouse or in the form of outdoor relief. (2) Alison said of this Law,

"The greatest boon that has been conferred on Ireland in our time, is the Law which has not only given a security, never known before for the lives of the poor, but has made that motive to exertion, and to application of capital to 'profitable investments of industry'..... and I believe I may add that the individual to whom Ireland is chiefly indebted for this inestimable boon is one ... who has distinctly perceived the root of the evil, - the absence of any security, either for the lives of the poor, or for the useful application of capital to the employment of labour, ... and has applied himself patiently and steadily to the legitimate remedy, viz. Mr. Poulett Scrope". (3)

Naturally a great credit goes to G.P. Scrope and T. Wakley and other members who espoused the principle, but the greatest credit goes to the Irish Famine and its impressive story of poverty and disease. Alison, Scrope and others had been advocating such

(1) An Act to make further Provision for the Relief of the destitute Poor in Ireland. 10 Vic. C31 (8th June, 1847.)

(2) Ibid. Proviso II.

(3) Alison, W.P. The Famine of 1846-7, in the Highlands of Scotland and in Ireland. Edinburgh & London 1847. p.65.

a law for a long time, but they failed in surmounting the strong prejudices and the deep-rooted beliefs that legal rights of relief would kill the spirit of independence and demoralise and pauperise the community. All their efforts could not radically change the general trend of thought that poverty was the vice of the poor themselves and should not be the responsibility of the State. But when nature during the famine spoke in its convincing language of disease and pestilence, the legislators began to be convinced that poverty could be a menace to the health and welfare of all classes, and that it was for the sake of the whole community that the State should take the responsibility of preventing poverty. Thus if it had been the fear from the break of peace which had instigated the ancient Elizabethian Poor Laws, it was the fear from disease which gave the Irish poor a more liberal progressive Poor Law.

To demonstrate the change produced by the lesson of the Irish Famine in this subject, I shall compare between the attitude of Government, Parliament and politicians towards the principles of poor relief in Ireland before the spread of pestilence and after it had swept all over the whole country.

Thus in 1846, we find Government opposing all the proposals of Scrope, Wakley and others for the amendment of the Irish Poor Law. So, when Scrope introduced a Bill to grant the able-bodied unemployed the right of outdoor relief in the form of labour, Sir James Graham strongly opposed the suggestion and in the strongest words refused to accept the idea of giving the able-bodied a claim for relief. He said on this occasion,

"The Hon. Gentleman says that there are 2,300,000 paupers in Ireland; and he adds, 'give to them the claim to relief from the land by a rate to be levied on land'. Now, all our experience in England would go to show that the land of Ireland would not be sufficient to meet the permanent claim of so overwhelming a description.

If you let in a claim of this description, I fear the inevitable effect will be to swamp the industrious class, and to spread pauperism indefinitely; you will create a state of society so debased and so dependent, that, bad and unhappy as the condition of the working population of Ireland may be, I feel convinced, judging from the highest authorities who have treated the subject, and relying on experience, that a very short time will elapse before that condition will be rendered infinitely worse than it is at present".
(1)

On another occasion, Scrope was proposing that the only way for the prevention of pestilence in Ireland was to introduce a new Poor Law there to prevent the prevalent poverty. Again, Sir James Graham, representing the Government, took an opposing attitude and contradicted the proposition in the strongest terms. He said,

"I think it is our bounden duty, in legislating for Ireland, not to legislate with regard to English feelings, English prejudices, and still less with reference to English Law,; but we are bound to consult Irish feelings, Irish habits, Irish

(1) Hansard's Parliamentary Debates 1846.
Vol. LXXXV. pp.401-402.

laws, as they have existed for centuries, though they may be at variance with the provisions found in the English Statute Book. . . . Every consideration of policy and equity induces me to oppose the application to temporary evils, of remedies the permanent effects of which are known to be injurious; and I have stated many other reasons why Government declines the proposition. . . . I look upon it as inconsistent with the welfare of Ireland, and dangerous, in the extreme, to the great body of the people in that country. I am satisfied, that if you lift these flood gates, a torrent of pauperism will overflow the land; and I think it not only inconsistent with the rights of owners, but with the independence and welfare of the labourers".⁽¹⁾

However, the same politician, Sir James Graham, in June, 1847, gave his support to the Justice of Ireland Act. He was not then in office, but he was among the supporters of the measure in Parliament. This measure was based on the same principles he had strongly opposed in 1846, namely, relief of the able-bodied unemployed and outdoor relief. On the discussions about this Act, Sir James Graham admitted that he had changed his opinion and attitude on this subject. Thus Hansard quoted him saying,

"Indeed, as far as he was concerned, he was bound to confess that even his own strong opinion had recently been changed as regarded the subject before the House, by the experience which he had acquired".⁽²⁾

(1) Hansard's Parliamentary Debates 1846. Vol. LXXXIV, pp.1182-1186

(2) Hansard's Parliamentary Debates 1847. Vol. XCI, p.347.

This experience he was referring to, was the experience of the Famine. It was the Irish Famine and its story of poverty and disease which had the credit of changing his opinion, as well as the opinion of all that section of the conservative party (Sir Robert Peel's Section) to which Sir James Graham belonged at that time.

I shall discuss the attitude of another politician, Lord John Russell, from the other big party in the House, the Whigs, to show that their views, too, had undergone an obvious change as a result of the experience of the famine years. In March 1846, when Scrope introduced a Bill for a new Poor Law for Ireland, Lord John Russell opposed this measure. He expressed himself strongly against the principle upon which the Bill was based, namely the grant of outdoor relief to the able-bodied unemployed in the form of labour. Lord John Russell was at the head of the Government which enacted the Irish Poor Law of 1838, which did not authorize any outdoor relief and restricted relief to the workhouse. In 1846, Lord John Russell was still holding the same opinion that outdoor relief should not be allowed in Ireland and he was still sticking to the principles upon which the 1838 Act was based. Thus in March 1846, he made a speech, to oppose Scrope's proposition to amend that law, and to justify the attitude of his previous Government in this Act. On this occasion, he said,

"It would have been unpardonable in me, with the knowledge I had, that outdoor relief had created great abuse in England, and certain to produce greater abuses in Ireland, if I should have introduced a Bill establishing that principle, because it was recommended by the Poor Law Commissioners in Ireland. I must

confess that, although the Poor Law then introduced has been subjected to great difficulties - though it cannot be said to have worked satisfactorily in many instances - yet my opinion with regard to the danger of the House sanctioning a Bill for the general administration of outdoor relief is unchanged. I think it would be dangerous to the wellbeing of the Irish people themselves. When you say there are 2,300,000 poor in Ireland, it does not mean that they are paupers, but that there are 2,300,000 persons who have not that abundance of food and those comforts you would like the subjects of this country to enjoy. I do not think the way to raise the condition of these persons is to give relief from any public fund. My opinion is, that the course you should pursue towards Ireland as well as towards England, is to endeavour to further and promote the means by which the labourers should be able to acquire an independent subsistence,; but that you should not encourage a measure by which the labourers of Ireland and England should be induced to draw their subsistence from public rates; that such relief should be confined, as far as possible, to persons in the utmost state of destitution.... and therefore I shall feel it my duty to vote against the second reading of the Bill before the House".

(1)

However, the same politician, Lord John Russell, was at the head of the Government that introduced the "Justice to Ireland Act" in 1847. This Act was based on the same principle

(1) Hansard's Parliamentary Debates 1846.
Vol. LXXXV, pp.408, 409.

that Lord John Russell had strongly opposed in 1846; namely outdoor relief to the able-bodied destitute. In introducing this Bill, Lord John Russell was conscious of the change in his attitude and he tried to justify that change. Thus in his speech he referred to his former opinions in 1838 saying,

"It will be remembered that when the Poor Law Commission of Inquiry made their report, they advised that all of a certain class should be relieved and in that class they included all those who were infirm and permanently disabled. We thought, upon the whole, that it was safer, in the first instance, to have workhouses erected in Ireland...., but to confine relief to the workhouses"⁽¹⁾

Then, referring to his new opinion and attitude on the subject and introducing the new measure, "The Justice to Ireland Bill", Lord John Russell further said,

"It is not only the experience of the present state of things, but it is an opinion formed upon general views of the state of Ireland, that the poor law ought to be more extensive than it now is. I shall, therefore propose to bring in a Bill, which is a Bill for the more effectual relief of the destitute poor of Ireland - which shall enact that the guardians of the poor be required to give relief, either in or out of the workhouse, at their discretion, to the infirm and to all those who are permanently disabled by bodily infirmity. We propose, likewise, when the workhouse is full that the Poor Law

(1) Hansard's Parliamentary Debates 1847.
Vol. LXXXIX, p.444.

Commissioners shall have power to direct that in such cases the guardians may give relief out of the workhouse to the able-bodied poor".⁽¹⁾

Thus it was Lord John Russell himself who introduced in 1847 a Bill authorizing outdoor relief to the able-bodied, i.e., authorizing a procedure which he had described in 1846 as "certain to produce greater abuses in Ireland" and "dangerous to the wellbeing of the Irish people themselves". It was he himself who took a line which he had described in 1846 as "unpardonable". And this 1847 Act was not a temporary act but a permanent one. So it cannot be said that he only resorted to this procedure as an emergency measure to meet unusual conditions. If that was so, he could have introduced a temporary act. So it can only be supposed that there had been a radical change in his views and ideas on the subject. And naturally the whole credit for that change goes to the Irish famine and its story of poverty and disease.

(1) Hansard's Parliamentary Debates 1847.
Vol. LXXXIX, pp.444-448.

The Act for repealing the Corn Laws (9 & 10 Vic. C22)

is another legislative measure which reflects the change in the political trends of thought during the Irish Famine. This Act meant the victory of the principle of free trade over that of protection. It almost abolished the duties on the foreign corn imported into the United Kingdom. This meant a considerable reduction in the price of corn and of bread. Naturally this was against the agricultural interests. The duties which had been fixed on the importation of corn under the old Corn Laws were meant to keep the price of corn high by reducing the imports. There is no doubt that this protective policy was serving the interests of the land owners.

The repeal of Corn Laws was, on the other hand, in the interest of the industrialists and the labouring classes. It was meant to encourage the importation of corn and thus reduce the price of food.

It is significant that it was Sir Robert Peel who brought this measure and succeeded in passing it through the House against the wish of a considerable section of his own party. This same politician had previously been the leader of the group believing in protection. In fact, he had been called to office after defeating the Whigs on a proposal to reduce protective duties, and so he had been "nominally the champion of this bulwark of the landed interest".⁽²⁾ It is most significant

(1) An Act to amend the Laws relating to the Importation of Corn. 9 & 10 Vic. C22 [26th June, 1846].

(2) Encyclopaedia Britannica. U.S.A. 1945. Vol. III, p.248.

that this same politician who got into office on the principles of "protection" was the one who introduced in 1846 the Act for Repealing the Corn Laws.

This was a radical change in the line of thought of Sir Robert Peel and his followers. I think that the Irish Famine had a part of the credit for this change. I am quite aware that it was not the only factor that had determined this change. I am quite aware that since the foundation of the Anti-Corn Law League in 1838 by Cobden and Bright, the idea of protective duties had been increasingly losing ground. There was also evidence to show that Peel began to change in principle to a Free Trader long before 1846. ⁽¹⁾ However, it was the Irish Famine which made him take the final decision on that subject. He hesitated no more, and he took the final step to the side of Free Trade. The influence of the Irish Famine on Peel in this respect is evident from his long speeches in support of the "Repeal of Corn Laws" Bill. He repeatedly referred to the story of poverty and disease in Ireland to justify this measure. He confessed that the experience of this famine had the credit of changing his opinion on the subject. He frequently argued that it was necessary to reduce the price of food in order to prevent the spread of epidemics in Ireland. In very clear terms, he asserted that one of the objects of this measure was to reduce the privations of the poor in order to improve the public health. In his own words, in his speech on 15th May, 1846, in support of

(1) Encyclopaedia Britannica. U.S.A. 1945. Vol. XVII, p.435.

the "Repeal of Corn Laws" Bill, he said,
 "Sir, I have explained more than once what were the circumstances under which I felt it my duty to take this course. I did feel in November last that there was just cause for apprehension of scarcity and famine in Ireland. I was stating what were the apprehensions I felt at that time, what were the motives from which I acted; my impression was, first, that my duty towards a country threatened with famine required that that which had been the ordinary remedy under all similar circumstances should be resorted to - namely, that there should be free access to the food of man from whatever quarter it might come".⁽¹⁾

In another speech on the same Bill Sir Robert Peel said,
 "The Right Hon. Gentleman the Recorder of Dublin says that we were deluded by accounts from Ireland. He admits, however, that he was alarmed at the outset, and that the prevailing feeling through Ireland was one of alarm, but then he talked of as unfounded the reports made from time to time by official bodies in Ireland."⁽²⁾ It is very easy for an individual to neglect those reports; but those responsible for the wellbeing of the country - deeply responsible, should famine and disease come without precautions being taken to meet them - what are they, what is a Government to do..... Do you think that a Government ought, in such a case to neglect to take precautions, even should those precautions turn out to be superfluous? Are you to hesitate in

(1) Hansard's Parliamentary Debates 1846. Vol. LXXXVI, p.690.

(2) He was referring to a speech in which Mr. F. SHAW stated that the official reports of the medical officers alleging a prevalence of disease as a result of destitution were exaggerated and unfounded. (See Hansard's Parliamentary Debates 1846, Vol. LXXXV, p.52).

averting famine which may come, because it possibly may not come? Are you to look to and depend upon chance in such an extremity? Oh Good God, are you to sit in Cabinet, and consider and calculate how much diarrhoea, and bloody flux, and dysentery a people can bear before it becomes necessary for you to provide them with food?... Is it not better to err on the side of precaution than to neglect it utterly? I say that, with the reports received by Government, in my opinion we should not have been justified in neglecting that precaution". (1)

Moreover, in evidence of the influence of the Irish Famine and its story of poverty and disease on the decision on the Repeal of Corn Law, I shall quote Sir James Graham, who had followed Peel's steps. He said,

"I hope the House will bear with me if I detain it by reading some extracts upon this point (Irish Famine), which assumes an aspect of peculiar importance; for I must confess it was reading these details in October which convinced me then, as I am convinced now, that a discussion of the Corn Laws in the present Session of Parliament was inevitable".

"Now, Sir, some Hon. Members have declared themselves unable to perceive the connexion which exists between the case of Ireland as it at present stands, and the proposed alteration of the Corn Laws. Sir, if the statement of the Right Hon. Gentleman the Member for the University of Dublin be correct, with respect to the Irish people - if it be true that year after year they are

(1) Hansard's Parliamentary Debates 1846. Vol. LXXXV, pp. 216 & 217.

in such a frightful position on account of fever, dysentery and dearth, as to render their present case by no means extraordinary, I cannot consent to call upon the people of England to make grants from the public Exchequer in aid of Ireland, and at the same time, insist that there shall remain on the Statute-book a law, the operation of which is to enhance the price of their daily bread".⁽¹⁾

It is clear from these quotations that the poverty and the consequent disease in Ireland were among the factors that induced Peel and his friends to change from Protection to Free trade. So, to the Irish Famine and its illustrative lesson of poverty and disease goes at least a part of the credit of changing the policy of the state in that important subject. To it goes the credit of impressing the legislator with the importance of providing the poor with cheap food to preserve the public health. To it goes the credit of convincing Parliament to put the welfare and health interests of the whole society, before the interests of the influential landlords and agriculturalists.

(1) Hansard's Parliamentary Debates 1846.
Vol. LXXIV, pp.171, 177 & 178.

THE CHANGE IN TRENDS LATER IN THE CENTURYAND ITS RELATION TO THE IRISH FAMINETHE COTTON FAMINE

I have tried to show the effects of the Irish Famine on thought and politics during the famine years. But these, it seems were not all the influences it had. The impression it left on Britain was much deeper than that, and its lessons were long remembered. The emphasis it had made on the connection between poverty and disease was so striking that it affected considerably the trends of opinion later in the Century. The generation which lived at this period became famine-conscious. Whenever there occurred any sort of distress, they immediately used to anticipate fever and disease. The story of the Irish Famine used to be at once recalled, on the occurrence of any prevalent failures or depressions. And if in any of these few cases of fever happened, this immediately aroused alarm and excited apprehensions from the recurrence of the Irish tragedy.

This is clearly illustrated in the story of the Cotton Famine (1861-1865). This famine was the result of a great depression in the cotton manufacture and trade in Britain during these years. This was the effect of the American civil war which resulted in cutting off almost entirely the supply of American cotton which used to form 85% of the total supply of raw material to Lancashire. ⁽¹⁾ This cut of the cotton supply was due to the blockade of the southern ports, one of the measures of the War. The blockade began in July, 1861, and was very soon reflected in the cotton manufacture in Lancashire.

(1) Encyclopaedia Britannica. U.S.A., 1945, Vol. VI, p.584.

But it was not only the
 out of supply of raw material which brought about the depression
 in this branch of industry. It is supposed that even if there
 had been no war, the trade would have been compelled anyway to
 face a period of depression. The reason was that there had been
 a huge overproduction greatly exceeding the demand in the years
 before the famine. So added to the lack of supplies, there was a
 cessation of demand, and these led to a great stagnation of trade.
 The Times says on this point,

"Is the distress so wholly and solely due to the blockade?
 There is hardly a well-informed merchant or manufacturer in
 Lancashire who would not be obliged to answer, were the question
 put to him, that there would have been nearly as great, if not
 quite as great, a stoppage of the Mills, and consequent distress,
 if there had been no civil war in America, no blockade, and
 nothing to hinder the arrival of every pound of cotton grown in
 the United States. The blockade has come in the very nick of
 time to justify the stoppage of manufacture, but there was quite
 sufficient cause in the glutted condition of the markets all over
 the world. This glut, consequent on over-production, is a
 periodical disaster; and if the disaster is now worse than its
 predecessors it is because the production has been unexampled". (1)

As a result of this stagnation of trade, there was a
 great amount of unemployment among the cotton workers in
 Lancashire. Most of the cotton mills either stopped or only
 worked part-time. This resulted in a vast amount of destitution

(1) Times, 31st October, 1862. p.6c.

and distress in these areas. This was not restricted to the cotton workers but it naturally involved other branches of trade and industry, and affected other classes whose wellbeing was connected and related to that of the cotton operatives. At first it was hoped that the stagnation might be only one of these transitory depressions to which this trade was subjected from time to time. But as time passed, the distress deepened, and the situation looked worse and worse. It was soon recognised that Lancashire was going to face one of the hardest times in its history. In the winter of 1862 the numbers maintained by the Boards of Guardians and the Relief Committees amounted to
(1)
506,061 persons.

Again, although most reports had agreed that the relief afforded in these years was not enough, yet it was reported that the relief committees had distributed about £1,750,000, besides contributions in kind amounting to £112,000. This, in addition to the Poor Law Relief which was just under
(2)
£2,000,000 during three years.

These figures may give an idea about the prevalence of distress. But one can only appreciate the depth of poverty and misery which the people experienced in these years, when one reads the reports and descriptions of their state. Among the most detailed and most graphic of these were the articles of the correspondent of the Times about the conditions of different towns in this district during these years. These articles show

(1) Arnold, R.A. The History of the Cotton Famine. London 1865. p.319.

(2) Encyclopaedia Britannica. U.S.A. 1945. Vol. VI, p.584.

that the inhabitants of these previously prosperous districts had been reduced by the long standing distress to that lamentable state of poverty and misery which was only found in the most distressed parts of the United Kingdom during periods of unemployment in the last Century. They give graphic pictures of suffering and privations, pictures which need not be quoted as they are very similar to those sad pictures, I have quoted before about Scotland and Ireland.

Once it was recognised that Lancashire was experiencing one of the severest depressions it had met in its history, the story of the Irish Famine was recollected and the country was on the alert for the spread of disease. And when some cases of typhus were reported from some of the cotton towns, Preston and Manchester in 1862, this aroused alarm and excited apprehensions that Lancashire was going to face the pestilence that Ireland had faced in 1847. This is evident from all the literature and the press of the period. I shall try in the following pages to give some evidence of this state of the public mind at this time.

Thus, beginning with Sir John Simon, the chief public health administrator of the country at that time, we find him discussing this subject in his report in 1863. He says that in October 1862 "there was room for very great anxiety as to the sanitary prospects of the cotton districts of England" because of the "widespread poverty" which resulted from the decline of the cotton industry. He expresses his fear that England might have to endure the prospect of "famine fever" as the circumstances, under which typhus "can do its worst as a national epidemic, are provided for it by extreme poverty and destitution". Simon's anxieties and fears seem to be obviously related to the experience of the Irish Famine. He says, "Sixteen years ago Ireland had had this most dreadful of sanitary

experiences. And now, in October, there were rumours, and, as afterwards appeared, well-founded rumours, that typhus had begun in our cotton districts". And he adds "typhus contagion spreads like wild-fire among half famished population".

(1)
This is one of the evidences showing how the lesson of the Irish Famine was recollected as regards the connection between famine and fever. Fever was not an unusual disease in the cotton districts and the death registers prove that every year there used to be a considerable number of deaths ascribed to this cause. Moreover, the number of typhus cases which were at first reported were not unusually large. The total number of typhus cases, to which Simon was referring to and which had occurred in Preston in October were only 109 cases. (2) But they assumed such a great importance from having occurred during a period of distress. They aroused the apprehension that they were the first signs of a forthcoming "famine" pestilence. That is why the central public health department sent one of their medical inspectors, Dr. Buchanan, who was to stay there on the spot to watch the fluctuations of health. It was stated that he was sent, so that from him "every day they might receive information" (3) about the spread of disease there, and also "to satisfy themselves that due local precautions were being taken to prevent the destitution

(1) Fifth Report of the Medical Officer of the Privy Council, 1862 B.P.P. 1863 (161) XXV, pp. 16 & 17.

