

June 1887

"Indigestion as found
amongst
Finnmen"

A Thesis
for the

M. D. Degree of the University of Glasgow.

By

W. J. Gardner Robinson, M.B.

of Hilgay

Downham Market

Norfolk.

ProQuest Number:27552941

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 27552941

Published by ProQuest LLC (2019). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

2

Contents. —

	<u>Page</u>
Title	1
Preface	3
Part I. — Its Causation	
(a) Predisposing Causes	7
(b) Exciting Causes	26
Part II. — Its Symptoms	37
Part III. — Its Frequency and Effects	51
Part IV. — Its Treatment — General	54
1. Hygienic	55
2. — Dietetic	58
3. — Medicinal	67

101

Preface. -

The subject of "Disorders of Digestion" has lately been prominently brought forward by several authors, and was chosen for the Lettsomian Lectures by Dr. Lauder Brunton in January, 1885. -

Considering the frequency of the cases grouped under the title of "Indigestion", it seems somewhat strange that so many of our text-books should say so little about it; although it is without doubt the commonest ailment of civilized life. - I have chosen the subject of "Indigestion as found amongst Females" in order that I might be more at liberty to point out any endemic influences (imaginary or real) which may either predispose to or complicate it. Coming here to commence practice in October, 1883, during the past three and a half years I have found it

the most common, most important and most troublesome malady to deal with. —

Amongst young members of the profession like myself, there is an inborn love of theory and treatment which is readily self satisfying; this must lead to a great exaggeration of the number of cases classed as Indigestion. More especially is this to be guarded against when practising in a strange and somewhat peculiar locality like the low lying, — shall I say Dutch like, — district, known as the Fens. It will be necessary for me to notice in detail certain features, such as climate, soil, &c, amongst the predisposing causes. —

I am well aware that I have chosen a subject, which, if the term "Indigestion" be used strictly, is not a disease but merely a prominent symptom; the name does not literally mean a diseased process but its consequence; and as a result of this process

food is not digested or digested more or less imperfectly or painfully. Looked at in this light Indigestion is an exceedingly common complaint. What I mean by the term in the following pages is a somewhat similar definition, in other words; viz, a failure in the stomach or intestines or both in the conversion of what is taken as food into nutritious aliment, and, as a consequence of such failure, some or all of the ill-effects described under the heading "Symptoms," result.

Indigestion defined thus, may be and undoubtedly is, the forerunner of many diseases. —

Having been a sufferer from the complaint myself, its causation, symptoms and progress, have ever had a great interest for me, and I have seized every opportunity of watching the disease and especially since settling here and noting the great difference between the cases I find here in the Falls and what

I have seen in my native district of
North Lancashire, or in Cleator Moor, Cumberland,
where I served my first apprenticeship. -

Indigestion as found amongst Fenmen.

Part I. -

Its Causation. -

- (a) Predisposing
- (b) Exciting

(a) Predisposing Causes.

Before commencing

a detailed account of these, it is necessary for me to briefly note a few particulars about the situation of my work geographically.

Hilgay, the central village, is situated on the south-western border of the county of Norfolk on the main road from London via Ely to King's Lynn. It is 16 miles south from the last named place, and 14 miles north from Ely. It stands on a gentle eminence which slopes south and west towards the eastern edge of the great Bedford Level, the largest Fen in England.

Within the range of my professional work are also embraced the villages of Southey, Ten Mile Bank, &c, all scattered places in the Fens properly so called, and the village of West Dereham, which lies to the north-east and is not in the Fens. The population of the district may be roughly estimated at 3200, of which one half reside in the Fens, in houses built on the banks of the artificial rivers and drains, in most places below high water level. -

(The method whereby this huge plain is drained and kept from being flooded is not the subject of this Thesis although exceedingly interesting) -

(A.) As (1) the nature of the soil, (2) the climate, and (3) the water-supply, have considerable influence as predisposing causes, I will describe these at the outset. -

(1) Nature of Soil. -

The remarkable feature of the

Fens in this locality is the soil, which is really a covering or crust of turf, consisting of a congeries of roots and fibres of 40 or 50 different species of plants mixed with earthy matter. It is black in color and naturally of a very soft consistence, but owing to drainage and other artificial methods of carrying off the water, at the present day it is pretty hard and can be easily cultivated and made to yield abundant crops of wheat and other cereals, unless it be very wet weather, when the ground is not sufficiently firm to stand the weight of horses and agricultural implements. This turf varies in thickness from 3 or 4 inches in Hilgay Fen about $\frac{1}{4}$ mile from the village, to as many feet in Southern Fen, $3\frac{1}{2}$ or 4 miles away. Around here it rests on clay, whilst in other places, not far away, it rests on gravel.