(2) & (3) Buchanan, G., "On Recent Typhus in Lancashire". Transactions of the Epidemiological Society of London, 1857. Vol. II, pp. 19; 18.

(1)
 which breeds disease".
 And, what is perhaps more significant, the public health department also sent Dr. Edward Smith to report on the diet of the poor classes in these districts:

The relation of these apprehensions to the lesson of the Irish Famine is further illustrated by the fact that the typhus that appeared in Preston and Manchester was described as being of the "true Irish type". In the words of Dr. Buchanan,

(2)
 "Yet in spite of the vast efforts made to assist the unemployed, one of the most lamentable consequences of extreme destitution has made its appearance. The prosperous cotton towns of Lancashire have been wholly exempt from typhus fever (of the true Irish type) since 1847-8, when it prevailed epidemically and was fatal to an extent only exceeded among the starving population of Ireland. In the present year this steady follower of famine has again appeared, and in Preston and Manchester has assumed an epidemic form. Rare cases of the summer have multiplied scores in the autumn

The existence of typhus fever suggests by itself doubts as to the complete success of the measures that have been adopted for the relief of the distress. But on inquiry being made into the

(1) Buchanan, G. "On Recent Typhus in Lancashire". Transactions of the Epidemiological Society of London 1857. Vol. II, p.18.

(2) Buchanan, G., "Dr. Buchanan's Report on the Health of the Operatives as Affected by the Prevailing Distress". Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P.1863 (161) XXV, pp.299-315.

circumstances under which this disease prevailed in Preston and elsewhere, the existence of other morbid conditions was detected which tended to corroborate such doubts. Some of these conditions consisted in a simple decline from the normal standard of health and strength, while others constituted positive disease. For example, stray cases of scurvy attracted attention at an early period!"⁽¹⁾

These words speak clearly of a deep conviction of the relationship between poverty and typhus fever. The writer seems even under the impression that poverty breeds a special type of typhus which he called the "true Irish type", "the steady follower of famine". This tells clearly of the forcible impression left on the minds by the experience of Ireland. It shows how much the idea relating poverty to disease during the cotton distress owed to the Irish Famine.

Dr. Buchanan connects privations not only with typhus, but also with other diseases too. So he records among the effects of the Cotton Famine that "lung diseases of a sort to be induced and aggravated by exposure have been rife, even out of proportion to the cold of the season".⁽²⁾

And it is equally interesting that he reported that all bruises and wounds were difficult to heal during this period,⁽³⁾ and that some practitioners were expecting an increase in rickets and

(1), (2), (3) Buchanan, G. "Dr. Buchanan's Report on the Health of the Operatives as Affected by the Prevailing Distress". Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P. 1863 (161) XXV, pp. 299-315.

tuberculous disease of children. He stated that there was an actual increase in these in Preston and Stockport. (1)

It is also most significant that Buchanan took the occurrence of typhus as an indication of the insufficiency of relief.

Another interesting evidence to the same effect was an anonymous letter to the editor of the Times from a medical man. This runs as follows:

"Your correspondent in Lancashire has not sounded the note of alarm one moment too soon when he tells us that typhus in a virulent form has shown itself at Preston; for typhus, and that to an extent only paralleled by the famine fever of Ireland, will show itself, not at Preston only but throughout the cotton districts, unless help is at once afforded to the famishing people on a scale far greater than at present seems even contemplated.

If human beings are half starved, and massed together in numbers, the worst form of fever known in these latitudes - the spotted typhus - will inevitably make its appearance among them. There are few pathological truths better established than this. Already is the population half starved, for it would be idle to suppose that the pittance allotted to each can do anything but keep them just above starvation point. They are, therefore, already in a condition at once to fall before the fever poison when this is generated. There is only one means

(1) Buchanan, G. "Dr. Buchanan's Report on the Health of the Operatives as Affected by the Prevailing Distress". Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P. 1863 (161) XXV, pp. 299-315.

to meet this rapidly approaching danger, viz. (1) notably to increase the weekly payments; and (2) to supply clothing and blankets, either by direct payments or perhaps better still by emptying the pawnshops. This is the only way by which the weakened bodies of these poor people can be brought back to a point capable of resisting the pestilence, and, at the same time, the tendency to mass together be counteracted".⁽¹⁾

He concluded that the authorities in Lancashire, "unless they would like to see the population fever-stricken as well as famished", they should immediately supply the people with liberal relief and if the local relief would be insufficient, the Parliament should be summoned and a grant made.⁽²⁾

The Times published also another letter from a medical man supporting the same idea. This letter refers in evidence to Murchison's treatise "The Continued Fevers of Great Britain" and to his views that destitution and typhus stand in the relation of cause and effect to each other. The writer states that he is so powerfully impressed with the danger of spread of typhus as a result of destitution in the cotton districts that he wants to call public attention to the subject. He further reminds the rich that typhus is contagious and that although it arises in the squalid abodes of the poor, yet it may invade the comfortable houses of the rich. He recalls the history of the Irish famine and how virulent typhus was bred by the poverty there and how it was spread not only to all classes but also to other countries even to America.

(1) & (2) The Times, 28th October, 1862. p.7d.

He thus concludes that typhus "unless immediate steps be taken to provide against the increasing destitution in Lancashire, will assuredly fill the graveyards of that county with the corpses of men and women who have built up the fortunes of many a cotton millionaire".⁽¹⁾

The comment of the Lancet on the appearance of typhus in Preston is another evidence of how medical thought had become convinced by the connection between poverty and disease. It says,

"It is the old sad story: Pestilence closely dogs the heels of Famine. Typhus had broken out at Preston, and there is no doubt that it is the dread famine-typhus. . . ., and there is but too good reason to apprehend that this outbreak is the precursor of a pestilential manifestation of the fell disease throughout the famine-stricken districts of Lancashire. The hope of escape from so grave and probable a disaster, which has hitherto been built upon the little prevalence and mortality of epidemic and other diseases in the localities in which deprivation of food has been most felt, must come to an end . . . no town (of Lancashire) can now justly entertain hope of escape from the threatened pestilence, except in so far as, acting upon the warning afforded by Preston, it may be able to stave off a like outbreak. That physical deterioration which arises from long-continued insufficiency of food, and of which typhus is the most formidable consequence (it matters not whether directly induced or merely fostered by the starvation), is now becoming painfully manifest in the famine

(1) The Times, 18th November, 1862. p.4b.

stricken districts, and where typhus has not yet shown itself, diarrhoea and dysentery, the sure results of an impoverished diet, are beginning largely to crop out!

"It is, then, almost, - nay, we fear altogether - vain to hope that Lancashire will escape from that dreaded culmination of famine-pestilence. The operatives of the cotton districts have up to the present moment exhibited a noble endurance..... Is this unsurpassed patience to be tried by a repetition of the awful scenes which marked the track of the famine fever of 1847?" (1)

"We fear we shall hardly be able to emphasize the fact that this threatened enthrust of virulent fever at Preston is a calamity which the benevolent must regard as calling even more loudly for the butcher and the clothier than the doctor..... this spotted fever, of which the very name is so much dreaded, is the attendant of cold, hunger, and overcrowding. Simon has his agents at work but there must be bread and meat, warm clothing, and coverings for the night. A population weakened by confinement, and long spent up indoors - a population which has offered up half its vital energies on the shrine of labour, is in the grip of famine and cold. That population will surely perish by hundreds from pestilential disease if ample and liberal succour be not extended". (2)

But it was not only the medical thought which showed a deep conviction of the connection between poverty and disease and an apprehension from the spread of disease during the cotton

(1) Lancet 1862. Vol. II, p.486.

(2) Ibid p.488.

famine. The general public opinion exhibited the same trend. Thus we find the Times correspondent in Lancashire writing on the occasion of the appearance of typhus in Preston.

"During the month which has passed since my last letter the distress has gone on widening and deepening in a steadily increasing ratio.... Further than this, not only is there an increase in the numbers requiring relief, but the physical condition of the people is rapidly deteriorating, and in the two or three places I have visited within the last week the effects of the long continuance of the scanty rations of bread, soup, and meal are plainly visible in the pinched wan look of the people. Preston has already been attacked by a virulent form of typhus fever, which is distinctly traceable to the privations the poor have undergone during the last 12 months, and, though fortunately it has not spread to any extent at present, it will hardly be checked without the most vigorous efforts and considerable cost".⁽¹⁾

In another article the same correspondent attacks the Guardians who were stingy with relief, "the penny wise and pound foolish" school and says,

"Present liberality may be the most judicious economy. One pauper on the sick list costs as much as three or four in health, and on the very threshold of winter they should have a wholesome dread of what would happen to their finances if fever or any other malady should make its appearance among a population already enfeebled by want, and entirely destitute of adequate clothing and bedding".⁽²⁾

(1) The Times 25th October, 1862, p.7d.

(2) The Times 1st November, 1862, p.7a.

In order to show that these were not casual remarks but were a really believed opinion of the correspondent, I shall quote another article of his in which he renounces the idea that typhus originates from ill-ventilation and rejects the view that it can be checked by lime-washing and improved ventilation. He says,

"But the most alarming sign of the effect produced on the people by a long course of low diet, and the most powerful incentive to increased liberality, is the virulent typhus fever which has broken out in the town, That it springs mainly from enfeebled physical powers is shown by the fact that the majority of the cases have arisen in localities and in houses which are among the cleanest and best ventilated. Very energetic sanitary measures have been taken in the way of lime-washing, improved ventilation, and the like, to check it; but a more generous and more varied allowance and a liberal distribution of warm clothing and bedding, are the great things needed"⁽¹⁾.

The letters sent to the Times from the people of Lancashire during this period also show a similar trend. An example of these is a letter from Ashton-under-Lyne during the appearance of typhus in some cotton towns. This says,

"What is worse, Sir, the diseases that accompany famine, nakedness, and cold are already stalking abroad, and the death rate is rapidly rising. Let our rich friends remember that the infection from the famine fever, once set in, can find its

(1) The Times 27th October, 1862, p.10e.

stealthy way even into the home of luxury. A physician, who has long stood in the highest rank of his profession in Ashton, one of the medical officers of the Union, stated at our committee last night that he had himself for the last four weeks 300 cases of all these diseases which follow in the wake of want and hunger, where there were only 54 for the corresponding weeks of October, 1861".⁽¹⁾

These are some examples and there are many others which show that the public opinion at that time was very convinced of the connection between poverty and the "Irish fever". It evidently apprehended and anticipated the spread of disease and rise in the death rates as a result of the distress of the Cotton Famine. I may even say that it became over-sensitive and over-conscious of this subject. News about cases of disease were sometimes given too much importance and often attracted more than necessary attention. Death rates of different districts and subdistricts were analysed and commented upon, and the smallest fluctuations were related to the prevalent distress. And that was not only in the medical journals but also in the ordinary press and in the public letters. This was so much overdone that Dr. Daniel Noble found it necessary to address the Manchester Statistical Society on that subject, in order to warn against unjustifiable deductions from usual fluctuations of death rates. His address gave a picture of the trend of public opinion at that time. He criticises the trend saying,

"These remarks have been suggested by the fact that of late

(1) The Times 23rd October, 1862, p.11c.

the disposition has been very generally manifested, to attribute every accidental elevation or depression in the death rate, occurring in any part of these districts of the cotton manufacture, to the distress which the diminished supplies of the raw material have caused to fall upon many of our working population. This disposition has found expression in various societies and in the public press, and the most diverse theories have been invented, to explain the supposed relations between an ascertained elevation, or depression, of the mortality in particular localities, and the reduced employment therein prevalent. If there has been a high death rate anywhere, in some particular quarter of the year, it has been suggested, or almost taken for granted, that the cause must be sought for in the distress".⁽¹⁾

It is evident from Dr. Noble's address that the public opinion was not only conscious of the connection between poverty and disease but even over-conscious of this connection. There can be no better proof than that of the change which had occurred in the general trend of thought on this subject. We must remember that only twenty years previously, in 1842, it was almost universally agreed that it was ill-ventilation and not poverty which caused typhus. Only twenty years previously, the generally accepted idea in England, was Chadwick's sanitary idea.

(1) Noble, D., "Fluctuations in the Death Rate". Transactions of the Manchester Statistical Society 1863-64, p.1.

The attitude of the Registrar General and the local Registrars in the cotton towns was also significant. Once it was recognised that the distress in the cotton district was prevalent and that there was little hope of quick revival of the manufacture, the Registrars became on the alert for the incidence of disease or the rise in the death rate. The quarterly reports of the Registrar General began to give special attention and devote a large space to the state of health in the North Western Counties. The death rates in each quarter in these districts were compared with the previous years and any fluctuations were commented upon and explained. These quarterly reports reflected anxiety and apprehension from the effect of the prevalent destitution on public health.

When in the quarter January-March 1862, there was a rise in the death rate compared with the figures of previous years for the same quarter, the Registrar General devoted much attention to the matter. Thus in the quarterly report for this period he says,

"But Lancashire, as has been already mentioned in general terms, has tended to darken the aspect of returns, which viewed in the aggregate are not unfavourable. In the last three corresponding quarters, the deaths in that county considerably increased, they were in the first 16,024, in the next 17,412 and in the March quarter of the present year 18,652".⁽¹⁾

(1) Quarterly Return of the Marriages, Births and Deaths. Registered in the Divisions, Counties and Districts of England. (Births and Deaths for the quarter Jan-March 1862), p.6.

"Of twenty-six districts of which Lancashire consists, there was in twenty-one an increase of the deaths now returned over those of the March quarter of 1860, and in sixteen an increase over those of the same quarter of 1861. In Leigh the deaths in the three corresponding quarters were successively 273, 274, and 339; in Bury 591, 695, and 801; in Salford 706, 632, and 818; in Oldham 692, 809, and 893, in Haslingden 400, 422, and 491; in Burnley 500, 531, and 603; in Blackburn 727, 850, and 996; in Preston 823, 877, and 887; and in Manchester 1760, 1774, and 2313. In Stockport the deaths in the same periods were 651, 588, and 711".

The explanation the Registrar General gave to this rise of mortality is significant. He says,

"The registrars in certain districts refer the increased mortality which these figures too plainly reveal, to scarlatina, measles, bronchitis, and pneumonia, which had been prevalent; and by some of them an opinion, which there is reason to fear may be too well-founded, appears to be entertained that these complaints had found an active ally in the poverty and want which many of the unemployed thousands now suffer in the great seats of manufacture".

The reports of the local Registrars in different towns in the quarter Jan-March, in the cotton districts are very interesting too. Thus the Registrar of Oldham, Royton says that deaths were more than

(1) Quarterly Return of the Marriages, Births and Deaths. Registered in the Divisions, Counties and Districts of England. (Births and Deaths for the quarter Jan-March 1862), p.6.

(2) Ibid.

double the average in the quarter Jan-March. He attributes this large increase to several causes. Among these, he mentions that the short working time, and consequently the lessened earnings must have had their effect. (1)

The Registrar of Oldham, Crompton, states that there has been much sickness in his sub-district during that quarter. He attributes that in part to privations from want of employment. (2)

The Registrar of Liverpool, Dale Street, states that the comparatively large number of cases of bronchitis and phthisis in his subdistrict may be in part the result of the privations which the poor for some months have had to endure. (3)

The Registrar of Stockport, Second part, states that the mortality in his district is considerably in excess of that of the corresponding quarter of 1861. He suggests that the state of the cotton trade, may have some effect. (4)

In another quarter, July-September, 1862, the registrar of Chorley states that that quarter has been generally unhealthy in his district. He says that he is afraid that this is owing "in a great measure" to the scarcity of food amongst the working classes in consequence of the prevalent distress in the cotton districts. (5)

What is even more significant is that when the death rate fell during the quarter July-September 1862 in some towns, some of the registrars expressed their astonishment at this

(1),(2) Quarterly Return of the Marriages, Births and Deaths. Registered in the Divisions, Counties and Districts of England. (Births and Deaths for the quarter Jan-March 1862), p.29.

(3),(4), Ibid p.28.

(5) Ibid. (for the quarter July-Sept. 1862), p.28.

unexpected effect. This shows how sure they were of anticipating a rise in the death rate as a result of poverty and destitution. Thus the Registrar of Chorlton, Chorlton-upon-Medlock says,

"This statement exhibits a very satisfactory condition of the health of this district, and could scarcely have been expected in the face of the large amount of destitution now unhappily existing"⁽¹⁾.

Again the Registrar of Preston, Walton-le-Dale, says,

"The distress is rapidly increasing, but there is not as yet much sickness in my district. I fear however, that the next return will not be so favourable, unless there is a revival of the cotton trade, as the cotton factory operatives will not be able to obtain sufficient clothing, fuel, and bedding"⁽²⁾.

I would like, before going further with the analysis of these Registrars' reports to notice that I do not think that the death rates in most places during the Cotton Famine had exhibited any marked trend or reflected the change in the social conditions of the people. I agree with Dr. Daniel Noble that the fluctuations that had occurred during this period were not at all unusual and could not have had a special significance.⁽³⁾ Thus I am not trying at all, in quoting the registrars' reports, to suggest that the death rates had shown during this period any significant trend. My only intention is to analyse their mode of thinking and to show how much they were convinced with the

(1)(2) Quarterly Return of the Marriages, Births and Deaths. Registered in the Divisions, Counties and Districts of England. (Births and Deaths for the quarter July-Sept. 1862), p.27; p.29

(3) Noble, D. "Fluctuations in the Death Rate". Transactions of the Manchester Statistical Society, 1863-64. pp.1-18.

relationship between poverty and disease.

Their explanations of the lowering of death rates in one of the quarters in some towns was very significant. Some of them, when they recognised that the distress had not led to the anticipated rise in the death rates, concluded that the relief measures must have been quite enough for mitigating its effects. An example of that is the report of the Registrar of Ashton-Under-Lyne, Knott Lanes. He explains the unexpected low death rate by mentioning that the parochial relief has been greatly increased, and that a great amount of voluntary charity is administered by local committees. He says that the people therefore have been supplied "with such an amount of food as has mitigated their distress in a considerable degree, and prevented up to this time an increase of the mortality".⁽¹⁾

Another explanation is given by the Registrar of Manchester, Ancoats. He renounces the idea that the unemployment and the subsequent inattendance to the mills had resulted in the drop of the death rates. He assures that this drop is due to a comparatively few deaths from diarrhoea, in consequence of the low temperature of the summer. In evidence of his view he mentions that the same thing had occurred in the summer quarter of 1860, when the temperature was equally low.⁽²⁾

The Registrar General in his report about this quarter cautions against any deductions from the low figures of mortality. His words give further evidence to his conviction of the connection between poverty and health. He says,

(1) & (2) Quarterly Return of the Marriages, Births and Deaths. Registered in the Divisions, Counties and Districts of England. (Births and Deaths for the quarter July-Sept. 1862), p.23.

"Nobody will seriously contend that inadequate supplies of food are conducive to health, it is too well-known that famine ... has often slain its thousands, but it is right at the present time to guard against deductions from the returns of mortality which they do not justify. It has been assumed as obvious that if the death rate in the distressed districts does not exceed or falls below that which has prevailed in times of prosperity, the relief obtained by the unemployed from public and private sources has sufficed to maintain them in health. The allowances may or may not have been sufficient in amount, but the returns of mortality furnish no evidence of the fact, they only show that extreme consequences of famine have not yet been manifested. Recreation in the open air, moderation in meat and drink, and the due administration of domestic offices are beneficial to health, but if they have been compensation for the loss of wages, the tables above quoted are silent on the point. These tables prove that under circumstances favourable to human life, the mortality in England was reduced last quarter, and that the districts of the cotton manufacture were not prevented by the distress from participating in the benefit, they cannot show that if Lancashire had been prosperous the health of its people would not have been still better and a further reduction of mortality obtained. It is matter not of speculation but fact that winter approaches, and that the cold of winter swells the bills of mortality by attacking the old, the young, and the infirm of middle age, and it needs not the gift of prophecy to predict that if cold and want, prolonged and embittered, attack a population with combined force,

it must fall as if under an armed host. To avert or mitigate such a result, food, clothing, bedding, and firing must be dispensed by a public or private charity that can rise to the greatness of the occasion".⁽¹⁾

Simon, too, warned on this occasion against any deductions from the fall of the death rates. He says,

"I would venture to suggest that caution is necessary in interpreting one broad fact which the Registrar General has made public. It is certain that in some of the cotton districts, during the winter months, the total mortality was less than usual; but it does not therefore follow (as some commentators on the fact have apparently believed) that the health of the distressed operatives was substantially better than usual, that the privations ... were less hurtful than their factory occupation of common times.....; till further evidence be given, it must not, I think, be assumed that an interruption of factory employment can rapidly make such a diminution in the death rate of the operatives as shall outweigh the evidence of injury from considerable degrees of privation"

"But.... where the cotton famine truly lessened the local mortality, the savings may not have been of adult life. It may have been exclusively of infants. ... And having regard to the great importance of this change, I can well conceive that in some places the total number of deaths may have been notably smaller than

(1) Quarterly Return of the Marriages, Births, and Deaths Registered in the Divisions, Counties and Districts of England. (Births and Deaths for the Quarter July-Sept. 1862), p.6.

usual even though the adult mortality have been considerably heightened by the cotton famine".⁽¹⁾

Simon suggests that the lowering of the total death rates may have been only due to a lowering in the child death rates. There may be much truth in that. However, there is another factor which should not be overlooked in accounting for this drop in death rates in some places. The total population, especially in some districts, was much lowered by emigration. When the distress got harder and harder, a large number of the working classes emigrated to other parts of the United Kingdom and abroad. And thus this lowering of death rates might have been at least in some districts only apparent, as they had been calculated on the basis of the official population. I may refer in evidence of that view to the report of the Registrar of Belmont who states that the district "is almost uninhabited, owing to the badness of trade".⁽²⁾

Again the Registrar of Wigan reports that there is a decrease both in births and deaths. He explains this by stating that many people have left town in consequence of the distress.⁽³⁾

(1) Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P.1863 (161) XXV, p.20.

(2) Quarterly Return of the Marriages, Births and Deaths Registered in the Divisions, Counties, and Districts of England (Births and Deaths for the Quarter April-June 1863), p.5.

(3) Ibid. (Births and Deaths for the Quarter July-Sept. 1863), p.30.

The report of the Registrar of Bolton, Eastern, also stated that "the decrease of deaths may be attributed in part to movement of the population in consequence of scarcity of employment in the cotton trade".⁽¹⁾

I may mention, also in evidence, that there was an increase in the English emigrants during 1862. Whereas the number in each quarter in 1861 and in the first quarter of 1862 averaged from 5,000 to 9,000, it became from 10,000 to 14,000 in the subsequent quarters in 1862.⁽²⁾ That of course does not include emigration into other counties in England and Scotland.

When typhus fever appeared in some Cotton towns, this was another occasion when the reports of the different local Registrars expressed clearly the idea relating disease to destitution. Thus the Registrar of Preston sub-district in the report for the quarter Oct.-Dec. 1862 relates the spread of typhus to the prevalent distress and gives detailed accounts of the degree of sufferings and privations in this area.⁽³⁾

Again, the Registrar of Bollington (Macclesfield) mentions that fever prevailed to a serious extent in April and May 1862, in a street in his district, which is mostly inhabited by a very poor class of persons. He explains this prevalence by saying "perhaps the privations they have endured caused the fever to spread more widely than it would otherwise have done".⁽⁴⁾

(1) Quarterly Return of the Marriages, Births and Deaths Registered in the Divisions, Counties, and Districts of England (Births and Deaths for the Quarter July-Sept. 1863), p.30.

(2) Ibid., (Births and Deaths for the Quarter Jan-March 1863), p.6.

(3) Ibid., (Births and Deaths for the Quarter Oct.-Dec.1862), p.24

(4) Ibid., (Births and Deaths for the Quarter April-June 1862), p.6.

Liverpool was not one of the seats of cotton manufacture. However, its prosperity was much connected with the cotton trade. So it suffered a great deal of distress during the cotton famine. Liverpool was specially prone to suffer in such circumstances as it was a town characterised by the existence of a large amount of slim poverty even in ordinary times. Dr. Buchanan gives us a picture of the usual structure and life of the lower classes in this town and of the immense amount of privation which it habitually contained. He explains that such a town, which was offering great opportunities for unskilled labourers, would naturally attract immense numbers of these; and this would always tend to create a redundancy in the labour market. He states that the town was congested with this class of unskilled labourer and that a good percentage of these could not obtain full employment all the time. He assures that thousands of labourers in the town could not earn sufficient to support their families because they could only get two or three days work a week He believes therefore that want, sometimes amounting to actual privation was the rule among a vast number of people in Liverpool. (1)

Pointing out the effect of this privation on health, Dr. Buchanan says, "When it is remembered that out of such an income as this, tens of thousands of the poor of Liverpool have to supply themselves not only with food, but with the house-room,

(1) Buchanan, G. "Report by Dr. Buchanan upon an Epidemic of Typhus in Liverpool". Seventh Report of the Medical Officer of the Privy Council 1864. B.P.P.1865 [3484] XXVI, pp.480, 481.

firing, clothing, and other necessaries, it will be seen that the amount available for food, must often and in large classes fall below what is requisite to support a good standard of health...⁽¹⁾ He also adds that,

"The low state of health that results from simple inadequacy of food and clothing, predisposes a large class in Liverpool to receive contagious fever. They are the class in whom epidemic, as well as in ordinary years, typhus finds its chief victims"⁽²⁾.

The habitual poverty in Liverpool was made much more intense by the distress during the Cotton Famine. This is evident from the reports of Dr. W.S. Trench, the M.O.H. of the town during this period. He shows that there was a decrease in the cotton imports during the famine. This resulted in throwing out of employment a large number of cotton porters and lumpers. These vast numbers had to try to insert themselves in other branches of unskilled labour, and this naturally led to a greater redundancy in a labour market which was already congested. The consequence was a large amount of unemployment and a considerable lowering in the wages. Dr. Trench states that in Liverpool there must be at least between seventy to eighty thousand people who, being "dependent on wages sufficient only for the barest requirements of daily bread", must have been sensibly affected by the slackness of business and the redundancy of labour during the Cotton Famine.⁽³⁾

(1) & (2) Buchanan, G. "Report by Dr. Buchanan upon an Epidemic of Typhus in Liverpool". Seventh Report of the Medical Officer of the Privy Council 1864. B.P.P.1865 [3484] XXVI, pp.480, 481; p.481

(3) Trench, W.S. Report on the Health of Liverpool During the Year 1864. Liverpool 1865, p.12.

The increase of poverty in Liverpool during this period is also corroborated by Dr. R. Hamilton who says,

"From 1860 to the present time, slackness of work amongst the labouring classes, mainly during the winter months, has prevailed to a large extent in Liverpool. Beginning with the cotton porters, it extended to the dock labourers and corn porters; and these three classes comprise the majority of the unskilled labourers. The artisans and small tradespeople necessarily participated".⁽¹⁾

Coincident with this increase of poverty in Liverpool during the Cotton Famine, there occurred an epidemic of Typhus in the town. This was significant especially as this was the first typhus epidemic since the epidemic of 1847 during the Irish Famine. This is evident from the following table showing the yearly number of deaths from fevers in Liverpool.

(1) Hamilton, R. "The Epidemics of Typhus and Cholera in Liverpool". Lancet 1867. Vol. II, pp.608 & 609.

TABLE XVII

Yearly Number of Deaths from Fever in Liverpool
 (1)
1847 - 1866

Year	Deaths from Fever	Year	Deaths from Fever	Year	Deaths from Fever
1847	5,845	1854	486	1861	482
1848	989	1855	458	1862	730
1849	567	1856	397	1863	1,304
1850	496	1857	498	1864	1,774
1851	587	1858	685	1865	2,338
1852	664	1859	529	1866	1,528
1853	462	1860	390		

(1) Hamilton, R. "The Epidemic of Typhus and Cholera in Liverpool". Lancet. 1867. Vol. II, p.608.

& Buchanan, G. "Report by Dr. Buchanan upon an Epidemic of Typhus in Liverpool". Seventh Report of the Medical Officer of the Privy Council 1864. B.P.P.1865 [3484] XXVI, p.470.

Dr. Hamilton, in order to show the relation of typhus to poverty calculated that the greatest majority of these deaths from typhus occurred in the lowest paid class of the community. Liverpool was divided into social classes and it was found that most of those who died from typhus belonged to the class called "weekly-wages class". Out of a total of 7,669 deaths from typhus in five years, 7143 occurred among those poor, and the rest occurred mostly in those who used to come in contact with this poor class. (1) I shall quote his table showing the total number of deaths from typhus and the numbers belonging to the poor classes.

TABLE XVIII

Deaths from Typhus in Liverpool in the Whole Community
and in the Weekly-Wages Class
(2)
(1862-1866)

Year	Total Deaths from Typhus	Deaths from Typhus Belonging to Weekly-Wages Class
1862	730	678
1863	1,304	1,211
1864	1,774	1,644
1865	2,338	2,177
1866	1,523	1,433

(1) Hamilton, R. "The Epidemics of Typhus and Cholera in Liverpool". Lancet 1867. Vol. II, p.608.

(2) Ibid.

Again, Dr. Trench, the Medical Officers of Health of Liverpool, in his report for the year 1864, made an interesting study of the relation between this typhus epidemic (1862-1866) and the prevalent distress during the Cotton Famine. His report was a valuable contribution to the idea relating poverty and disease. He gave a large amount of evidence to prove that there was an unusual unemployment and poverty during these years. Among these evidences were figures for "imports and exports of cotton", "imports of grain", in addition to figures about the amount of deposits in the savings banks. He also gave detailed accounts from different companies about the numbers of workers employed by them every year and the amount of wages paid by them. He also gave tables showing the amount of business in different branches of trade. All these accounts showed clearly that there was a great amount of unemployment during this period. But this unemployment was coincident with the spread of the typhus epidemic. Dr. Trench therefore concluded that this epidemic was related to this destitution prevalent during the Cotton Famine, an opinion with which Dr. Hamilton concurred.

(1) Dr. G. Buchanan in his official report on this epidemic did not agree that there was any extraordinary distress in Liverpool during the Cotton Famine. And strangely enough his evidence of this idea were the returns of the numbers of paupers and the Poor Law outdoor relief!! He therefore thought that want of employment and greater destitution might have played some part "though a subordinate one" in determining the first increase of fever in 1861 and that it did not affect the subsequent progress of the epidemic!! "Seventh Report of the Medical Officer of the Privy Council 1864". p.481.

In conclusion he said,

"It may surprise many to have it even hinted that want and destitution prevailed so widely among the people as to be the chief cause of this, as of every preceding epidemic of typhus known to medical history, for during the years of which I write our fashionable streets bore evidence, by the great increase of splendid equipages and the accumulation of treasures of art and luxury that much prosperity was not only co-existent with the want which I have described, but also co-dependent on the same causes".⁽¹⁾

(1) Trench, W.S. Report of the Health of Liverpool During the Year 1864. Liverpool, 1865, pp.21 & 22.

CHAPTER III

STATE PUBLIC HEALTH RESEARCH ... IN POVERTY

SIR JOHN SIMON

"The 'public health' of a country means the health of its masses, and the masses will scarcely be healthy unless, to their very base, they be at least moderately prosperous". (1)

"How far poverty can be turned into non-poverty, how far the poor can be made less poor? In the whole range of questions concerning the Public Health, there is not, in my opinion, any one to be deemed more important than the question which those last words raise in an almost accidental connexion. In various earlier passages of this volume, I have more or less expressed my conviction that Poverty in its severer forms is among the worst of sanitary evils; and whenever I reflect what chief factors have to be desired for progressive improvement in our conditions of public health, I doubt if any can be considered more essential, or ought to be hoped for with more ardent hope, than that the poverty of our poorer classes may be lessened". (2)

These are not the words of Alison, but are those of Sir John Simon, that famous English sanitary administrator of the 19th Century, who had influenced greatly the early development of Public Health in England. He was the most eminent figure in this newly started branch of Government, and would occupy a great part in any written history of the early Public Health in this country. According to Frazer he is supposed to be "the great exemplar of

(1) Simon, Sir John, Sixth Report of the Medical Officer of the Privy Council 1863. B.P.P. 1864 [3416] XXVIII, p.15.

(2) Simon, Sir John, English Sanitary Institutions, 2nd. Edition, London, 1897, p.445.

the English Public Health service"; (1) and his writings to "lay (2)
down the abiding principles of Public Health administration".
He was the first to hold the principal medical administrative
posts in Public Health, and he remained for 21 years (from 1855
till 1876) the chief Health administrator of the country.

That is why the above-quoted words have a particular
significance. They were not the words of a non-official pioneer
whose views might not have influenced at all the policy of the
State, but they were the words of the responsible administrator
who was actually carrying out the policy --- the words of the
official in whose hands the machinery of Public Health in England
had developed. Moreover, they are not quoted from ordinary
publications, but they are quoted from the official papers of the
State. And they are not the only solitary examples. All the
official writings of Sir John Simon since 1848, when he became
the Medical Officer of Health of the City of London, show clearly
that trend of thought. His annual reports then show that he was
greatly aware of the effect of poverty on health. (3) And later
on, his official writings when he was the Medical Officer of
Health of the different Public Health administrative bodies,
expressed clearly this idea. All over his annual reports, he
always stressed his conviction that the health of the community
would vary with the material well-being of its members and he

(1) & (2) Frazer, W.M. A History of English Public Health,
1834-1939. London, 1950, pp.44. & 43.

(3) Simon, Sir John, Reports Relating to the Sanitary Condition
of the City of London, London, 1854.

always elucidated clearly the great influence that poverty had on the prevalence of disease. Whenever he dealt with any health problem, he always pointed out the great progress in public health to be expected if the poverty of the poorer working classes were lessened. That was a general trend of thought that one can pursue all through his very many official reports. This has an important particular significance. It means that at last the concept relating poverty and disease had won a seat in the executive administration. It is true that the official position of Simon did not allow him a free hand in deciding the policy of the State on these subjects. However, it at least gave him the chance of carrying an immense amount of official research into the manifold routes connecting poverty and disease. While he was Medical Officer of Health, first of the General Board of Health, then of the Privy Council, and lastly of the Local Government Board, he had ample opportunities of pursuing scientific research in these fields and he took good advantage of these opportunities.

Simon was characterised by a distinct trend towards scientific research, a trend which distinguished him from many other workers in his field. He probably owed this trend to his scientific background in the early years of his career, when he was totally absorbed in the purely scientific side of medicine. This was reflected in his future career in Public Health. Throughout his work, he strongly stressed the necessity for scientific methods and scientific studies in this new field, and asserted that they are as necessary and valuable in this as in

other fields of medicine. In fact, to him goes the credit for making Public Health a field of vast study and research at that time. His work as a Medical Officer of Health was a continuous scientific research in the dark, unexplored fields of hygiene; and among these fields were the fields connected with the effects of poverty with all its constituents on public health.

To show Simon's scientific trend I shall quote a passage from his book 'English Sanitary Institutions'; he was speaking of the Medical Department under the Privy Council, and wrote:

"And the first function which the department had to fulfil towards them was the function of EXACT STUDY, as foreshadowed in the report of 1858 Their Medical Department had to develop a scientific basis for the progress of sanitary law and administration. We had to invoke, for our own special province of duty, the spirit which for many previous years had been tending to more and more activity in other departments of medicine, as indeed generally throughout the biological and physical sciences; we had to aim at stamping on public hygiene a character of greater exactitude than it had hitherto had. Confident that, if the knowledge were got, its utilisation would speedily follow, we had to endeavour that all considerable phenomena of disease prevalence in the country should be seen and measured and understood with precision,-should be seen as exact quantities, be measured without fallacious admixture, be understood in respect of their causes and modes of origin; that true facts and true interpretations of facts, with regard to the diseases of the country, and the causes producing them,

should be supplied on a sufficiently large scale for political appreciation and use. Undertaking in that spirit to investigate as thoroughly as we could the general sanitary requirements of the country, we proceeded in part methodically, on lines which had suggested themselves to us as necessary main-ways of a general plan; ... The successive steps recorded in the annual reports, had not only made essential progress in the matter of our scientific task, but had led, and were still leading, to such important extensions of sanitary law as gave a hundred fold reward for the labour".⁽¹⁾

Simon did really fulfil the above programme with a genuine scientific spirit, and a large number of inquiries were pursued in the many different public health problems of the time. And as Simon was impressed with the big role played by poverty in these problems, he directed much of this research to the manifold routes connecting poverty and disease. This resulted in throwing more light on the different ways in which poverty affected health, and in providing an immense amount of precise information and evidences on the subject. And consequently, there was a further growth of understanding of the question. One cannot overestimate the effect of such research in emphasising and confirming the idea relating poverty and disease. It gave the idea a scientific basis and support and made it find its way more easily to the ears of the country. Moreover, it clarified its vague aspects and elucidated more exactly the many ways in which privation endangered health.

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897. p.287.

Thus, it may be said that this was a further phase of development of the idea, a phase of research, in which it was subjected to immense study and investigation, which tended to confirm and strengthen it. Particularly so, as this research was official, published in the State papers and presented to Parliament.

Statistical Correlation Between Poverty and Death Rates

I am now going to deal with the different problems of poverty and disease to which Simon had directed scientific investigations and to discuss his reports about the many inquiries carried out under his instructions.

In 1858, the General Board of Health published papers relating to the sanitary state of the people of England. These consisted of two reports. One of them was by Dr. Edward Headlam Greenhow, ⁽¹⁾ and the other was an introduction by Simon in which he commented on the former report. Dr. Greenhow's report was a statistical inquiry in which the investigator, feeling the insufficiency of the information contained in the published Registrar General Reports to throw enough light on the phenomena of disease in the country, tried to supply the deficiency himself, making use of the immense masses of unpublished data within the Registrar General's office.

The Registrar-General in his sixteenth annual report (published in 1856) had furnished the public only with the general death rates of the districts of England and Wales during the decennium 1841-50; but he did not give the specific death rates of different diseases and of different age groups. "With that insufficiently detailed knowledge of facts", Simon says, "exact sanitary criticism was impossible. While districts were only to

(1) Greenhow, Edward Headlam (1814-1888). Studied Medicine at Edinburgh and Montpellier and was probably one of Alison's students. Graduated M.D. at Aberdeen 1852. From 1854, he frequently reported on different problems of public health to the General Board of Health and to the Privy Council and served on several Royal Commissions. In 1855, he was appointed lecturer on Public Health at St. Thomas's Hospital. The Clinical Society was founded in 1867 mainly by his exertions, and he became its president in 1879. (Dictionary of National Biography).

be judged and compared in respect of their total unfavourableness to life, while the unfavourableness could only be spoken of in lump, sanitary practice must be as rude in treatment as it was in diagnosis, and could hardly rise above the quack's method of using one physic for all maladies". (1)

Dr. Greenhow, therefore, tried to fill the gap. He calculated the specific death rates of a large number of diseases or groups of diseases with regard to the whole of England and Wales, with regard to each of the 11 registration-divisions of the country, with regard to each of the 23 registration-counties, and with regard to each of 105 registration-districts, during the seven years 1848-54. In addition he ascertained, with regard to each of 20 of the districts, at what age the more important diseases had proved fatal. (2)

Dr. Greenhow showed in his report that the different diseases were not equally fatal in the different districts, but were proving fatal in widely different ratios in different districts of the country. He also showed how those wide differences of mortality were accompanied with district-differences in the industrial and living conditions of the respective populations.

What interests me most in these reports is that Dr. Greenhow seemed to be fully conscious of the influence of poverty on disease and anxious to correlate statistically the

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.265.

(2) Ibid, p.267.

health and destitution in different districts. Although the material and the facts before him could not allow him to estimate the exact degree of poverty, yet he tried to make the best of the available data to begin an attempt in this field. The only available figures that he could use as an index of poverty were the proportion of paupers in the population. He thus introduced in his tables a column about the proportion of paupers receiving parochial relief in each district against the columns of the amount of mortality! This was clearly a trial for endeavouring to find out statistically the influence of poverty on health. He did that in all his tables about different occupations and different districts. Whether he was comparing the general or the specific death rates, he always added in juxtaposition a column about the amount of pauperism in the population. The following is an example of his tables.

TABLE XIX

Male and Female Pulmonary Death Rates in Colliery Districts,
with the Population Density, and the Proportion of Paupers
 (1)
and of Men Engaged in Agriculture and Coal mining.

District	Death Rates from Pulmonary Affections		Percentage of Adult Men Engaged in		Urban Percentage of Population	Persons to a Square Mile	Proportion of Paupers per 1,000 persons
	Male per 100,000	Female per 100,000	Agriculture	Coal Mining			
Glendale	215	218	57.1	4.2	0	65	53
Easington	222	264	12.0	49.9	0	362	27
Haltwhistle	328	399	37.9	12.4	0	56	26
Houghton-le Spring	364	394	10.2	47.3	16	773	38
Tynemouth	507	506	6.5	27.5	45	1,035	49
Gateshead	562	516	6.9	13.9	53	1,186	47
England and Wales	569	535	26.5	-	50	307	-

(1) Greenhow, E.H., General Board of Health.
 Paper Relating to the Sanitary State of the People
 of England, 1858, B.P.P. 1857-58, XXIII, p. 65.

These conditions were investigated by the Board of Health - it would be necessary to investigate this part of the subject much more analytically than the facts at present before we would admit.

(2) Greenhow, E.H., General Board of Health, Papers Relating to the Sanitary State of the People of England B.P.P. 1857-58, XXIII, p. 22.

Dr. Greenhow's attempt in correlating poverty and health is naturally open to criticism, as the proportion of paupers in the population was not at all a good measure of poverty in any area. He himself was aware of that and pointed out clearly the shortcomings of his method and urged that a more illuminating statistical investigation of the relationship between poverty and health should be done in future. He says in his report:

"It is also very doubtful whether the amount of poverty indicated by the proportion of paupers in a population who are in the receipt of parochial relief is to be received as affording an altogether correct indication of the amount of that form of poverty which most affects the public health. Persons receiving parochial relief can scarcely be considered as destitute. Having once accepted such relief, they may be regarded as having abandoned many of the cares and deprivations of the independent poor, and probably with them some of the influences which must injuriously affect health. Hence fully to appreciate the influence of poverty and its attendant ills, bad food, bad lodgings, starvation and anxiety - and no one practically acquainted with the poor, and conversant with disease, will hesitate to allow that these conditions have great influence over health - it would be necessary to investigate this part of the subject much more analytically than the facts at present before me would admit". (1)

(1) Greenhow, E.H., General Board of Health. Papers Relating to the Sanitary State of the People of England B.P.P.1857-58, XXIII, p.23.