The general appearance of the district is one

of remarkable flatness of a dark color in winter, and of various colors in summer, owing to rotations in crops. This, of course, is studded with houses irregularly situated on the banks of the rivers, drains &c. —

(2) The Climate.—

Given a flat district, with such a soft and damp soil, one would naturally expect an excessively humid state of the atmosphere. This is what is found here, and is a very important factor to be taken into account in considering the prognosis and treatment of cases of Indigestion as will be shown presently. There can be little doubt but that this humidity acts on *Femur* causing a more or less general depression of bodily vigour, which is alike distressing and annoying, and is often the chief symptom which takes them to consult a medical man. Fevers are a rarity here, occasionally we have them

on a summer's morning. Although we are situated in one of the driest districts of England as regards the average yearly rainfall, still at certain periods of the year more particularly the atmosphere is in such a state of humidity as to render it unhealthy. This is especially the case after long droughts when there is a heavy downfall of rain, followed by great heat. In some parts of my district this is very bad still; but under the influence of better drainage and cultivation, matters are constantly being improved. —

It is interesting to observe the effects of the climate around here on visitors from the North of England. I had an idea of writing on my present subject a year ago, so with a view to test the effects thoroughly, I persuaded my brother R. J. R. to live on exactly the same kind of food and have his

meals at exactly the same hours as at home, and live at a house in the midst of Hilgay Fen. This he carried out at the close of a hot and damp fortnight last September, when the weather became very hot. - At the end of three days he complained of loss of appetite and "felt as if he could fall asleep over his meals". At the week-end he complained of frontal headache, lassitude, was weary and sleepy, no appetite, and said he was "gone up". He had a furred tongue, tendency to constipation and abundant urates in his urine; - in fact, he had many symptoms of indigestion - from what? I know of no other cause than the climate, as he used no Fen water, obtaining his supply from here and went in for plenty of exercise. - It is interesting to note that on his coming to stay here in Hilgay, he completely recovered without any medical aid.

(3) Water and Water-supply. —

Owing to the nature of the soil and the remarkable flatness of the low lying surface, the water-supply in the Fens is naturally very indifferent. In this immediate neighbourhood, the inhabitants obtain their water chiefly from the rivers and larger drains. This is nearly all surface water, and taking into consideration the peaty black soil and sluggishness of the flow, the water itself is dirty brown in color and highly nitrogenous. In the summer and autumn it is bad, as the rivers and drains, contain large masses of floating weeds &c. and often when the weather is fine for weeks together, these shallow supplies get positively injurious, nasty and unpleasantly warm to taste. This always produces a number of Diarrhoea cases every year, followed by flatulent-Indigestion. Last August and September I had about 30 due to its use. —

Summing up the effects of soil, climate and water-supply, there can be no doubt about their effects either singly or collectively on the inhabitants of this district. I have mentioned the effects of climate on R.I.R., and will now give another example of the collective effects on a family: -

Mr. H. W., wife, 3 children, 2 servants and 3 laborers, came into a large farm in Hilgay Fen from a village near Cothamouth in West Cumberland, in September, 1854.

At the end of a month, one of the laborers came to me suffering from frontal headache, sleepiness, furred tongue, lassitude, could not work, fulness after eating, &c. He was quite alarmed, as he had never had any previous illness he knew of. - Within two months of their settling down in the Fen, the whole of these Cumberland people except the youngest child (4 years of age) consulted

me for similar symptoms, some of them much more severe. At that time, I had little or no knowledge of the influence of climate, and it was only with considerable difficulty and trouble that I managed to give relief. - The whole family and laborers had hitherto been remarkably strong and healthy. Visitors to this house have occasionally had similar attacks, but a change to the higher districts out of the Fens, have immediately led to good results. -

I must say, that, on the whole my experience bears out the remark of a late medical practitioner at Chatteris that "The Fens predisposed to Indigestion and allied ailments, and more especially after a heavy rainfall followed by heat." Why, I cannot say, unless there is something exhaled from the soil, in addition to the

humidity, &c, which produces this state.

I know that Intermittent Fever has been banished from amongst us by the superior means of drainage and cultivation; but is this exhalation or humidity, still capable of producing the symptoms of Indigestion, although not now capable of producing the former disease? I think so and will give a few reasons for this view.