Simon's comment on the report as regards its dealing with the effect of poverty on disease was as follows:

"Practically, too, it must be reckoned that, even with the high civilisation of this country, and with its unequalled system of poor-law relief, privation still exists as a cause of premature death. Among the surgical cases treated at hospitals and dispensaries, diseases from insufficient nourishment form a very considerable part. Children especially suffer from this cause, and many of their so-called scrofulous ailments are in fact mere starvation-disorders, which a few weeks of better feeding can cure. And, besides the direct stint of food, and that indirect stint which consists in the use of damaged and adulterated provisions, there are other kinds of privation practically inseparable from poverty. It must have scanty house-room; and this - at least till the means of ventilating poor dwellings are thoroughly popularised - is an increased liability to disease. It must have scanty clothing and scanty fuel, and with little other protection than habit must encounter inclemencies of weather. It must have a weight of care in its daily struggle for subsistence; it must have little of the variety and pleasurable excitement which are good for mind and body. Few tasks can be more difficult than to estimate the diffusion of poverty, as distinguished from pauperism, in different parts of England; and I have no means of determining whether poverty, in this sense, be one of the local conditions to which any preventable disease at all closely proportions itself. But, as regards pauperism, such certainly is not the

case; a glance at Dr. Greenhow's table is sufficient to show that districts with the highest, and districts with the lowest, proportion of pauper-population do not stand opposedly to one another as regards general death rate, or as regards the death-rates of particular diseases".⁽¹⁾

But although Dr. Greenhow's inquiry led to no positive results, yet it was one of the first attempts to correlate statistically the occurrence of poverty and disease, and it proved that the minds of these public health people at that time were quite conscious of the important role played by poverty in the Public Health, and that they were anxious to measure in exact numbers the degree of dependence of disease on privation.

(1) Simon, Sir John, General Board of Health, Papers Relating to the Sanitary State of the People of England B.P.P.1857-58, XXIII, p.vii.

The Cotton Famine (1861-1865), which I had discussed in the last chapter was one of the occasions in which Simon directed research and inquiry into the connection between poverty and disease. His report about this Famine in the year 1862 gives ample evidence to his deep conviction of this connection. It is clear in this report that the distress and destitution in the cotton districts had aroused in him strong anxieties and fears from the spread of disease and the deterioration of health. He was apprehending and anticipating that Lancashire would be devastated by these ravages of epidemics bred by poverty. He recollected the experience of the Irish Famine and was afraid that history would repeat itself and that the cotton manufacturing districts would suffer from the famine pestilence that had ravaged the poverty stricken Ireland.

Simon connected between poverty and typhus; and the way he was connecting these showed a clearer understanding than in former decades of the real manner in which privation helps the spread of this disease. There was less vagueness and less misconceptions in the idea. He was nearer to the truth and seemed to conceive more accurately how poverty favoured the propagation of this fever. He appeared to have a more exact idea about the role played in this respect by each of the different elements of poverty: malnutrition, overcrowding, uncleanness etc. This was quite evident in the way he dealt with the subject. I shall quote parts from Simon's report on the Cotton Famine, as it was one of the clear evidences of his trend of thought on poverty and disease. He wrote:

"Foremost there was the unwonted possibility that England might have to endure, almost without power of arresting if begun, the terrible spectacle of a famine fever. For the circumstances under which true Typhus (the "goal fever" the "camp fever", the "ship fever", of our ancestors) can do its worst as a national epidemic, are provided for it by extreme poverty and destitution. The disease is never otherwise than contagious, and its contagion spreads like wild-fire among any half-famished population. Sixteen years ago, Ireland had had this most dreadful of sanitary experiences wherever typhus might show itself in (the cotton districts) hunger would not be the only baneful influence in favour of its spread. Eminently contagious as it is by means of exhalations from the sick, and only partly divestable of that property by even the best ventilation of the best hospitals in Europe, it must be of absolute necessity spread wherever persons who have not previously suffered its attack encounter its intense contagium in over-crowded ill-ventilated dwellings. And this danger had to be apprehended in the cotton districts. For means of rent-paying had ceased. Partly in consequence of eviction from former lodgings, partly in voluntary search for the cheapest obtainable shelter, the population had been gradually getting more and more restricted in dwelling-place. As colder weather began, as the want of fire began to be felt, as the absent clothing and bedding began to be missed, so, more and more, for warmth's sake, the dwelling spaces were sure to be without ventilation and the inmates to be huddled together. Within the atmosphere of any such dwelling-places, the spark of typhus-

-contagion, if it should enter, would find every opportunity to spread".⁽¹⁾

The anxieties and fears from the consequences of the distress became more acute when typhus actually showed itself in some of the towns in the cotton districts. This had led Simon to send Dr. Buchanan to these areas. It is illuminating to read the purpose of Dr. Buchanan's services in Simon's words:-

"Under these circumstances, my Lords had to watch carefully all fluctuations of health in the distressed districts, and to satisfy themselves that due local precautions were being taken to prevent the destitution which breeds disease. With this view their Lordships determined to have for the rest of the year a medical Inspector constantly in the suffering districts, from whom every day they might receive information, or through whom give advice, concerning these very important matters; and the gentleman, whose services I under their Lordships' directions engaged for the purpose, was Dr. Buchanan, one of the physicians to the London Fever Hospital".⁽²⁾

(1) Simon, Sir John, Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P.1863 (161) XXV, p.17.

(2) Ibid., p.18.

It is clear from the above that Simon sent
 (1)
 Dr. Buchanan to act as his recording instrument in these areas
 to assess the fluctuations of health and disease that might result
 from poverty and destitution.

Dr. Buchanan's report was in fact an inquiry into the
 relation between poverty and disease in the cotton districts. I
 shall cite some parts of it. He wrote:

"Yet in spite of the vast efforts made to assist the
 unemployed, one of the most lamentable consequences of extreme
 destitution has made its appearance. The prosperous cotton towns
 of Lancashire have been wholly exempt from typhus fever (of the
 true Irish type) since 1847-8, when it prevailed epidemically, and
 was fatal to an extent only exceeded among the starving population
 of Ireland. In the present year this steady follower on famine
 has again appeared, and in Preston and Manchester has assumed an
 epidemic form. Rare cases of the summer have multiplied to scores

(1) Buchanan, Sir George (1831-1896). Graduated M.D., London
 in 1855. Became resident medical officer at London Fever Hospital.
 In 1857, appointed medical officer of St. Giles's district "then
 notorious because its death rate was one-fifth higher than that
 of the whole metropolis". "His reports on the sanitary condition
 of this district were soon recognised as masterpieces". In
 1861, he was employed by the Privy Council as an occasional public
 health inspector, and in 1869 as a permanent one. He was later
 appointed first assistant medical officer and in 1879, principal
 medical officer to the Local Government Board.
 "He always rendered the very best service which the occasion
 required or permitted, and he was in various cases the author of
 reports which have become classical in sanitary literature". "By
 impressing on all his fellow workers, political as well as medical,
 his own enthusiasm, Buchanan made inevitable the evolution of the
 medical department of the Local Government Board to one of the
 most important of scientific departments either at home or abroad".
 (Dictionary of National Biography, London 1901)

in the autumn. The existence of typhus fever suggests by itself doubts as to the complete success of the measures that have been adopted for the relief of the distress. But on inquiry being made into the circumstances under which this disease prevailed in Preston and elsewhere, the existence of other morbid conditions was detected which tended to corroborate such doubts. Some of these conditions consisted in a simple decline from the normal standard of health and strength, while others constituted positive disease. For example, stray cases of scurvy attracted attention at an early period".⁽¹⁾

It is interesting to notice that Dr. Buchanan considered the existence of typhus and other morbid conditions to suggest that the measures of relief had not been sufficient to alleviate the poverty. In other words he was measuring the degree of want by the health of the people and disease prevalence.

Summing up the results of one of his inquiries concerning existing morbid conditions related to distress Dr. Buchanan wrote:

"1st. That while actual death from starvation has been of the rarest occurrence, there is a peculiarly low state of health among the unemployed operatives of the cotton towns, showing itself particularly in the elder people and predisposing to various diseases.

2nd. That scurvy and other evidences of a tendency to haemorrhage have been seen with remarkable frequency.

(1) Buchanan, G. Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P.1863 (161) XXV, p.299.

3rd. That lung diseases of a sort to be induced and aggravated by exposure have been rife, even out of proportion to the cold of the season.

4th. That epidemic measles and scarlatina have habitually exhibited peculiarities that in ordinary times are only met with in weakly constitutions. That true typhus has shown itself. That epidemic diarrhoea has been below the average, except in Preston, which is the town that suffered most from typhus fever.

5th. That disease from drunkenness and from neglect of children has been less common than in ordinary times". (1)

Besides Dr. Buchanan, Simon sent also Dr. Edward Smith (2) to the cotton districts to inquire into the dietaries of the unemployed distressed cotton operatives. That step also showed his trend towards scientific exploration and investigation of different problems of Public Health. He took the opportunity of the Cotton Famine and the problems that arose about how much income should be offered by the relief authorities, to make the subject a field for exact scientific investigation. So

(1) Buchanan, G. Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P. 1863 (161) XXV, p.304.

(2) Smith, Edward (1818?-1874). Graduated M.D., London in 1843. Devoted much attention to Dietetics. He was therefore consulted by Government on prison and Poor Law dietaries. He was appointed medical officer of the Poor Law Board, and when this was merged into the Local Government Board in 1871, he became assistant medical officer for Poor Law purposes. He introduced many reforms in the hygiene of workhouses and their dietaries (Dictionary of National Biography, London 1898).

Dr. Edward Smith was chosen to provide more exact scientific information than was at the moment available with regard to the economics of diet, and the problems of nutrition of the poor destitute. He was to answer scientifically the question of what the least outlay of money was, which would procure food enough for healthy life.

This investigation in one of the aspects of poverty that affected health, namely nutrition, was the basis of a wider one which was carried out later by the same investigator, under Simon's directions also, and which explored more how poverty affects health through malnutrition. (I discuss these later.)

In Simon's report, there was another interesting discussion about the exact influence which the Cotton Famine had exerted on the death-rates of the affected population. The Registrar General had made public the fact that in some of the distressed cotton districts during the winter months the total mortality was less than usual.

Simon's answer to that was "But it does not therefore follow (as some commentators on the fact have apparently believed) that the health of the distressed operatives was substantially better than usual, - that the privations which their enforced idleness entailed on them were less hurtful than their factory-occupation of common times. No doubt, indeed, but that factory-occupation produces, on a very large scale, chronic ill-effects on health; but, till further evidence be given, it must not, I think be assumed that an interruption of factory employment can rapidly make such a diminution in the death-rate of the operatives

as shall outweigh the evidence of injury from considerable degrees of privation. Assuredly, such a conclusion cannot be based on any facts which have yet been published with regard to the matter in question".⁽¹⁾

This paragraph shows how much Simon believed in the injurious effect of privation on health and how much he gave it in his mind a prime importance. He was absolutely sure that poverty must have cast its dark shadow on mortality, and his explanation of the contradictory figures was that:

"A smaller than ordinary number of deaths in particular cotton-districts during the past winter may have been only one of those common predictable fluctuations of mortality which go to furnish average local death-rates, and may, indeed, have been a higher mortality than the districts without the cotton-famine would have had. But where this was not the case, where the cotton famine truly lessened the local mortality, the saving may not have been of adult life. It may have been exclusively of infants. For the closure of the factories withdrew perhaps the deadliest influence with which the infantine population of the cotton-districts has to contend, - the influence which is exerted against infant life by the industrial occupation and absence of mothers".⁽²⁾

This attitude in his report gives the impression that he had been so much convinced of the injurious results of privation on health that he had been expecting a far severer

(1) & (2) Simon, Sir John, Fifth Report of the Medical Officer of the Privy Council 1862, B.P.P.1863 (161) XXV, p.20.

effect on mortality and disease prevalence. And when health had not suffered to the extent he predicted, he was seeking different reasons for this unexpected result. Another illustration of this attitude is that he tried to seek a reason for the relative moderate severity of typhus epidemic. He held the mildness of the winter responsible for moderating the blunt effect of attack of privation on health in this respect and limiting typhus spread. In his own words "Obviously as regards the past, it is a matter of fact that evils which might well have been anticipated did not fall, or at least did not heavily fall, upon the distressed population If the temperature of last November had continued through December and January - still more, if the temperature of these two months had (as usual) been much below the temperature of the November, the sufferings of the population must have been far severer than they were, and typhus could not but have spread much more extensively than it did". (1)

(1) Simon, Sir John, Fifth Report of the Medical Officer of the Privy Council 1862, B.P.P.1863 (161) XXV, p.20.

Poverty, Nutrition and Health

In 1863, the medical department of the Privy Council published in the annual report an inquiry by Dr. Edward Smith into the nutrition of the poor labouring classes and a comment by Simon on the subject. At that time the department was concerned in a systematic investigation into the conditions... influencing the distribution of disease in England. Dr. Smith's inquiry was a part of this systematic investigation, and Simon's comment on it was included under the general heading 'distribution of disease in England, and the circumstances by which it is... regulated'. This by itself suggests what his report strongly confirms that Simon was fully realizing the influence of... malnutrition of the poor on the occurrence of disease in the... country. The object of the inquiry was "a social and national one, to demonstrate upon what food large masses of the population do live", (1) and was specially directed to the poor lowest fed population.

Simon began his commentary report by stating that "no sanitary necessity can be more real than the common animal need of proper food, - that no morbid influence can be of worse import to life than mere privation of nourishment", that "In degrees far short of what is popularly known as starvation or famine, insufficiency of nourishment may bring very hurtful consequences to health", and that "generally it may be said that in order justly to estimate the sanitary circumstances of a people, scientific regard must be had to the quantity and quality

(1) Smith, E., Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 [3416] XXVIII, p.216.

(1)
of the people's meat and drink".

Then he summarizes the results of Dr. Smith's inquiry saying:

"As the inquiry specially related to the feeding of our lowest-paid labouring classes, it was to be expected that evidence of the very poor diet would often be met with. And such proved to be the fact. Throughout some of the examined classes, and in appreciable sections of the remainder, the diet was (to say the best of it) of doubtful permanent sufficiency for health. The worst deficiencies, however, were found among the examined classes of indoor operatives. They, taken as a whole, are so ill-fed that assuredly among them there must be many instances of severe and injurious privation".

(2)
 Dr. Smith's inquiry was a detailed estimation of the diet of some classes of workers: silk weavers and throwsters, needlewomen, kid glovers, stocking and glove weavers, and shoemakers; besides agricultural labourers in England, Wales, Scotland and Ireland. In selecting the samples, although he was concentrated on the low-wages employments, yet he tried to avoid those who were suffering specially from hardship and ill-health. The following are some of the results of his inquiry:

In the case of Silk weavers and throwsters, he finds out that "these populations have a precarious and uncertain dietary" and that "they are as a whole insufficiently nourished and of feeble health".

(1), & (2) Simon, Sir John, Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 [3416] XXVIII, pp.11, 12.

(3) Smith, E., Ibid, p.219

He relates that to the fact that "the prostration of trade, for many years has ... so lessened the period of full work, that the income obtainable is not higher than that of any low fed population in this country".⁽¹⁾

In the case of Needlewomen he remarks that this was "the lowest fed class"⁽²⁾ included in his inquiries. He ascertains that "they are exceedingly ill-fed, and show a feeble state of health".⁽³⁾

As to the kid glove stitchers he notices that "the class is ill-fed and unhealthy".

On the whole, he concludes that in the classes of indoor occupations he investigated, "the average quantity of food supplied was too little for health and strength".⁽⁴⁾

As regards the agricultural labourers of England, Dr. Smith comes to the conclusion that "apart from their families", they "are not ill-fed, and their known longevity, with the favourable rate of sickness, as shown by the returns of benefit societies, can only be supported on that conclusion".⁽⁵⁾

But he notices that "there is reason to believe that the quantity of food obtained by the wife, and also by the children at the period of rapid growth, is in many cases, in almost every county, deficient, and particularly in nitrogen".⁽⁶⁾

As regards Scotland, he remarks that the crofters "are in fact amongst the worst fed of the labouring population",⁽⁷⁾

(1) (2) (3) (4) (5) (6) & (7) Smith, E., Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P. 1864 [3416] XXVIII, pp. 219; 223; 223; 233; 261; 262; 275.

but on the whole "the Scotch farm labourer is well fed notwithstanding the want of delicacy which is found in his principal food".⁽¹⁾

Simon comments on these results saying, "From such degrees of (scantiness of food) as Dr. Smith found existing among the lowest fed of the examined classes, there must, I feel assured, be much direct causation of ill-health, and the associated causes of diseases must be greatly strengthened by it in their hurtfulness".⁽²⁾ He also says, "That cases are innumerable in which defective diet is the cause or the aggravator of disease, can be affirmed by any one who is conversant with poor-law medical practice, or with the wards and outpatient rooms of hospitals".⁽³⁾

But that is not all that Simon infers from these results. He considers that these evidences of scantiness of food imply the existence of much more hurtful forms of privation. He says: "Yet in this point of view there is, in my opinion, a very important sanitary context to be added. It must be remembered that privation of food is very reluctantly borne, and that, as a rule, great poorness of diet will only come when other privations have preceded it. Long before insufficiency of diet is a matter of hygienic concern, long before the physiologist would think of counting the grains of nitrogen and carbon which

(1) Smith, E., Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P. 1864 [416] XXVIII, p. 231.

(2) & (3) Simon, Sir John, Ibid., pp. 15, 14.

intervene between life and starvation, the household will have been utterly destitute of material comfort;- clothing and fuel will have been even scantier than food, - against inclemencies of weather there will have been no adequate protection, - dwelling space will have been stinted to the degree in which overcrowding produces or increases disease, - of household utensils and furniture there will have been scarcely any, - even cleanliness will have been found costly or difficult, and if there still be self-respectful endeavours to maintain it, every such endeavour will represent additional pangs of hunger. The home, too, will be where shelter can be cheapest bought; - in quarters where commonly there is least fruit of sanitary supervision, - least drainage, - least scavenging, - least suppression of public nuisances, - least, or worst, water supply, - and, if in town, least light and air. Such are the sanitary dangers to which poverty is almost certainly exposed, when it is poverty enough to imply scantiness of food. And while the sum of them is of terrible magnitude against life, the mere scantiness of food is in itself of very serious moment. From such degrees of it as Dr. Smith found existing among the lowest fed of the examined classes, there must, I feel assured, be much direct causation of ill-health, and the associated causes of disease must be greatly strengthened by it in their hurtfulness. These are painful reflections, especially when it is remembered that the poverty to which they advert is not the deserved poverty of idleness. In all cases it is the poverty of working populations. Indeed, as regards the indoor operatives,

the work which obtains the scanty pittance of food is for the most part excessively prolonged. Yet evidently it is only in a qualified sense that the work can be deemed self-supporting. All disease of such populations, and whatever destitution results from it, must be treated at the public expense; and on a very large scale the nominal self-support can be only a circuit, longer or shorter, to pauperism

"How far (if at all) the described circumstances of our poorest labouring population tend to better themselves, and how far (if at all) they may be bettered by interference from without, are questions which cannot be discussed without reference to parts of political economy on which I am incompetent to speak. Indirectly, indeed, these questions are of the vastest sanitary importance;- for the 'public health' of a country means the health of its masses, and the masses will scarcely be healthy unless, to their very base, they be at least moderately prosperous. And although the satisfactory solution of these questions is a task for other sciences than the science of medicine to fulfil, yet assuredly, if that solution can be given, the ultimate result will be among the foremost gains which a department of public health can have to record".⁽¹⁾

This passage had specially attracted my interest and attention while I was reading Simon, for it summarises him on the subject of poverty and health, and is a good representative sample of many similar pieces which are scattered all over his works.

(1) Simon, Sir John, Sixth Report of the Medical Officer of the Privy Council 1863. E.P.P. 1864 [341c] XXVIII, p.14.& 15.

The Health of Workers in "Sweated Trades"

Again, in 1863, the Medical Department of the Privy Council directed Dr. Edward Smith to carry out another investigation, this time into the health conditions of the tailors in London. The tailoring trade was one of the "sweated" trades, in which there had been a great amount of suffering and misery among the working class. It was this suffering and misery which had inspired Charles Kingsley with his famous work "Alton Locke".

The inquiry of Dr. Smith revealed that a large section of the workers in this trade were either unemployed or only partially employed during a long part of the year. This fluctuation of employment applied to both those who were employed in workshops and to those who were doing piece-work in their homes. Thus in the case of the former Dr. Smith remarks that, "the great mass of operatives may pass weeks without any employment or only with one-third of one or of two coats per week". He exclaims, "it may be affirmed of these operatives as a whole, that in the slack time their income is insufficient to maintain them, and they fall into debt, and that with much anxiety and probably insufficient food for lengthened periods, the large income of the summer months suffices only to clear off the accumulated debt".

(1)

Again, as regards those workers who were doing piece-work at their homes, Dr. Smith remarks that "it is impossible to estimate with any approach to accuracy, the average income of these lowest classes of the trade during the year, since during three or four

months of the year the work is always deficient; and for weeks may be entirely absent. If the operatives can only just live when the work is moderately plentiful, what must be their state of distress during such periods of dearth of employment".⁽¹⁾

Dr. Smith describes in his reports the "sweating system" and how it was lowering down and down the condition of the labourers in this trade. The "sweaters" were middlemen who used to obtain work from big shops or from Government and then employ the labourers for doing it at the lowest terms and thus make a big profit out of their labour. It was not infrequent that one middleman, employs another middleman, and this one a third, all of whom making a profit between the wages given to the operatives and the sums given by the contractor with the Government for example.⁽²⁾ These sweaters used to make enormous gains from the labour of the poor workers. "The gain of the middleman", says Dr. Smith "is understood to be the loss of the operative and presses almost entirely upon the lowest class".⁽³⁾ "They", says Simon, "were cruelly grinding the faces of the poor".⁽⁴⁾

Dr. Smith also ascertains that the places where the tailors were working, whether in the shops or in their own homes were extremely insanitary and overcrowded.⁽⁵⁾ Moreover, he notices that the hours of work in this trade were extremely prolonged. Thus he says that "on some occasions the hours are prolonged to 9 or 10 o'clock, and as the work begins at 6 or 6½ a.m., at that period 15 to 16 hours are spent in labour".⁽⁶⁾

(1) (2) (3) (5) (6) Smith, E., Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 [416] XXVIII, pp. 427; 416; 427; 429; 422.
 (4) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.436.

Dr. Smith conceived clearly that the low income and the bad condition of labour in this trade must be reflected in the health conditions of the workers. To illustrate the repercussions of these low conditions of living in this trade on health he compared the mortality of the tailors in London with the mortality of the agricultural labourers at different ages according to the Registrar General figures. (1)

He concludes from these figures that "the mortality... is much greater in tailors than in agricultural labourers during the period of apprenticeship, but it is yet more considerable in middle life, the excess amounting to from about 50 to about 75 per cent". (2)

Again Dr. Smith gives in his report a very clear evidence of his deep belief in the relationship between material well-being and health. That was when he was talking about the health conditions of the poorest class of workers in this trade. Although he had no means to estimate the health of this class apart from the other more prosperous workers, yet he felt sure that their health must be worse and their mortality higher. In his own words, speaking about the lowest class of the trade, he says, "I do not know of any means by which a correct estimate may be made of the sickness and mortality occurring among those class. They must vary very much, according to the kind of work which the operatives do, and the seasons of sufficiency and want, but I cannot doubt that it is exceedingly high in the

(1) & (2) Smith, E., Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 [3416] XXVIII, 424; 424.

lowest grades, and far exceeds that observed in men working in
the West End shops". (1)

(1) Smith, E., Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 [3416] XXVIII, 427.

In 1864 the Annual Report of the Medical Officer of the Privy Council showed that Simon had pursued his investigation into poverty and health. Having finished with the inquiry into the food of the poor labouring classes, he turned to another feature of poverty and disease. He pursued his object by arranging another study into the dwellings of the poor. He directed Dr. Henry Julian Hunter to carry out an inquiry into the dwellings of the agricultural and other labourers of rural districts.

To summarise the outcome of this inquiry I shall quote a part of Simon's commentary report. He wrote:

"To the insufficient and miserable quality of the house accommodation generally had by our agricultural laborers, almost every page of Dr. Hunter's report bears testimony. Especially within the last twenty or thirty years the evil has been in very rapid increase, and the household circumstances of the laborer are now in the highest degree deplorable. Except in so far as they whom his labor enriches see fit to treat him with a kind of pitiful indulgence, he is quite peculiarly helpless in the matter. Whether he shall find house-room on the land which he contributes to till, whether the house-room which he gets shall be human or swinish, whether he shall have the little space of garden that so vastly lessens the pressure of his poverty, - all this does not depend on his willingness and ability to pay reasonable rent for the decent accommodation he requires, but depends on the use which others may see fit to make of their 'right to do as they will with their own'. However large may be

a farm, there is no law that a certain proportion of laborers' dwellings (much less decent dwellings) shall be upon it; nor does any law reserve for the laborer ever so little right in that soil to which his industry is as needful as sun and rain....." (1)

Simon explains that one of the roots of this evil was the poverty of the agricultural labourer. "Unhappily", he says, "agricultural labor, instead of implying a safe and permanent independence for the hard-working laborer and his family, implies for the most part only a longer or shorter circuit to eventual pauperism, - a pauperism which during the whole circuit is so near, that any illness or temporary failure of occupation necessitates immediate resource to parochial relief;" (2)

This meant that the residence of agricultural labourers in any parish was glaringly an addition to its poor rates. That is why the parishes and especially the large proprietors had a pecuniary interest in reducing to a minimum the number of resident labourers in the parish. These proprietors, therefore, in order to evade the burden of supporting the poor agricultural labourers, and to reduce the poor rates, they used to demolish the labourer's dwellings on their estates and to evict the labourers resident in them. Simon gives evidence from Dr. Hunter's report that this destruction of houses in spite of increased local demand for them had been occurring on a considerable scale. These evidences which Dr. Hunter had

(1) & (2) Simon, Sir John, Seventh Report of the Medical Officer of the Privy Council 1864, B.P.P. 1865 [3484] XXVI, p.9.

compiled from 1861 Census, showed that in 821 parishes and townships in England, while the population had increased $5\frac{1}{3}\%$ in 1861 than in 1851, the house room had decreased $4\frac{1}{2}\%$. And ... beside these extreme cases, there were also "innumerable parishes" where the same process was going on. Simon comments of this ... system of eviction saying, "How far it has been intended in the English constitution and law that this kind of unconditional ... property in land should be acquirable, and that a landlord, 'doing as he wills with his own', should be able to treat the cultivators of the soil as aliens whom he may expel from his territory, is a question which I do not pretend to discuss. ... For that power of eviction which I have described does not exist only in theory. On a very large scale it prevails in practice, - prevails no doubt under a variety of motives, but chiefly under that pecuniary one which the Poor Law everywhere supplies, - prevails as a main ... governing condition in the household circumstances of agricultural labor"⁽¹⁾

But where would these expelled labourer's live after their eviction? Simon answers this question saying, "While great owners are thus escaping from poor-rates through the depopulation of the lands over which they have control, the nearest town or open village receives the evicted laborers:- the nearest, I say, but this 'nearest' may be three or four miles distant from the farm where the laborer has his daily toil. To that daily

(1) Simon, Sir John, Seventh Report of the Medical Officer of the Privy Council 1864, B.P.P.1865 [484] XXVI, p.10.

toil there will then have to be added as though it were nothing, the daily need of walking six or eight miles for power of earning his bread. And whatever farm-work is done by his wife and children is done at the same disadvantage".⁽¹⁾

The extent of the evil and its injurious effects on health is more appreciated when one imagines the types of dwellings and lodgings which could be available in towns and open villages for such evicted labourers, and what overcrowding would result from the aggregation of such masses. This was well described in Simon's report as follows:

"In the open village, cottage-speculators buy scraps of land which they throng as densely as they can with the cheapest of all possible hovels. And into these wretched habitations (which, even if they adjoin the open country, have some of the worst features of the worst town residences) crowd the agricultural laborers of England. To show what a mockery of accommodation is likely to be the laborer's lot in the town or open village to which he is driven, I might content myself with referring to almost any page of Dr. Hunter's report".⁽²⁾

But poverty was not the only features of the problem as presented in the report. Simon believed that deficiencies and inefficiency in the administration of sanitary acts were also responsible for the insanitary condition and deplorable qualities of the rural dwellings. In his own words:

(1) & (2) Simon, Sir John, Seventh Report of the Medical Officer of the Privy Council 1864, P.P.1865 [3484] XXVI, p.9, p.11.

"Nor on the other hand must it be supposed that, even when the laborer is housed upon the lands which he cultivates, his household circumstances are generally such as his life of productive industry would seem to deserve. Even on such princely estates his cottage, though secure to him, may be of the meanest description. In other cases, the accommodation which he rents from his employer is often atrociously bad, and at the same time exorbitantly dear. There are landlords who deem any sty^e good enough for their laborer and his family, and who yet do not disdain to drive with him the hardest possible bargain for rent. It may be but a ruinous one-bedroom hut, having no fire-grate, no privy, no opening window, no water-supply but the ditch, no garden, - but the laborer is helpless against the wrong. Even the base principle of (caveat emptor) is inapplicable, where prime necessities of life are concerned, and no alternative purchase can be made. And the Nuisances Removal Acts to which he might have wistfully looked for protection against some evil conditions of dwellings, are probably (as will hereafter be seen) a mere dead letter in the district - perhaps in great part dependent for their working on such cottage-owners as the one from whom his hovel is rented".⁽¹⁾

Simon, in his report after picturing the condition of the dwellings of the rural labourers, discussed their effect on the health of the labourers and their bearing on the Public Health.

(1) Simon, Sir John, Seventh Report of the Medical Officer of the Privy Council 1864, B.P.P.1865 [3484] XXVI, p.12.

He showed how overcrowding would lead to spread of epidemic diseases and favour the extension of contagious disease. In his own words;

"For, again and again, in phrases so uniform that they seem stereotyped, reporters on the spread of epidemic disease in rural districts have insisted on the extreme importance of that overcrowding, as an influence which renders it a quite hopeless task to attempt the limiting of any infection which is introduced. And again and again it has been pointed out, that, notwithstanding the many salubrious influences which there are in country life, the crowding which so favours the extension of contagious disease also favours the origination of disease which is not contagious".⁽¹⁾

In his discussion of the effect of overcrowding on health, Simon gave examples of local epidemics, which were investigated by his officers, and which illustrated clearly the role played by overcrowding, and which spoke loudly and convincingly by giving graphic details of the deplorable state of some lodging and their unbelievable overcrowding, and the succession of epidemic disease among the crowded tenants until all were involved.

Another danger to health, which Simon referred to in his report, was the danger of migratory labour and the nuisances which it commonly implied on public health, through the importation and spread of epidemics in the areas they work in.

(1) Simon, Sir John, Seventh Report of the Medical Officer of the Privy Council 1864, B.P.P.1865 [3484] XXVI, p.13.

He described the way they migrate, and the kinds of places they spent their nights in, either in the open air, or under a farm shed, or in filthy wooden huttings without any constructional or sanitary appliances, or by wedging themselves in over-congested lodging houses of the poorest type, "but exceptionally in anything that can be termed a house either way, as a rule, the accommodation will be of the vilest description, and will imply nuisances which endanger the public health.... With the nuisances which immigrant labor commonly implies, sometimes there will be this further serious complication, - that, amid the adventitious throng of population, there is imported some contagious disease under circumstances which peculiarly favour its spread; and several local epidemics of smallpox, diphtheria, typhoid fever, cholera, typhus, scarlatina, have again and again owed their rise to such contagion from unclean industrial settlements".⁽¹⁾

Thus, in conclusion, it seems to me that Simon in the way he dealt with the problem in his report, linked the problem of housing of rural labourers with the poverty of the agricultural labourers, and indicated the repercussions of the problem on the Public Health. I am under the impression that his report tried to indicate that this localised problem of housing is partly a problem of poverty in some of its respects, and in this way I think Simon

(1) Simon, Sir John, Seventh Report of the Medical Officer of the Privy Council 1864, B.P.P.1865 [3484] XXVI, p.17.

had shown another aspect in which poverty might affect the health of a section of the population.

But of course, beside poverty, he stressed the other factors that contributed to the problem mainly the inefficiency of administration of sanitary laws and their shortcomings.

However, in other of his writings in his book or reports, when he was dealing with the whole question of housing of the poor classes, Simon sometimes doubted whether poverty was such an important element in the case, and seemed definitely against accusing poverty for being mainly responsible for the evil. He considered that the problem and its solution were mainly a problem of sanitary laws and their efficient administration, and he expressed his fears that considering poverty as the main cause of the evil might be taken as a pretence for inaction. He therefore urged that the problem of housing of the poor could be dissociated from the more obstinate problem of poverty and stressed that sanitary authorities could do much to solve the problem by increased efficiency of the sanitary machine in spite of the poverty of the tenants. This view is well illustrated in the Preface to the City of London Reports. He wrote:

"And let not the inquirer too easily admit what will be urged by less earnest persons as their pretext for inaction - that such evils are inalienable from poverty. Let him, in visiting those homes of our labouring population, inquire into the actual rent paid for these dog-holes as they are; and studying the financial experience of Model Dormitories and Model Lodgings, let him reckon what that rent can purchase. He will soon have misgivings as to

dirt being cheap in the market and cleanliness unattainably expensive. Yet what if it be so? Shift the title of the grievance - is the fact less insufferable? If there be citizens so destitute, that they can afford to live only where they must straightway die - renting the twentieth straw heap in some lightless fever-bin, or squatting amid rotten soakage, or breathing from the cesspool and the sewer, so destitute that they can buy no water, - that milk and bread must be impoverished to meet their means of purchase, surely no civilised community dare avert itself from the care of this abject orphanage."

"But, if I have addressed myself to this abjection, partly because the very limited extent in which it starts from a true premiss, it deserves reply, and partly because I wish emphatically to declare my conviction that such evils as I denounce are not the more to be tolerated for their rising in unwilling Pauperism, rather than in willing Filth; yet I doubt whether poverty be so important an element in the case as some people imagine. And although I have referred especially to a poor neighbourhood - because here it is that knowledge and personal refinement will have least power to compensate for the insufficiencies of public law; yet I have no hesitation in saying that sanitary mismanagement spreads very appreciable evils high in the middle ranks of society, and from some of the consequences, so far as I am aware, no station can call itself exempt".

"The fact is, as I have said, that, except against wilful

violence, life is practically very little cared for by the law. Fragments of legislation there are, indeed, in all directions; enough to establish precedents - enough to testify some half-conscious possession of a principle; but for usefulness, little beyond this. In respect of houses, here and there, under local Acts of Parliament, exist sanitary powers, generally of a most defective kind, pretending often to enforce amendments of drainage and water supply, sometimes to provide for the cleansing of filthy and unwholesome tenements, in a few cases to prevent overcrowding, very rarely to ensure stringent measures against houses certified to be unfit for human habitation. Occasionally but a few lines would exhaust the list, an application of the Public Health Act, or some really efficient local Act has put it within reach of the authorities to do all that is needful under certain of these heads. . . . But I know of no such town that would bear strict examination as to its possession of legal powers to fulfil, what I presume must be the principle contemplated by the law - that no house should be let for hire unless presenting the conditions indispensable for health or be hired for more occupants than it can decently and wholesomely accommodate".⁽¹⁾

Simon, again, in his book "English Sanitary Institutions" in the special chapter on Politics of Poverty, expressed the same views. He wrote "When housing infamously unfit is permitted to tender itself for hire, and when the laws

(1) Simon, Sir John, Preface to Reports Relating to The Sanitary Condition of The City of London, London, 1854, pp. XI - XIV.

which have been enacted against nuisances, and against the overcrowding of population within stated limits of room or house or area, are by negligence or corruption left unenforced, the pretence is commonly to be heard, that the wrong has been committed or condoned in compassion for the exiguous earnings of the poor; but persons conversant with the subject will in general be able to discern that the real compassion has not been for the earnings of the poor, but for the profits of the house-jobber or landlord, and that to have permitted the making of profits on such states of dwelling has been as contrary to the true interests and rights of the poor, and as contrary to the methods of good government, as would be to have permitted, in the provision-market, the making of profits on the sale of diseased or rotten meat or fish. In the one case, just as in the other, there is wanted for public protection the strict practical enforcement of a limit to the downward-competition in quality. To the provision-monger,-the vendor of "meat, poultry, game, flesh, fish, fruit, vegetables, corn, bread, flour, or milk", the Public Health Act does not allow under heavy penalty (however plausible may be his pretence of cheapness) that he shall offer for sale provisions which are "diseased or unsound or unwholesome or unfit for the food of man", and the first object at which sanitary reformers have to aim, in regard of the dwellings of the poor, is, that the tender of an unfit commodity shall there be as illegal and as punishable as it would be in the case of food. Were but that condition secured, the question whether the wage-earning classes obtained their sufficiency of

proper house-accommodation would in substance be on a like footing with questions as to their sufficiency of food; would be a simple question of the relation of their wages to the market-price of a necessary of life".⁽¹⁾

In the footnote, he explained by adding "So far as the matter is one of commerce, it would apparently tend to settle itself on some such lines as the following:- In a given district where the competition-price for house-accommodation is extraordinarily high - so high that ordinary wages for such sorts of labour as may be in question will not suffice to purchase proper lodging, is it, or is it not, the case that the demand for labour is of proportionate height. If YES, then (coeteris paribus) the labourer ought to be able to obtain from his employer such additional payment as will cover the local extra-cost of proper lodging, but if NO, then (coeteris paribus) it presumably will be for the labourer's interest to carry his labour to some locality where the relative cost of proper lodging is not higher than he can afford to meet".⁽²⁾

Although I can see the good intention behind Simon's argument, namely his fears that considering the problem as the inevitable outcome of poverty might be taken as a pretence for inaction or might lead to giving up attempts for solving the problem, yet I do not completely agree with him. I consider that poverty was an essential feature of the problem of housing of the poor classes at that time. In his logical argument

(1) & (2) Simon, Sir John, English Sanitary Institutions. 2nd Edition, London, 1897, pp.441, 442.

that the labourer should either get additional payment to afford better lodgment or emigrate to another area where the relative cost of proper lodging was proportionate to the cost of labour, he forgot that the labourer was too helpless to have such a choice, and perhaps he was also indifferent to his state. He was facing strains and pressures he was unable to resist and involved in problems he could not alone understand or solve. He was amidst a social storm from which he did not care to escape, and he could not find alone the way for safety even if he could recognise the dangers. It may be easy to write on paper that the workers should move to places where wages would be proportionate to the cost of proper lodging. - It is easy enough to write that, but it is not so easy for human beings to change the work they had been used to, and to face the insecurity of the unknown. It is not easy for them to move to other places, when they have no assurance to find new jobs there. And after all was there any place at that time where the wages of the working classes would be enough to afford proper lodgings? Is it not true that the wages of these classes almost everywhere were only sufficient to provide the cheapest lodgings in the most overcrowded districts and areas? It had been repeatedly reported from different parts of the country at these times that during periods of distress there used to be a large number of unoccupied empty houses. (1) This observation in itself shows that the workers used to be forced to overcrowd

(1) Hansards Parliamentary Debates, 1841, Vol. LIX, p.1021.

in the lowest types of lodging during periods of slump; and these periods used to recur very frequently in these times. Moreover, could all the owners of the houses of the poor afford the sanitary improvements? Was it not true that some of them at least were not much better off than their tenants?

In conclusion, it appears to me, in deference to some of Simon's writings, that the standard of living and the insufficient wages, were one of the causes of the problem of housing of the poor at that time. It was not the only cause, but it cannot be disregarded. That was also the opinion of the Royal Commission on the Housing of the working classes (1885). They say: "Turning to the unquestioned causes which produce overcrowding and the generally lamentable condition of the homes of the labouring classes, the first which demands attention is the poverty of the inhabitants of the poorest quarters, or, in other words, the relation borne by the wages they receive to the rents they have to pay. This is not the place for a full discussion of the wage question. It will be sufficient to attempt to consider what are the usual income of the classes especially under investigation"

"In considering the rates of wages, whether high or low, hereafter to be quoted, sight must never be lost of the precarious condition of the earnings of many of the working classes. Evidence has been given to show how uncertain is the employment of the majority, how a period of comparative prosperity may be followed by a period of enforced idleness, and how consequently their existence and subsistence can only be described as from hand to mouth. But even if employment were regular,

the wages are so low that existence must be a struggle at the
(1)
best of times".

(1) First Report of Her Majesty's Commissioners for Inquiring into
the Housing of the Working Classes. B.P.P.1884-1885 [C4402]
XXX, p.16.

There is no more convincing argument against poverty, to which the society may listen, more than its dangers on the health of the community, and its responsibility for the needless sacrifice of human lives. So Simon was in the best position to be able to fight poverty, and his voice would be the one most likely to be listened to by the nation in this respect. But how did he think poverty should be fought? What were his solutions for poverty at these times when England presented a picture of vivid contrasts - at the one end of the scale there was wealth and luxury greater than that of any other country in the world, and at the other unbelievable poverty, almost ceaseless toil, and oftentimes, despair".

(1)

"How far poverty can be turned into non-poverty?" and "How the poor can be made less poor?", Simon asked, in the chapter written about the Politics of Poverty in his 'English Sanitary Institutions'. What was his answer to these questions?

(2)

One of the ways of overcoming poverty, in his opinion, was an efficient sanitary administration. He always held and stressed the opinion that sanitary laws and efficient administration of these laws were amongst the strong weapons against poverty. His reasons for that idea were that "Sickness, in the case of the poor, is as terrible an aggravation of the poverty as the poverty is an aggravation of the sickness".

(3)

(1) Frazer, W.M., A History of English Public Health, 1834-1939, London, 1950, p.192.

(2) & (3) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.447; p.454.

Another reason was that he believed that, by efficient administration of necessary laws, you could control the quality of food and lodgement supplied to the poor so that they could get for the same money a more nutritive food and a more sanitary home, thus to guard against their exploitation by the provision-monger and the house-jobber or landlord, - this exploitation which used to aggravate the strains of their poverty and its consequences.

In the case of housing of the poor, his argument to show how efficient sanitary administration will help to relieve the burdens of poverty was as follows "By the tolerance of dwellings unfit for human habitation, and of gross tenemental overcrowding, and of offensive trades in single family living rooms, facilities have been given for greater and greater congestions of populations in districts already congested beyond their earning powers, and beyond their power to afford wholesome shelter" (1) and this had operated doubly to the disadvantage of the poor working classes "first that, as competing vendors of labour in a market where labour is redundant, they steadily keep down, or progressively reduce, the rate of wages; and secondly, that as competing buyers of dwelling space where the accommodation is relatively deficient, they raise higher and higher the rent of lodging, or depress lower and lower the quality of the shelter" (2)

Thus for all these reasons he believed that suitable sanitary legislation would help to alleviate the poverty of the poor classes, or in his own words "It cannot be too loudly

(1) & (2) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.440; p.439.

proclaimed that an EFFICIENT ADMINISTRATION OF THE SANITARY LAWS is among the best helps which can be given to the poorer classes of the population; and that authorities who negligently or corruptly fail of their duties in such administration are among the worst oppressors of the poor".⁽¹⁾ In this point of view he met more or less with the opinions of the Sanitary school of thought.

But Simon did not confine himself to this school of thought, which believed that all that was needed for the betterment of the conditions of the poor working classes was efficient sanitary administration. He had a wider and clearer view of the health problems of the poor, and their relation to their material well-being. He was conscious that sanitation alone would not solve the health problems of the working classes. In his own words "It of course cannot be expected in regard of house-accommodation, any more than in regard of other commodities of life, that, in present social circumstances, the Poorest of the Labouring Classes will be free from hard conditions of stint. Be done what may under the Sanitary Acts to banish from the dwellings of the poor all worst degrees of uncleanness and overcrowding, the condition remains, that scanty earnings can buy but scantily of the necessaries and comforts of life; and that, where the sternest frugality has to be exercised with regard to necessary food and clothing, where indeed but too often severe privation

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.454.

in those respects has to be endured, only very humble purchase of dwelling-space, and still humbler provision of means of comfort and cleanliness within the space, can be afforded. Question, how the house-accommodation of the poorer labouring classes may be rendered such as humane persons would wish it to be, is therefore necessarily in great part question, how far poverty can be turned into non-poverty, how far the poor can be made less poor". (1)

So in dealing with the public health problems of his time, Simon found it inevitable that he should deal with the "immensely difficult" social questions of labour and wages as he found out the great intimate relation between them. He rightly recognised that a great amount of disease, and needless premature death of thousands of the poor classes was a result of the smallness of earning power in the lowest paid branches of industry, as compared with the necessary costs of wholesome and decent living, and that "the possibility of rendering that ratio less unfavourable to the poorer workers, either by cheapening their costs of life, or by bettering their conditions of employment" (2) was a big problem which had a great bearing on the health of the nation.

In more than one place of his 'English Sanitary Institutions', he had shown the vast sacrifices of the working classes to the demands and pressure of industry, and how the commercial tendency was towards starvation wages and low-price labour. He wrote: "The inexorable pressure of the commercial

(1) & (2) Simon, Sir John, English Sanitary Institutions. 2nd Edition, London, 1897, p.444; p.435.

screw is towards starvation-wages, and towards extortion of killing amounts of labour under haphazard sanitary conditions; it is indifferent whether the workers lodge in gutters or pigsties; and its tendency is not to stop of its own accord". (1)

In another place, he described the abject penury of the poorer industrious classes, and the losing conditions under which they seemed to be waging their contest for subsistence saying:

"Masses of population, described as at some cruel disadvantage amid the increase of commercial enterprise around them; numbers, on the one hand, who declare they cannot obtain employment enough for their maintenance, and numbers, on the other hand, who, though employed to their utmost strength, and with work often pushed far beyond the proper limits of industry, gain for themselves only what are known as "starvation-wages" with such insufficiency of food and shelter as these will purchase for them". (2)

(1) & (2) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.440; p.436.

One cannot help admiring the sincerity, and humanity, and the social spirit of these vivid pictures of grinding poverty, and low standards of wages, which led to such hopeless lives and to immense misery, disease and needless deaths. It would be natural for the Twentieth Century reader of these scenes to expect that Simon, therefore as a next step, would condemn, fight and revolt against the economic doctrines and ideas of the time, that had permitted such exploitations, and led to such sacrifices of thousands of lives yearly, and to so large amount of ill-health and disease. But, to one's disappointment, one finds Simon silent against these economic doctrines, or even more or less accepting them, and admitting the policy of non-legislative interference with the price of labour, and taking it for granted that the law should leave wages to find their own level in the struggles of such an unrestricted competition. It is surprising how a man like Simon could be so much concerned and worried about the disastrous fruits of such doctrines, and yet would not try to question the validity of the roots of the whole evil.

The doctrine which mainly influenced the economic life of the country, and consequently the Public Health during the greatest part of the last century, was that of "laissez faire". This doctrine demanded the minimum interference by the government with economic and political affairs, and professed that the State should refrain from interfering with industry, labour and free contract; thus allowing the competition amongst various groups in the nation to determine alone the income and the wealth of each group. Under this doctrine, profits would only be

determined by the free play of competition, and wages should be left to find their own level amid the struggles of free competition, and should be fixed freely in the labour market according to the demand for the competing vendors of labour. The doctrine implies "Freedom of Contract" between capital and labour, disregarding how unfair such contract would be between such unequal parties as the rich influential employers and the needful highly unorganised labourers.

One of the conceptions, founded by the economists at these times, was that of the "Economic Man", which was an abstract imaginary creature, moved solely by exclusively economic motives. It was a creature, stripped from all feelings of sentiment or pity, and of all characteristics other than the purely economical, and impelled by no motive other than that of interest. Thus it should pursue its way blindly, seeking its material advantage, as though impelled by a law of nature, that would disregard everything except the material benefits.

These were some of the economic concepts which had influenced the life and legislation during the greater part of the Nineteenth Century. They had led to gross inequality in the distribution of wealth and that had serious repercussions upon the health of the people. Among the evils they led to "there was one outstanding evil which took precedence of all others, and that was the low standard of wages which led to hopeless and soul-destroying poverty for the vast majority of those who worked with their hands".

(1) Frazer, W.M., A History of English Public Health 1834-1939, London, 1950, p.192.

The real wages of the majority of the working classes "were low, and grinding poverty the constant accompaniment of the lives of the workers, dogging their footsteps ceaselessly and remorselessly from the cradle to the grave".⁽¹⁾

Thus "England during the third quarter of last Century presented a picture of vivid contrasts- at the one end of the scale there was wealth and luxury greater than that of any other country in the world, and at the other, unbelievable poverty, almost ceaseless toil and, oftentimes despair".⁽²⁾

That state of affairs had, of course, a deteriorating effect upon the public health of the nation, and led to the pitiful sacrifices of the health and lives of the poor to the demands of industry and capital. So it is astonishing to find Simon, who, more than anybody else perhaps, was conscious of the effect of such state of low-price labour on the public health of the nation, avoiding the challenge of these economic doctrines, and considering them as unquestionable sacred laws, and taking them as inevitable necessities for the economic life of the country; and even whenever his logic, while discussing any health problem of poverty, should have led him naturally to the condemnation of these doctrines, because everything was pointing to them as the root of the evil, even then he would check his argument from reaching its logical end, and avoid questioning the correctness of these holy economic theories. He was quite careful not to give his mind the full freedom to suspect the

(1) & (2) Frazer, W.H., A History of English Public Health, 1834-1939, London, 1950, p.109; p.192.

divinity of these doctrines, or to challenge their validity, and simply admitted and accepted them as inevitable unquestionable doctrines. It is regrettable that Simon had not the mental audacity to think along different lines from his time. I used to follow his vivid pictures of the poverty of the poor classes, - the meagre nourishment on which low-priced labour was done, - the frequent extreme want of proper housing for labouring populations, - the grinding pressure of unmerciful competition on their incomes and lives, and the great bearing of this privation and want on their health and on the public health of the country. But at the end, instead of reaching the logical conclusion of the necessity of defending the lives of these poor working classes against a harsh, ruthless, merciless, competitive economic life which is not supplying them with the necessities of health and well-being in return of their hard long work - instead, I find Simon accept as unquestionable the economic conceptions of the Century, which were the roots of the whole evil - or at most just raise shadows of doubt about their justness.

As an example I will cite a part of the Preface to the unofficial print of his City of London Reports:-

"If there be citizens so destitute, that they can afford to live only where they must straightway die - renting the twentieth straw-heap in some lightless fever-bin, or squatting amid rotten soakage, or breathing from the cesspool and the sewer, so destitute that they can buy no water - that milk and bread must be impoverished to meet their means of purchase - that the drugs sold them for sickness must be rubbish or poison, surely no

civilised community dare avert itself from the care of this abject orphanage. And - (ruat coelum), let the principle be followed withersoever it may lead, that Christian society leaves none of its children helpless. If such and such conditions of food or dwelling are absolutely inconsistent with healthy life, what more final test of pauperism can there be, or what clearer right to public succour, than that the subject's pecuniary means fall short of providing him other conditions than these? It may be that competition has screwed down the rate of wages below what will purchase indispensable food and wholesome lodgment. Of this as fact, I am no judge; but to its meaning, if fact, I can speak. All labour below that mark is masked pauperism. Whatever the employer saves is gained at the public expense. When, under such circumstances, the labourer or his wife or child spends an occasional month or two in the hospital, that some fever infection may work itself out, or that the impending loss of an eye or a limb may be averted by animal food; or when he gets various aid from his Board of Guardians, in all sorts of preventable illness, and eventually for the expenses of interment, it is the public that, too late for the man's health or independence, pays the arrears of wage which should have hindered his sufferings and sorrow".

Following such clever argument one should expect him to come to a conclusion quite different from the following conclusion, with which he ended his discussion.

(1) Simon, Sir John, Preface to Reports Relating to The Sanitary Condition of The City of London, London, 1854, p.IX.

"Probably on no part of political economy is there more general concurrence of opinion than against any legislative interference with the price of labour. But I would venture to submit, for the consideration of abler judges than myself, that before wages can safely be left to find their own level in the struggles of an unrestricted competition, the law should be rendered absolute and available in safeguards for the ignorant poor - first, against these deteriorations of staple food which enable the retailer to disguise starvation to his customers by apparent cheapenings of bulk; secondly against these conditions of lodgment which are inconsistent with decency and health".⁽¹⁾

How regrettable it is to find his arguments end in such a conclusion. In spite of all the evils he was describing, and although his own logic would point naturally to a different conclusion, yet he seemed quite prepared to agree with the general opinion, and accept the principle of non-interference with wages and "Free Contract" even between such unequal parties as the merciless, pitiless "Economic Man" and its poor victims the labouring populations. He seemed quite prepared to accept that, on the condition that efficient sanitary administration became available, as if sanitary legislation alone would be enough to prevent the evils of such unjust and unfair economic status, which by itself was the main cause of the deterioration of the health and unnecessary sacrifices of the lives of the

(1) Simon, Sir John, Preface to Reports Relating to The Sanitary Condition of The City of London, London, 1854, p.IX.

working classes. It illustrates also his extreme caution what he said in the above passage "It may be that competition has screwed down the rate of wages below what will purchase indispensable food and wholesome lodgment. Of this, as fact, I am no judge, but to its meaning, if fact, I can speak". It was a fact and even he, later in his 'English Sanitary Institutions' in 1897, stated it as a fact, without resorting to such caution and tact.

It may be interesting to analyse and explain Simon's attitude in this respect. In my opinion, Simon was not the man to explore and discover new worlds, although he could organise well the already explored worlds. He was not Alison. He was not that type that would suspect and question what everybody believed, or try to shake and resist the accepted opinions and beliefs. He had not that mental courage and audacity to think along lines opposite to the general trends. The reform movement of the Century was that of sanitation, and he joined it; but although he should have felt from his experience in health the need for another economic movement, he did not have enough initiative to advocate new principles in this field. He, like almost everybody else then, was under the influence of the ideas and the spirit of the time, and his mind was unable to resist the influence of the general beliefs and ideologies, and was moulded by the culture and philosophy of the century. He was conforming to the pattern of the Nineteenth Century, and was in harmony with its spirit. That is why he did not feel competent to dare suspect or challenge what he

must have regarded as the back-bone of the economic life of the country; and he had no other ideology to teach in place of the doctrines which he took for granted as indispensable and inevitable. He did not even see it was possible to think of another ideology. He was never very far ahead of his time.

The following quotations may prove, or rather illustrate my explanation of Simon's attitude, and how he was under the influence of the spirit of the Nineteenth Century. Besides, they give his opinion in two points of some interest in the subject of poverty and disease. He wrote in the chapter upon the Politics of Poverty:

"It appears essential that present society should be more on its guard, not in the angry spirit of Tudor times, but in a spirit equally resolute, against recruitals of loafer life, and of the pauperism which represents wilful idleness. Among the able-bodied who, on plea of being unemployed, beg alms of the public, or recurrently apply for poor law relief, there undoubtedly are large numbers whose unemployedness is more or less voluntary; probably many in whom the idleness is so wilful an offence against the community as to deserve treatment of a penal character".⁽¹⁾

Then referring to private charity he added:

"It should clearly define for itself what is its proper province of action as distinguished from the province of poor-law relief, and within its own province it should (after the spirit of the other province) be at all possible pains to discriminate

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.456.

between proper and improper claims for assistance, and to discourage all the many fraudulent forms of mendicancy and parasitism - all the sham-poverty and wanton unthrift and laziness which would live at the cost of others It is painful to have to recognise as regards this country and most of all as regards London, that, through non-recognition of those elementary principles, infinite quantities of vaguely benevolent intention, together with vast sums of money, run to waste, year after year, under the much-misused name of Charity; while also, with the waste of means and of good intention, mischief, sometimes far-reaching mischief, is done to the classes whose benefit has been intended Among the most flagrant illustrations of the general case are the facts regarding the very numerous medical charities of London: institutions, differing widely among themselves as to scope of work, and as to standing and character and resources: all of them more or less mendicant or expectant as to charitable gifts from the public, and most of them loud in professing financial difficulties, yet none of them under any sort of exterior audit or control: all of them independent of each other: all of them free from any relation to the admirable system of Asylums, Infirmaries and Dispensaries which the Poor-Law has at work within the same area: all or nearly all of them - (except so far as subscribers' tickets may be required and the individual subscriber may choose to investigate) - ready to give gratuitous medical treatment without any sort of inquiry whether the recipient is really so poor as to need that form of alms; and the chief of them giving out-patient

treatment, in this indiscriminate way, on so immense a scale as to raise doubts against the value of what they give"

"..... As regards those almost bacchantic forms of benevolence which offer hospitality to all comers - beds or breakfasts or dinners or suppers, the educated observer will hardly have failed to see that they "create a demand which they can never meet"; (1) that their tendency is "to make relief a source of social disorganisation, an excuse for heedlessness and vice, a counter-attraction to the sober gains of thrift and foresight, an incentive to restless discontent and ceaseless expectation of bounties". (2)

"And even as to what seems the more limited proposal to provide "cheap meals" or "free meals" for groups of ill-nourished children coming to elementary schools, surely the public when besought for alms to fulfil that purpose (unless it be limited to actual paupers) ought to demur to the principles - the indefinitely extensible principles - which the proposal involves: ought to consider whether the principle of exonerating parents from the duty of finding food for their children, and the principle of admitting children to expect from outside alms other food than the food of their family, are principles which in the long run can work for the common weal, either in their relation to public economy, or in their not less important relation to the family-life and the morals and the self-respect of the people". (3)

(1) & (2) Cited by Simon from Annual Report of the Council of the Charity Organisation Society, 1889, pp.28 & 3.

(3) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London 1897, pp.457, 458 & 459.

One can feel the harsh strict spirit of the Nineteenth Century through these lines, which show how much Simon was influenced by the Mid-Victorian age, and how much he was reflecting the soul of the time, and echoing the ideas and attitudes of the period. His mind and ideals were shaped in the moulds of the Nineteenth Century. The Twentieth Century reader will be disappointed if he expects him to think or feel in the way we do now, or to write for example what a recent writer wrote when he was referring to the same problems "What statecraft did not realise during this part of the nineteenth century was that industry and society were making too large demands upon the physical energies of the labouring classes, and that refusal to work which the Poor Law Commissioners deplored was the revolt of the individual against hard soul-destroying and long continued labour".⁽¹⁾

One should not expect the typical Nineteenth Century personality to feel or write this way, and Simon was no exception in this respect. He was not gifted with the wings which made it possible for only very few to fly above and ahead of their times, and to explore new lands. Simon was not one of these. He was a legitimate son of the Nineteenth Century, and his mind was modelled in the Victorian fashion. And that is, in my opinion, the real explanation of his attitude in discussing the economic side of poverty. He could not imagine there should be

(1) Frazer, W.M., A History of English Public Health, 1834-1939, London, 1950, p.107.

any alternative to the much believed in, and deep-rooted economic doctrines of the age.

From the impressions I have got from Simon's writings, I think I have enough material to go so far as to draw these rather general features of his picture, but I am not justified in going as far as Professor Major Greenwood, who referring possibly to the same aspect of Simon's personality, pushed his conclusions to a more extreme extent, and wrote "I can easily see how tactless it would have been in the palmy mid-Victorian age of laissez-faire to anticipate Mr. Shaw's epigram and suggest in an official report that what was the matter with the poor was poverty; that a macabre indictment of the heartless mothers and of the evils of 'reckless fornication' would be much more likely to make our well-to-do grandparents take notice. Still, I have a purely emotional dislike of attacking those who cannot answer, who will never even read the indictment (many could not); that is why I rank Simon ethically below Farr, Southwood Smith, and Chadwick. He was, I think, a great opportunist, wise in his generation". (1)

This statement is referring to a report, written by Simon in 1863 about the very high infant mortality rate in the Marsh Districts. This report was a comment and summarization of the results of the inquiry, made by Dr. Henry Julian Hunter on this subject. This high infant mortality rate was mainly explained by the employment of adult women in agriculture, as

(1) Greenwood, M. (The Younger), Some British Pioneers of Social Medicine, London, 1948, p.92.

a result of which the mothers neglected their children, especially when their agricultural labour was migratory. In Simon's words:

"The mother, as soon as she can rise from her confinement, goes again to work, leaving, while she is away, her infant to anyone who will pretend to take care of it. Instead of its natural food, entirely improper stuff is given it. 'Cow's milk is dear, and often quite unattainable by these people, and sugar sop, a lumpy mass of bread, water, and sugar is given instead'⁽¹⁾".

The report suggested, on the basis of evidence given by Dr. Hunter and about 70 medical practitioners, that some of these infantine deaths were due to deliberate starvation by the mother, or through intentional or unintentional overdose of the opium which was universally employed. "The system, moreover", Simon added "conduces to a vast quantity of reckless fornication. The proportion of illegitimate births is extraordinarily great. And perhaps the darkest shades of Dr. Hunter's picture are for cases where the infant's burthensomeness to its mother is increased by this complication of illegitimacy"⁽²⁾.

Major Greenwood, in commenting on this report, pointed out that wages earned by these farm labourers were very low, proving their extreme privation, which, in his opinion, was the real cause of this high infant mortality; and that the

(1) & (2) Simon, Sir John, Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 [3416] XXVIII, pp.35 & 36.

indictments contained in the report were not fair statements, because evidence of wholesale murder and criminal neglect was at second hand, and also because of the well-known fact that "particular instances of horrid cruelty linger in the memory, as we remember forecasts which came true and forgot those which proved false - and may colour the opinion of perfectly honest witness reporting upon the actions of the 'working classes'."

I may agree with some of Greenwood's argument in these points, but I do not think that he was quite justified in deducing from this report his picture of Simon's personality. I quite see and admit it is difficult to resist the temptation of getting to such a colourful conclusion, especially as tact and caution were among the obvious qualities of Simon, and also because his official career could affect and mould one's personality in this way, and could theoretically account for Dr. Greenwood's picture. But I do not think that Simon consciously took an intentional certain attitude to adapt himself to "our well-do-do grandparents". Dr. Greenwood overlooked the fact that Simon was after all one of these "Grandparents". I rather think that Simon was genuine, and that his writings were a sincere mirror reflection of his mind. Why should Dr. Greenwood expect him to think and feel in the Twentieth Century way? When Simon's ideas and writings failed to conform to recent patterns, and looked in harmony with the Nineteenth Century's mentality, Dr. Greenwood thought that Simon tactfully modified and coloured his writings to suit "the palmy mid-Victorian age". But Simon was the son of this palmy mid-Victorian age, and it is not

surprising that he was thinking with the Century's mentality, and feeling things in the Victorian way. And if one adds to that the fact that Simon's report was a commentary report, and it was a fidele summary of the ideas and evidences given in Dr. Hunter's report including the evidences of about 70 medical practitioners, one should hesitate to think that he was an "opportunist" whose purpose was to write what "would be more likely to make our well-to-do grandparents take notice".

Besides, and of this I speak more emphatically, Simon never hesitated to say and stress that "what was the matter with the poor was poverty". He even said it, in the most impressive way, in that same subject, about which Dr. Greenwood quoted Simon's words, and in the same report, only in earlier pages than those quoted. He was dealing with another problem: the problem of malnutrition of the poor; and he, by the way, referred to the above subject, and said clearly what Dr. Greenwood felt missing in the quoted pages, and what he thought Simon failed to recognise or avoided to say. Commenting on the result of an inquiry which had proved that the diet of indoor operatives was insufficient, Simon says,

"These are very painful reflections, especially when it is remembered that the poverty to which they advert is not the deserved poverty of idleness. In all cases it is the poverty of working populations. Indeed, as regards the indoor operatives, the work which obtains the scanty pittance of food is for the most part excessively prolonged. Yet evidently it is only in a qualified sense that the work can be deemed self-supporting....."

"Also, it seems to me that, where higher degrees of plenty exist, there, very important drawbacks are to be counted. If the wife has been earning money, she has been withdrawn more or less from her housekeeping and motherly duties; and I must say that, the more knowledge I get of the sanitary circumstances of the poor, the more reason I find for dreading any considerable development of that mode of increasing income. Or, if the children have been earning money, they probably have been more or less withdrawn from opportunities of rudimentary education. In either case (and of course often both cases concur in the life of a single household) a better present livelihood is got; - but the price paid for it is in effect a mortgage on the future of the family, - a mortgage which is almost sure to result in the family's eventual deterioration".⁽¹⁾

Also two years earlier, in 1861, Simon was dealing with the same problem of excessive infant mortality, but the investigation was carried out in the industrial areas. In his report, he expressed the same views, and held the same factors responsible for the excessive infant mortality as in the 1863 report. It was almost a repetition of the same ideas. However, one finds parts in the 1861 report, which clearly point to poverty as the origin of the problem, and do not fail to stress that "What was the matter with the poor was poverty". Thus one reads the following in this report:

(1) Simon, Sir John, Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P. 1864 [3416] XXVIII, p.15.

"And the root of the evil is an influence with which English Law has never professed to deal. Money is on one side; penury on the other. Domestic obligation is outbidden in the labour-market; and the poor factory-woman, who meant only to sell that honest industry of hers, gradually finds that she has sold almost everything which other women understand as happiness. But the root of this evil is perhaps out of reach of law — certainly out of reach of remedies which I am competent to advise".⁽¹⁾

This shows his belief that poverty was the root of the evil, and his reports taken as a whole on this subject clearly suggest that he was conscious that the high infant mortality in some areas in England, resulting in his opinion from employment of adult women, was one of the aspects of poverty in the Nineteenth Century and its effect on Public Health; and that is why I have dwelt long on this subject. I am as much aiming to throw more light on Simon as I am trying to show more of his contributions to the different aspects of the effect of poverty on health and I believe that this subject was one of his contributions in this field.

He began to be interested in it in 1853. In his report of that year, he stated that the wide differences of infant mortality, which were to be found in different districts of England, were due to the varying prevalence of two local causes. The first was the degree of common sanitary defects of residence,

(1) Simon, Sir John, Fourth Report of the Medical Officer of the Privy Council 1861, B.P.P.1862 (179) XXII, p.35.

and the second was that the engagement of women in branches of industry in some towns "where, consequently", he said, "these homes are ill-kept; where the children are little looked after; and where infants who should be at the breast are improperly fed or starved, or have their cries of hunger and distress quieted by those various fatal opiates which are in such request at the centres of our manufacturing industry".⁽¹⁾

In 1861, Simon instructed Dr. Greenhow to inquire into this subject. Simon's Instructions, as stated by Dr. Greenhow, were to inquire into the sanitary circumstances of the infantine population of some industrial towns in England and "into the influence exerted upon infantile mortality by the poverty of parents, by illegitimacy of birth, and by the industrial occupation of mothers".⁽²⁾

In 1863, Simon instructed Dr. Henry Julian Hunter to inquire "with regard to the very curious fact, that, in some entirely rural marsh-districts, the habitual mortality of young children is almost as great as in the most infanticidal of our factory-towns".⁽³⁾

I referred previously to the reports written on this inquiry, and Simon, in his English Sanitary Institutions, summed up the result of these inquiries, writing: "we had also shown as an industrial element of very wide operation, that, in proportion as adult women were taking part in factory labour or in

(1) Simon, Sir John, The General Board of Health. Papers relating to the Sanitary State of the People of England, B.P.P.1867-68, XXIII, p. xxxiv.

(2) Greenhow, E. H., Fourth Report of the Medical Officer of the Privy Council 1861, B.P.P.1862 (179) XXII, p. 187.

(3) Simon, Sir John, Sixth Report of the Medical Officer of the Privy Council 1863, B.P.P.1864 (3416) XXVIII, p. 33.

agriculture, the mortality of their infants rapidly increased; that, in various registration-districts, which had such employment in them, the district death-rate of infants under one year of age had been from 2⁽¹⁾ to nearly three times as high as in our standard districts".

If one also looks through Simon's Sixth Report to the Privy Council, one will come across another evidence of the view that the employment of mothers in industry and agriculture, which was leading to this high infant mortality, was partly the result of poverty in the Nineteenth Century. This evidence was in a report by Dr. Edward Smith included in Simon's annual report. It says:

"The labour of women in the fields (whatever may be its disadvantages, and however desirable it may be that it should not be necessary) is under present circumstances of great advantage to the family, since it adds that amount of income to the family which relieves from the pressure of want, and provides shoes and clothing, and pays the rent, and thus enables the whole family to be better fed; at the same time, the exertion in the open air, and oftentimes the good food at the farmhouse, improves the health of the wife, and is not generally (remembering the pecuniary necessity for it) distasteful to her, and when she can find employment the children can obtain employment also, and thus further add to the income of the family. When the income attainable by the husband is sufficient to maintain his family in

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.298.

health and respectability, no doubt the out-of-door occupation of the wife and young children should cease, so as to give better opportunity for cooking and the increase of domestic comfort, and to enable the children to obtain a better education; but the first question at present is, the obtainment by any means of sufficient money to maintain her family. When the husband is temporarily or permanently unable to work the labour of the wife is necessary, and I found many widows maintaining themselves and their orphan children in a respectable manner by husbandry". (1)

This shows how poverty was at the root of the evil, and that it was unquestionably one of the factors that had led to the employment of mothers in industry and agriculture with its consequences on the infant mortality in the Nineteenth Century. However, I think that it was not the only factor, and there were other reasons that accounted for this social phenomenon.

(1) Smith, E., Sixth Report of The Medical Officer of the Privy Council 1863, B.P.P.1864 [3416] XXVIII, p.262

Finally I think it will confirm Simon's prestige in the field of Public Health Administration in this country that he prophesied and advocated the principle of the National Insurance system as the real solution for poverty, at the end of his chapter about the "Politics of Poverty" in his book 'English Sanitary Institutions'. He wrote: "The essential question, by what means shall it be possible for the community to enforce on individuals such industry as will suffice for their present and prospective self-support, and to extract from the early earnings of the industry such proportionate payment as will ensure against future chances of sickness, and against the eventual certainty of old age, is a question which England may perhaps not yet be quite prepared to answer in detail; but it is a question which the country will soon be obliged to answer in a form sufficiently precise for practical application. As a recent writer has well shown in a little book specially addressed to "working men", the tendency of universal compulsory insurance (as on a method which the book explains) would be, within measurable time, to leave the poor law 'without paupers on whom to operate; the sick and aged poor would be supported independently by their own money, instead of being demoralised by a compulsory levy from other people; ratepayers would be relieved from a needless burden, and the multitudes otherwise doomed to pauperism would be raised into the class of self-respecting and self-provided citizens'.

(1) Under our present

(1) Cited by Simon from Blackley, W.L., Thrift and Independence. A Word for Working Men, London 1885.

social conditions, the question of adopting and strictly enforcing that principle (subject of course to such exceptions as individual cases of bodily or mental inability might require) tends almost inevitably to connect itself with all questions of future benefaction of the poor. Especially it would seem reasonable to connect the principle of Compulsory Insurance with the principle of Free Education; for surely, if the State is to provide gratuitous education for the masses of the people, it may reasonably require, as first fruits from the receivers of such education, that they shall, as far as practicable, secure themselves against future pauperism, and thus guarantee the community against further costs on their behalf".

(1)

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.462.

The earlier pages tried to illustrate that Simon showed all his life, even as early as the 1850's a clear understanding and a deep conviction of the idea relating poverty and disease. It may be interesting to try to elucidate the different influences that had affected him and had determined his line of thought in this respect.

One need not search long for these influences, as the idea at that time was not unfamiliar, and could be frequented much in the literature of the period. The evidences, which I gave in the last chapter from medical as well as from ordinary publications seemed to show that the idea was quite accepted during the Cotton Famine (1861-1865), and that the public mind was quite impressed with the relation between disease and destitution. This was obvious in all quarters, in the ordinary press, in the letters from the general public, in the reports of the local Registrars and in the medical literature. So it needed no mental courage from Simon to conceive that idea. Obviously, he must have been naturally disposed to like it, otherwise he would not have espoused it so warmly. But it did not need much ingenuity or originality to think in these terms as this was not unusual at that time. In the last chapter I expressed the opinion that it was the Irish Famine which was greatly responsible for the growth of understanding on this subject and in creating a public opinion about the connection between poverty and disease. The story of this Famine, naturally must have impressed Simon just as it had impressed the whole generation. Simon was more apt to be specially interested in following the events of this famine, as,

in 1848 when he was appointed the Medical Officer of Health for the City of London, prevention of disease became his main concern. And his writings do show that he had followed the events of this famine and was impressed by its lessons. This is especially evident in his reports during the cotton distress. In these reports, as a reaction to the occurrence of a few cases of typhus in Preston he immediately recollected the history of the Irish Famine and its impressive story of the pestilence bred by poverty. It was clear that his apprehensions from the spread of disease in the cotton districts were related to the experience of Ireland during its great Famine. ⁽¹⁾ So it is natural to suppose that the history of this Famine had been one of the factors that might have influenced Simon and directed his views.

One may wonder whether Simon's trend of thought had been influenced in some way or another by Alison's teachings and ideas. It is natural to try to find out whether the writings of Simon in the 50's, 60's and 70's about the relationship between poverty and disease had any relation to the similar works of Alison in the 40's. It appears to me that there was a relationship between the thought of the two and that Simon most probably had been influenced and inspired by the philosophy of Alison.

It may be objected that Alison's campaign had been at a time when Simon was not at all connected with public health, and that it

(1) Simon, Sir John, Fifth Report of the Medical Officer of the Privy Council 1862. B.P.P.1863 (161) XXV, p.17.

was only in 1848 that Simon became involved in this branch of Medicine. In answering this objection, I may mention that Simon was well-known for his wide interests, even in Oriental languages, Art, Metaphysics, etc: (1) and that the public health agitation and the great discussions on the health of the poor during the 40's was too engrossing to fail to attract the attention of any interested medical man. Moreover, there are evidences to show that Simon had been a member of the Health of Towns Association before 1848, (2) a fact proving that the agitated enthusiasm of the forties on public health had attracted his attention and aroused his interest. Moreover, the ideas of Alison and his followers were embodied in the Report on the Sanitary Condition of the Labouring Population of Great Britain, which Simon, as a medical officer of health, must have read. In addition, there is evidence indicating that Simon most probably had heard an address by Alison on the subject of poverty and disease. Simon says the following in his Private Personal Recollections:

"In 1840 (a propos of the meeting of the British Association in Glasgow) I succeeded in seeing many Scotch centres of interest, Edinburgh, Abbotsford, Stirling, Loch Lomond, ...and Inverness". (3)

At this meeting of British Association, to which Simon was referring, Alison read a paper exhibiting his distinctive line of thought, "Illustrations of the Practical Operation of Scottish System of the Poor". He read it on two days, 18th September and

(1) Lancet 1904, Vol. II, p.320.
 (2) McCracken, I.F., "How Sir John Simon Entered the Public Health Service". The Medical Officer 1948, Vol. LXXX, p.158.
 (3) Simon, Sir John, Private Personal Recollections, 1897, p.12.

(1)
21st September. Besides he entered into a long discussion on the subject with Dr. Chalmers on the 23rd September.

And in addition to Alison's paper there were two papers of the same trend read at the same meeting, one by Professor R. Cowan who strongly supported Alison and another by A. Watt, one of Alison's disciples. (2)

So it is natural to expect that Simon, a young medical man then had been impressed by the idea advocated by Alison.

And even part from that, taking into consideration that Alison and Simon were two of the most well-known names in a newly explored field of study living at the same era in one country, one cannot exclude the influence of one on the other, especially as they were talking in the same new, unfamiliar language.

My impression, therefore, is that such an influence occurred, and that the concept adopted by Simon about Poverty and Health in the second half of the century was a further stage in the development and evolution of the concept advanced by Alison in the first half of the century about the same subject.

Simon's trend of thought in this respect may also be partly the effect of his long experience among the poor. He had worked as the Medical Officer of Health of the City of London for seven years (1848-55). During that time he had ample opportunities to mix with the poor classes, and to notice the privations they endure, and to see for himself the filth diseases and the starvation diseases from which they were suffering as a

result of their privation. His experience with these poor masses from the early years of his career must have been responsible for the interest he had always shown in the problem of the effect of poverty on the health of the people.

In the Preface to his City of London Reports (1854), Simon wrote inviting any educated person to visit some of the districts of the poor classes, which of course he had greater opportunities to see, and he expressed his conviction that an hour's visit would suffice to convince any educated person with the need for great and even revolutionary reforms. From his description of what one can see in an hour's visit, one could imagine what effect such scenes had on Simon, and could see how such effects had directed his interests in the problem of poverty and health. I shall quote the picture he had drawn for an hour's visit to demonstrate the effect his experiences in these areas must have had upon his future trends. He wrote:

"Let any such person devote an hour to visiting some very poor neighbourhood in the metropolis, or in almost any of our large towns. Let him breathe its air, taste its water, eat its bread. Let him think of human life struggling there for years. Let him fancy what it would be to himself to live there, in that beastly degradation of stink, fed with such bread, drinking such water. Let him enter some house there at hazard, and - heeding where he treads, follow the guidance of his outraged nose, to the yard (if there be one) or the cellar. Let him talk to the inmates. Let him hear what is thought of the bone-boiler next door, or the slaughter-house behind; what

of the sewer grating before the door; what of the Irish basket-makers upstairs - twelve in a room, who came in after the hopping, and got fever; what of the artisan's dead body, stretched on his widow's one bed, beside her living children".

"Let him, if he have a heart for the duties of manhood and patriotism, gravely reflect whether such sickening evils, as an hour's inquiry will have shown him, ought to be the habit of our labouring population: whether the legislature, which his voice helps to constitute, is doing all that might be done to palliate these wrongs: whether it be not a jarring discord in the civilisation we boast - a worse than pagan savageness in the Christianity we profess, that such things continue, in the midst of us, scandalously neglected; and that the interests of human life, except against wilful violence, are almost uncared for by the Law"⁽¹⁾.

I regard that this experience in such an environment and such a background must have been responsible for inspiring Simon and must have contributed in determining his trend of thought on the connection between poverty and disease.

Again Simon's interest in poverty might be related to the influence of his intimate friends, among whom there were many of the progressive great writers and philosophers of the Century. Simon was greatly interested in the intellectual life of the time and was intimately mixed with the distinguished literary, artistic, political and social circles. In his house,

(1) Simon, Sir John, Preface to Reports Relating to the Sanitary Condition of the City of London, London 1854, p.ix.

gatherings used to take place, for many years, of the celebrities of the time. (1) His brilliant 'salon', was frequented by many of the distinguished men of science, art and thought from Britain and Europe; and among these were many who were espousing the cause of the poor and fighting for the betterment of their social conditions.

Thus among Simon's friends was Charles Kingsley, the Christian Socialist who espoused all his life the cause of the working classes, and the author of "Alton Locke" and "Yeast" which dealt with the social questions of poverty in the last Century, and gave moving scenes from the life of the workers in the "sweated" trades. Many of Kingsley's writings were devoted to describe the misery of the labouring classes, their low wages, their too long hours of work, their wretched homes and places of work, and the disastrous results of these conditions on their health. He was maintaining that the economic system of the time was oppressive, unjust and was causing a great waste of human life and happiness. "Capital", he says, "is accumulated more rapidly by wasting a certain amount of human life, human health, human intellect, human morals, by producing and throwing away a regular percentage of human soot - of that thinking and acting dirt which lies about, and ... breeds and perpetuates itself in ... the dark places of the Earth". (2)

Kingsley was a great believer in sanitary reform and a violent

(1) Lancet 1904, Vol. II, pp.325 & 489.

(2) Cited in Schilling, B.N., Human Dignity and the Great Victorians, New York, 1946, pp.102,

enemy of Laissez-faire; "I shall resist it", he says, "as I do any other snare of the devil...because I look forward to a nobler state of humanity".⁽¹⁾

He, at one time, supported the Chartist movement, but abandoned it later. However he was deeply sympathetic with the workers he saw at Chartist meetings, "the oppressed, the starved, the untaught, the despairing, the insane; 'the dangerous classes', which society creates, and then shrinks in horror like Frankenstein, from the monster her own clumsy ambition has created".⁽²⁾

Among Simon's intimate friends was also John Ruskin, the great writer, who, in addition to his wide interests in Art and Literature, devoted great attention to socio-economic problems and to the condition of the poor. Many of his writings were concerned with the poverty of the lower classes and their low physical and moral conditions. He was extremely tormented with the knowledge of bitter want among the workers, and he, therefore, attacked vigorously the prevalent economic doctrines of "Laissez-faire", the laws of demand and supply and the determination of wages by competition.⁽³⁾ Ruskin's works show his deep compassion for the suffering of the poor and a clear liberal trend of thought. He advocated repeatedly that the

(1) (2) & (3) Cited in Schilling, B.N., Human Dignity and the Great Victorians, New York 1946, p.103; p.114; p.157.

Government should make certain that no one would live in need of food, clothing, fuel and shelter. (1) Among the principal ideas he had espoused were a system of old age pensions, the provision of good homes for the workers, organisation of labour, and a system of National Education. (2)

One can imagine the influence of such friends on Simon, and the effect by this atmosphere of liberality and learning with which he was surrounded. It was in these cultural circles that the new ideas on social problems and the new social trends were evolving and developing. It is no wonder therefore, that Simon, surrounded by such associates, and living in such an atmosphere, would devote a chapter in his book to the politics of poverty, the engrossing topic of the writers of the period. Moreover, Simon, who was French in origin, travelled extensively on the Continent and became frequented with many of the writers and the men of art and science in France and Germany. In his different visits, he was specially concerned in getting acquainted with the literary and artistic life and with the famous men of thought. (3) On the Continent during this era, there were great movements and sharp evolution in the social trends, and there was an agitated interest in the social problems of the working classes, and this might have influenced Simon's lines of thought.

(1) Schilling, B.N., Human Dignity and the Great Victorians, New York, 1946, p.165.

(2) Dictionary of National Biography, Oxford, 1921-22.

(3) Lancet 1904, Vol. II, p.489.

Again, early in his life, Simon was "strongly influenced" (1) by his master Joseph Henry Green, to whom he was apprenticed for studying Surgery. Green was the intimate friend of Samuel Taylor Coleridge, (2) the great humane philosopher and writer, who showed in his works great sympathy and compassion with the Poor. (3) B.N. Schilling considers Coleridge the legitimate ancestor and predecessor of Kingsley, William Morris and other writers who espoused the purpose of the poor during the last Century. (4) Dr. Green was extremely influenced by Coleridge's philosophy. After Coleridge's death he devoted "the whole remaining strength and earnestness of his life to the one task of systematising, developing and establishing, the doctrines of Coleridgean philosophy". (5) He wrote a book "Spiritual Philosophy" which was meant to analyse the Coleridgean philosophy and was founded on Coleridge's teachings. Green died before publishing this book, and it was Sir John Simon who revised it, and published it in 1865, with an introduction about Green's life. So it is natural to assume that Simon's early thought was affected by Coleridge's humane trends. It is worth mentioning in this respect that Simon's long-life friend John Newton Tomkins, who

(1) & (2) Lancet, 1904. Vol. II, p.489.

(3) Schilling, B.N., Human Dignity and the Great Victorians, New York, 1946.

(4) Schilling in giving an account of Coleridge's views says, "Coleridge was among the first to point out the sad condition of children working in factories and to insist that their labour would result in diminished vigor and future ill-health... But the parents were to be pitied equally with the children. They suffered under a designation which seems greatly to have irritated Coleridge; he wonders whether despite the tremendous increase in English commerce, the nation as a whole is any happier, whether the condition of the lower classes has not actually deteriorated and whether prosperity is genuine in which healthy labourers are commonly styled "the labouring poor". The wealth of England may have trebled, but what of the quality of human life? Coleridge finds that too high a price has been paid and that "the machinery of the wealth of the nation" is made up "of the wretchedness, disease and depravity of those who should constitute the wealth of the nation!", p.48.

(5) Green, J.H., Spiritual Philosophy, Founded on the Teachings of the Late Samuel Taylor Coleridge. Edited by Simon, John, London and Cambridge, 1865, p.xxxiv.

shared with Simon his literary interests, cherished a lock of Coleridge's hair which he brought from the necropsy performed (1) by Green. So it is quite possible that Coleridge's writings were among the early influences that had contributed to Simon's interest and sympathy with poverty.

However, in discussing the different factors that had influenced Simon's views on poverty and disease, one should not forget the effect of his scientific research in this respect. It was this research he pursued or directed in the different public health problems that had impressed him strongly with the injurious effects of privation in health. In every aspect of health and disease, inquiries revealed that poverty was the main public health problem of the country and the great obstacle for attaining better standards of health. That is why, as the years passed on, and more and more research was done, Simon became more and more convinced with the evils of poverty, and his writings showed greater and greater conviction with the relationship between the health and the material well-being of the lower classes. Simon's great programme was to make public health a field of scientific research, and in carrying out this programme, he realized more and more the hazards of poverty. By trying to find out "true facts and true interpretations of facts, with regard to the diseases of the country, and the causes producing them", (2) Simon got more and more confirmation and

(1) Lancet 1904, Vol. II, p.489.

(2) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.287.

emphasis of the responsibility of privation in the causation of disease. And in "endeavouring" that all considerable phenomena of disease prevalence in the country should be seen and measured and understood with precision - should be seen as exact quantities, be measured without fallacious admixture, be understood in respect of their causes and modes of origin",⁽¹⁾ he was more and more impressed with the injurious effects of poverty on health.

(1) Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897, p.288.

BIBLIOGRAPHY OF VOLUME I

BOOKS, PAMPHLETS AND JOURNALS

- Adshead, J., Distress in Manchester. Evidence on the State of the Labouring Classes in 1840-1842, London, 1842.
- Alison, Somerville, Scott, Address to the Working Classes on the Prevalence of Fever and Disease in General. 3rd Edition, Edinburgh, 1838.
- Alison, S.S., "The State of the Poor in Scotland". London Medical Gazette, 1844-45, Vol. I (Vol. XXXV), p.311.
- Alison, W.P., "Quarterly Report of the New Town Dispensary - 1st March - 1st June, 1817". Edinburgh Medical and Surgical Journal, 1817, Vol. XIII, p.400. (Unsigned)
- Alison, W.P., Blackwood's Edinburgh Magazine, 1836, Vol. XL, pp.494 & 812 (Unsigned).
- Alison, W.P., Observations on the Management of the Poor in Scotland and its Effects on the Health of the Great Towns. 1st & 2nd Editions, Edinburgh and London, 1840.
- Alison, W.P., Reply to the Pamphlet Entitled "Proposed Alteration of the Scottish Poor Law Considered and Commented on" by David Monypenny Esq., of Pitmilly, Edinburgh and London, 1840.
- Alison, W.P., Illustrations of the Practical Operation of the Scottish System of Management of the Poor. (From J. Stat.Soc., 1840, Vol. III), London, 1840.
- Alison, W.P., Further Illustrations of the Practical Operation of the Scotch System of Management of the Poor. (From J. Stat. Soc., 1841, Vol. IV), London, 1841.

Alison, W.P., Reply to Dr. Chalmers' Objections to an Improvement of the Legal Provisions for the Poor in Scotland, Edinburgh and London, 1841.

Alison, W.P., Observations on the Epidemic Fever of 1843 in Scotland and its Connection with the Destitute Condition of the Poor, Edinburgh and London, 1844.

Alison, W.P., Remarks on the Report of Her Majesty's Commissioners on the Poor Law of Scotland, Edinburgh and London, 1844.

Alison, W.P., The Famine of 1846-7 in the Highlands of Scotland and in Ireland, Edinburgh and London, 1847.

Alison, W.P., Letter to the Chairman of the Edinburgh Parochial Board, on the Present Position of the Question Relative to the Claim of the Able-bodied Unemployed to Legal Relief in Scotland, Edinburgh and London, 1848.

Alison, W.P., Observations on the Reclamation of Waste Lands and their Cultivation by Croft Husbandry Considered with a View to the Productive Employment of Destitute Labourers, Paupers and Criminals, Edinburgh and London, 1850.

Alison, W.P., A Letter to Sir John McNeill on Highland Destitution and the Adequacy or Inadequacy of Emigration as a Remedy, Edinburgh and London, 1851.

Alison, W.P., On the Present State of the Law of Settlement and Removal of Paupers in Scotland (Read at the Statistical Section of the British Association at Belfast, September, 1852), Dublin Statistical Society, Dublin, 1852.

- Alison, W.P., "On the Effect of Poverty and Privation on the Public Health". Transactions of the National Association for the Promotion of Social Science (Liverpool meeting) 1858, pp.434-443.
- Arnold, R.A., The History of the Cotton Famine, London, 1865.
- Bateman, T., Succinct Account of the Contagious Fever of this Country, London, 1818.
- Baxter, G.R.W., The Book of the Bastiles..., London, 1841.
- Blackley, W.L., Thrift and Independence. A Word for Working Men, London, 1885.
- Blackwood's Edinburgh Magazine, 1840, Vol. XLVIII, p.819.
- Brotherston, J.H.F., Observations on the Early Public Health Movement in Scotland. London, 1952.
- Buchanan, G., "On Recent Typhus in Lancashire". Transactions of the Epidemiological Society of London, 1857, Vol. II, pp.19; 18.
- Callanan, J.; Kennedy, H.; Lalor; Lamprey, J.; Pemberton; Popham, J.; Reid, S.; Ross; and others "Report on the Epidemic Fever in Ireland". Dub. Quart. Journ. Med. Sc., 1849, Vol. VII, VIII.
- Chadwick, E., "On the Comparative Results of the Chief Principles of the Poor Law Administration in England and Ireland as Compared with that of Scotland". Transactions of the National Association for the Promotion of Social Science (Edinburgh Meeting), 1863, pp.712-725.
- Chalmers, T., On the Sufficiency of the Parochial System without a Poor Rate, for the Right Management of the Poor, Glasgow, 1841.

- Chisholm, C., "An Essay towards an Inquiry how far the Effluvia from Dead Animal Bodies, Passing through the Natural Processes of Putrefaction, are Efficient in the Production of Malignant Pestilential Fevers". Edinburgh Medical and Surgical Journal, 1810, Vol. VI, p.389.
- Cleland, J., Statistical Tables Relative to the City of Glasgow. 3rd Edition, Glasgow, 1823.
- Clutterbuck, H., Observations on the Prevention and Treatment of the Epidemic Fever at present Prevailing in the Metropolis, and Most Parts of the United Kingdom to which are added Remarks on some of the Opinions of Dr. Bateman and others on the Same Subject, London, 1819.
- Corrigan, D.J., Lancet 1829-30, Vol. II, pp.569-600; 614.
- Corrigan, D.J., On Famine and Fever as Cause and Effect in Ireland, Dublin, 1846.
- Cowan, R., Vital Statistics of Glasgow, I. Statistics of Fever and Smallpox Prior to 1837; II. Statistics of Fever for 1837; III. Remarks Suggested by the Mortality Bills. (Read to the Statistical Society of Glasgow, April 1837 and May 1838), Glasgow and Edinburgh, 1838.
- Cowan, R., "Statistics of Fever in Glasgow for 1837" Lancet, 1838-39, Vol. II, p.145.
- Cowan, R., "Vital Statistics of Glasgow Illustrating the Sanitary Condition of the Population". J. Statist. Soc. 1840, Vol. III, pp.257-292.
- Creighton, C., A History of Epidemics in Britain, Cambridge, 1894.

- Curran, J.O., "Observations on Scurvy as it has lately Appeared throughout Ireland and in Several Parts of Great Britain".
Dub. Quart. Journ. Med. Sc. 1847, Vol. IV, p.84.
- Duncan, Andrew (Elder), Heads of Lectures on Medical Police,
Edinburgh, 1801.
- Duncan, Andrew, (Junior), "Report on the Present State of Fever in Edinburgh". The Edinburgh Magazine and Literary Miscellany,
1817, Vol. I, pp.348, 349.
- Easton, J.A., "Poverty in relation to Disease". Transactions of the National Association for the Promotion of Social Science (Glasgow Meeting) 1860, pp.655-659.
- Edinburgh Medical and Surgical Journal, 1817, Vol. XIII, p.119;
1818, Vol. XIV, pp.528-529; 1840, Vol. LIII, pp.494-496.
- Elliotson, J., Lancet, 1829-30, Vol. II, p.441.
- Ferguson, T., The Dawn of Scottish Social Welfare, Edinburgh and London, 1947.
- Frank, J.P., "The People's Misery: Mother of Diseases", 1790.
Translated from the Latin by H.E. Sigerist, Bull. Hist. Med.1941,
Vol. IX, pp.88-100.
- Fraser, J., "On the Excessive Mortality Occurring in Cities and Large Towns". Transactions of the National Association for the Promotion of Social Science (Glasgow Meeting) 1860, pp.648-654.
- Frazer, W.M., A History of English Public Health, 1834-1939.
London, 1950.
- Green, J.H., Spiritual Philosophy: Founded on the Teachings of the Late Samuel Taylor Coleridge. Edited by John Simon, London and Cambridge, 1865.

Greenwood, H., *Some British Pioneers of Social Medicine*,
London, 1948.

Hamilton, R., "The Epidemic of Typhus and Cholera in Liverpool",
Lancet, 1867, Vol. II, pp.608-609.

Howard, R.B., *An Enquiry into the Morbid Effects of Deficiency of
Food Chiefly with Reference to their Occurrence amongst the
Destitute Poor, London and Manchester*, 1839.

J.W.T., "Remarks on the Diseases Lately Prevalent in Edinburgh",
Blackwood's Edinburgh Magazine, 1817, Vol. I, p.396.

Kennedy, H., *Observations on the Connection between Famine and
Fever in Ireland and Elsewhere.* [Summarised in the *Dub. Quart.
Journ. Med. Sc.*, 1847, Vol. IV, pp.150-151.]

Kidd, Joseph, *Times*, 6th May, 1847, p.7f.

Lancet, (Editorials) 1838-39, Vol. II, p.145; 1839-40, Vol. II,
p.579; 1841-42, Vol. II, p.791; 1844, Vol. I, p.734;
1862, Vol. II, pp.486 & 488; 1904, Vol. II, pp.320 & 489.

Latham, P.M., *An Account of the Disease Lately Prevalent at the
General Penitentiary, London*, 1825.

London Medical Gazette, (Editorials) 1839-40, Vol. I, pp.759, 762,
790, 854; Vol. II, pp.110, 664, 844, 871.

MacArthur, Sir William, "A Medical Survey of the Irish Famine
of 1846". (A Robert Campbell Memorial Oration).

Ulster Med. J., 1951, Vol. XX, pp.1-15.

McCracken, I.E., "How Sir John Simon Entered the Public Health
Service", *The Medical Officer*, 1943, Vol. LXXX.

Macdonald, D.F., *Scotland's Shifting Population, (1770-1850)*,
Edinburgh, 1937.

Malthus, T.R., An Essay on the Principle of Population.

6th Edition, London, 1826.

Murchison, C., Transactions of the National Association for the

Promotion of Social Science (Liverpool Meeting) 1858, p.54B.

Murchison, C., A Treatise on the Continued Fevers of Great Britain

1st Edition, London, 1862.

Noble, D., "Fluctuations in the Death Rate". Transactions of

the Manchester Statistical Society, 1863-64, pp.1-18.

Noble, D., "On Certain Popular Fallacies Concerning the

Production of Epidemic Diseases". Transactions of the

Manchester Statistical Society, 1859-60, pp.1-22.

O'Brien, W.P., The Great Famine in Ireland and a Retrospect of

the Fifty Years 1845-95, London, 1896.

O'Rourke, J., The History of the Great Famine of 1847 with

Notices of Earlier Irish Famines, Dublin 1875.

Schilling, B.N., Human Dignity and the Great Victorians,

New York, 1946.

Scott, C., Remarks on the Circumstances and Claims of the Indigent

Poor and the Inadequacy of the Present System of Parochial

Relief in Scotland with Reference especially ... to Peterhead.

Aberdeen, Peterhead, 1841.

Scrope, G.P., A letter to the Agriculturalists of England on the

Expediency of Extending the Poor Law to Ireland...., London, 1830

Scrope, G.P., Plan for a Poor Law for Ireland with a Review of

the argument For and Against it..., London, 1833.

Scrope, G.P., How is Ireland to be Governed..., London, 1846.

- Scrope, G.P., Letters to the Right Hon. Lord John Russell, on the Expediency of Enlarging the Irish Poor Law to the Full Extent of the Poor Law of England, London, 1846.
- Scrope, G.P., Reply to the Speech of the Archbishop of Dublin... Against the Poor Relief (Ireland) Bill, London, 1847.
- Scrope, G.P., Remarks on the Irish Poor Relief Bill, London, 1847.
- Scrope, G.P., The Irish Relief Measures Past and Future, London, 1848.
- Scrope, G.P., A Plea for the Rights of Industry in Ireland...., London, 1848.
- Scrope, G.P., Some Notes of a Tour in England, Scotland and Ireland, Made with a View to the Inquiry, Whether our Labouring Population be really Redundant. London, 1849.
- Scrope, G.P., The Irish Poor Law, How Far it has Failed and Why?.. London, 1849.
- Scrope, G.P., The Irish Difficulty, and How it must be Met... London, 1849.
- Scrope, G.P., Draft Report Proposed by Mr. Poulett Scrope to the Select Committee of the House of Commons on the Irish Poor Law, London, 1849.
- Sigerist, H.E., Bull. Hist. Med., 1941, Vol. IX, pp.81-87.
- Simon, Sir John, Preface to Reports Relating to the Sanitary Condition of the City of London, London, 1854.
- Simon, Sir John, English Sanitary Institutions, 2nd Edition, London, 1897.
- Smyth, George Lewis, Ireland Historical and Statistical, London, 1844.

- Stark, James, Inquiry into Some Points of the Sanatory State of Edinburgh, Edinburgh, 1847.
- Stark, J., Report on the Mortality of Edinburgh and Leith for the year 1847, Edinburgh, 1848.
- Stark, James, "Contribution to the Vital Statistics of Scotland", J. Stat. Soc. 1851, Vol. XIV, pp.48-87.
- Strang, John, Vital Social and Economic Statistics of Glasgow for 1851, Glasgow, 1852.
- Strang, John, Vital Social and Economic Statistics of Glasgow for 1861, Glasgow, 1862.
- Times, 27th August, 1840; 3rd December, 1842; 23rd June, 1847; 23rd, 25th, 27th, 28th, 31st October, 1862; 1st & 18th November, 1862.
- Trench, W.S., Report of the Health of Liverpool During the Year 1864, Liverpool 1865, p.12.
- Trevelyan, Sir Charles, The Irish Crisis, London, 1880.
- Watt, A., The Glasgow Mortality Bill for the year 1840. Glasgow, 1841.
- Watt, A., The Vital Statistics of Glasgow for the Years 1843 & 1844, Glasgow, 1846.
- West, T., A Treatise on Pyrosis Idiopathica or Water-Brash. London, 1841.
- Yule, I., Observations on the Cure and Prevention of the Contagious Fever now Prevalent in the City of Edinburgh, Edinburgh, 1818.

MANUSCRIPTS

- Alison, W.P., Lectures at Edinburgh on Medical Police and Jurisprudence. MS. Lectures, 1821, Roy. Soc. Med. Library.
(In the autograph of Sir Thomas Watson)

Gregory, James and Alison, W.P., Notes on a Course of Lectures on the Practice of Medicine Delivered from the Professorial Chair of Edinburgh. MS. Lectures 1820-21, Roy. Soc. Med. Library. (In the autograph of Sir Thomas Watson)

GOVERNMENT PUBLICATIONS

Britain

Papers Containing the Report of the Physicians on the State of Disease in the Penitentiary at Millbank, 1823.

B.P.P.1823 (256) (309) (545) V.

Report from the Select Committee on the State of Discipline, Diet, and Prevailing Disease in the Penitentiary at Millbank, 1823. B.P.P.1823 (533) V.

Fourth Annual Report of the Poor Law Commissioners for England and Wales, 1838. Appendix A, B.P.P.1837-38 (147) XXVIII, 145.

Copies or Extracts of Correspondence on the Subject of Distress in Bolton, with the Report of the Assistant Commissioner sent by Her Majesty's Government to Inquire into Alleged Cases of Destitution and Death, 1841. B.P.P.1841 sess.2 (58) II.

General Report on the Sanitary Condition of the Labouring Population of Great Britain.

Local Reports on the Sanitary Condition of the Labouring Population of England.

Reports on the Sanitary Condition of the Labouring Population of Scotland.

[Presented to Parliament, July, 1842.]

Supplementary Report on the Result of a Special Inquiry into the Practice of Intements in Towns by E. Chadwick. B.P.P.1843 (509) XII.

First Report of the Commissioners for Inquiry into the State of
Large Towns and Populous Districts, 1844.

B.P.P.1844 (572) XVII.

The General Board of Health:

Papers Relating to the Sanitary State of the People of England,
being the Result of an Inquiry into the Different Proportions
of Deaths Produced by Certain Diseases in Different Districts
in England, Communicated to the General Board of Health by
E.H. Greenhow, M.D., with an introductory Report by the Medical
Officer of the Board. B.P.P.1857-58 [2415] XXIII.

Fourth Report of the Medical Officer of the Privy Council for 1861,

B.P.P.1862 (179) XXII.

Fifth Report of the Medical Officer of the Privy Council for 1862.

B.P.P.1863 (161) XXV.

Sixth Report of the Medical Officer of the Privy Council for 1863.

B.P.P.1864 [3416] XXVIII.

Seventh Report of the Medical Officer of the Privy Council for

1864. B.P.P.1865 [3434] XXVI.

First Report of Her Majesty's Commissioners for Inquiring into
the Housing of the Working Classes.

B.P.P.1884-1885 [C-4402] XXX.

Census of Great Britain, 1851.

Population Tables. Numbers of the Inhabitants in the years 1801, 1811, 1821, 1831, 1841, 1851, in Scotland and in Islands in the British Seas, 1852. B.P.P.1852-1853 [1632] LXXXVI.

Population Tables Part II: Ages, Birth Place of the People, Civil Condition, Occupation &c., Vol. I,

B.P.P.1852-53 [1691-1] LXXXVIII.

Quarterly Return of the Marriages, Births and Deaths, Registered in the Divisions, Counties and Districts of England. Quarters, January-March, April-June, July-September, October-December, 1862.

1863

Scotland

Reports from Assistant Handloom Weavers' Commissioners.

Reports by J.C. Symons, Esq., on the South of Scotland, and on France, Belgium, Switzerland, and part of Austria, 1839.

B.P.P.1839 (159) XLII.

Report from the Select Committee Appointed to Inquire into the Treatment of the Unemployed and Destitute Inhabitants of Paisley since 1841, Together with the Minutes of Evidence Taken Before Them, 1843. B.P.P.1843 (115) VII.

Report from Her Majesty's Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws in Scotland, 1844.

B.P.P.1844 (577) XX.

Appendix Pt. I, B.P.P.1844 (563) XX.

Appendix Pt. II, B.P.P.1844 (564) XXI.

Appendix Pt. III, B.P.P.1844 (565) XXII.

First Detailed Annual Report of the Registrar General of Births,
Deaths and Marriages in Scotland (for the year 1855)..

B.P.P.1861 [2314] XVIII.

Ireland

First Report from the Select Committee on the State of Disease
and Condition of the Labouring Poor in Ireland.

B.P.P.1819 (314) VIII.

Third Report of the Commissioners for Inquiring into the
Condition of the Poorer Classes in Ireland, 1836.

B.P.P.1836 [43] XX.

Report of Geo. Nicolls, Esq., to His Majesty's Principal
Secretary of State for the Home Department on Poor Laws,
Ireland. First Report, 1837, B.P.P.1837 [69] LI.

Report from Her Majesty's Commissioners of Inquiry into the State
of the Law and Practice in Respect to the Occupation of
Land in Ireland 1845. B.P.P.1845 [605] XIX.

Evidence Taken before Her Majesty's Commissioners of Inquiry into
the State of Law and Practice in Respect to the Occupation of
Land in Ireland, 1845.

Pt. I, B.P.P.1845 [606] XIX.

Pt. II, B.P.P.1845 [616] XX.

Pt. III, B.P.P.1845 [657] XXL.

Index to Minutes of Evidence Taken Before Her Majesty's
Commissioners of Inquiry into the State of Law and Practice
in Respect to the Occupation of Land in Ireland, 1845, Pt. V,
B.P.P.1845 [673] XXII.

Report of Dr. Playfair and Mr. Lindley on the Present State of the Irish Potato Crop and on the Prospect of the Approaching Scarcity, 1846, B.P.P.1846 (28) XXXVII.33.

Abstracts of the Most Serious Representations Made by the Several Medical Superintendents of Public Institutions (Fever Hospital, Infirmaries, Dispensaries) in the Provinces of Ulster, Munster, Leinster and Connaught 1846. B.P.P.1846 (120) XXXVII, 479.

Report of the Select Committee of the House of Lords on the Colonisation from Ireland, 1847. B.P.P.1847 (737.737-II) VI.

First Annual Report of the Commissioners for Administering the Laws for Relief of the Poor in Ireland. Dublin 1848.
B.P.P.1847-48 [963] XXXIII.

Report of the Commissioners of Health, Ireland, on the Epidemics of 1846 to 1850, Dublin, 1852. B.P.P.1852-53 [1562] XLI.

Report of the Commissioners Appointed to take the Census of Ireland for the Year 1841. 1843 B.P.P.1843 [504] XXIV.

The Census of Ireland for 1851.

Pt. V, Vol. I, Containing the Report, Tables of Pestilence, and Analysis of the Tables of Deaths. B.P.P.1856 [2087-1] XXIX.

Pt. V, Vol. II, Containing the Tables of Deaths and Index.
B.P.P.1856 [2087-1] XXX.

Pt. VI, General Report. B.P.P.1856 [2134] XXXI.

STATUTES

An Act for the Amendment and Better Administration of the Laws
Relating to the Relief of the Poor in Scotland,

8 & 9 Vic. C.83.

[24th August, 1845]

An Act to make Provision, until the First Day of September One-
thousand eight hundred and forty seven, for the treatment of
poor persons afflicted with Fever in Ireland. 9 Vic. Cap 6.

[24th March, 1846]

An Act to amend the Laws relating to the Importation of Corn.

9 & 10 Vic C.22

[26th June, 1846]

An Act to make further Provision for the Relief of the Destitute
Poor in Ireland. 10 Vic. C.31

[8th June, 1847]

MISCELLANEOUS

Hansard's Parliamentary Debates, 1841, Vol. LIX; 1844, Vol. LXXVI;
1845, Vol. LXXXI & LXXXII; 1846, Vol. LXXXIII, LXXXIV, LXXXV,
& LXXXVI; 1847, Vol. LXXXIX, XCI; 1848, Vol. XCVII;
1849, Vol. CIII, CV.

A Collection of Papers Relating to the County Hospital for Sick
and Lane &c. at Winchester, London, 1737.

(Photographed at the London School of Hygiene and Tropical
Medicine).

Report of the Meeting held in the Relief Church, Paisley, on
5th October, 1816, to Consider the Present Distress of the
Country, Paisley, 1816.

Association for Obtaining an Official Inquiry into the
Pauperism of Scotland [Minutes of the First Meeting of the
Association], Edinburgh, 1840.

Pastoral Address, Relative to the Appointment of July 22nd, 1841,
as a Day of Humiliation, Thanksgiving and Prayer.
Edinburgh, July, 1841, p.3.

Provincial Medical and Surgical Association: The Administration
of Medical Relief to the Poor, under the Poor Law Amendment
Act and Other Legislative Provisions for the Public Health,
Considered in the Reports of the Poor Law Committee of the
Provincial Medical and Surgical Association, London, 1842.

Distress in Ireland. Narratives of Visits Made in 1846 and
1847 by Members of the Society of Friends, in the Distressed
Districts. London, 1846.

First Report by the Central Board of Management of the Fund
Raised for the Relief of the Destitute Inhabitants of the
Highlands and Islands of Scotland, Glasgow, 1847.

Second Report by the Central Board of Management of the Fund
Raised for the Relief of the Destitute Inhabitants of the
Highlands and Islands of Scotland, Glasgow, 1847.

Digest of Evidence Taken before Her Majesty's Commissioners of
Inquiry into the State of the Law and Practice in Respect to
the Occupation of Land in Ireland, By J.P. Kennedy,
Secretary of the Land Commission, Dublin, 1843.

Memorial Regarding Amendments in the Scottish Poor Law, Proposed
by William P. Alison, ... Revised and Adopted by a Committee
formed from the Managers of Several Charitable Institutions
in Edinburgh, Edinburgh and London, 1852.