1. - Nearly two years ago I sent a resident of Southern Fen, G. P., to the late Dr. Sweeting of Lynn. He was suffering from many symptoms of Indigestion of several months standing; but, to use his own words, "I feel as if I could do anything every other day, if it was not for this fulness, pain after dinner, and headache". On alternate days he was much worse. - Dr. Sweeting in his note to me in August, 1885, said "Your patient, G. P., is suffering from Indigestion evidently of

malarial origin. He is one of a large class of cases who consult me, who are benefited by a change out of the Fens altogether.

In this particular case, the change did away with the alternate day exaggeration, although Mr. P. is still far from being quite well. -

2.- An old and resident magistrate in the Fen, (not a medical man) told me about a week ago (May, 1887), that I should see no Intermittent Fever; but he was firmly of his opinion that so far as his laborers were concerned, 80 in number, ~~that~~ Indigestion had taken its place.

3.- On page 8, I have purposely mentioned that my work extends into West Dereham, a village not in the Fens. In this place I have 30 members of our local Foresters Club, not one of whom ~~has~~ consulted me for Indigestion, which resembles what I find in the Fens in

having exaggerated symptoms every other day, during the past two years. On the other hand, let me take the list of members who live in Pratt's and Hilgay Great West Fen, which is the dampest district in the locality: here, from the list before me, I find I have 46 members; now, no fewer than 32 of these have been to consult me for Indigestion more or less severe during the past two years. In 26 of these or 81%, the second day aggravation of the complaint was noted. I will give in detail the history of one or more of these cases under 'Symptoms': —

These three proofs, which I might multiply if necessary, are, I am inclined to believe, quite sufficient to point out that the local endemic influences have considerable predisposing power. I may add as a postscript that yesterday (June 5), no fewer than 6 cases came to consult me with well marked Indigestion,

and in 3 of the cases, the patients were firmly of opinion that they were worse. Every other day. In all I did not ask any leading question in order to call attention to this peculiarity. all were cases of not less than one week's history and all out of the food. -

(B.) Habits and Food of Fenmen. -

In the course of my work I found that most of the Fenmen have a strong love for their native place. Dwelling in the midst of a plain whose boundary is beyond the reach of vision westward and eastward only the form of low ~~lying~~ hills (on which they stand as our example), they are apt to look upon undulating landscape as an exception to our country. Amongst the agricultural laborers in Hilary Fordham or Sothery Fens, it is rare to find many who have been far away from their locality even for a visit. It is probable that education and increased railway facilities may

alter this in the future. A strong love of locality and aversion to going away 'for a change', have made my work rather hard in some cases. I sometimes advise a change of air to some place out of the Inn or to the sea-side at Hunstanton; but this peculiarity has prevented it; in fact there seems to be a sort of hereditary prejudice against any idea of benefit to be obtained from change of locality as against medical treatment, and stay at home. This has been shown very well in a family of five sisters all married in Southern Inn and all great sufferers from Indigestion. Their parents suffer likewise and not one of them will leave home even for a week's change of locality. Dr. Sweeting and also Dr. Love have both strongly urged them too; but they will not go away, although they have no other reason than inherent love of the place. -

Tennens, as a body are strong healthy fellows,

very quiet and inoffensive. They are all employed in agricultural pursuits. - They are fairly regular in their habits, work hard, take little or no interest in anything but their own immediate surroundings and their families; and, as a rule, are very primitive in their ideas, and religious. -

As to their Food, this is all important in considering Indigestion. - Their chief articles of everyday consumption are

1. Pork
2. Bread - all pure wheaten -
3. Norfolk Dumplings -
4. As drinks - Tea and Beer. -

Pork -

This is the great and only animal food they take or care for. Fat pork, as a rule, forms part of at least two out of the three daily meals. The consumption of it is very large. I made a curious calculation as to the number of

pigs killed in the 500 village of Southern for one month. This place contains about 1000 inhabitants. During the period named they consumed 31 pigs weighing, at the calculation of the leading butcher about 3 tons or 6600 lb. In the same time 4 sheep were consumed and any beef used was bought from Ely or elsewhere as it would not pay even to kill a small beast. - Here we have a startling and novel fact, and which explains a great deal of the Indigestion which is so common. -

All the men consume this animal food by preference: - now performing as they do a large amount of manual labor requiring considerable physical strength and endurance, and living chiefly on fat pork and thick slices of pure wheat bread, where does the muscular energy come from?

Smith on "Foods" says "Pork having so very large a proportion of fat cannot be

regarded as equal to beef or mutton in nourishing the system of those who make much muscular exertion. Moreover, there is a peculiarity about pork by which it is believed to be less digestible than other kinds of flesh, and it appears to me that this is due to the greater hardness of the muscular fibres, by which the mastication of it is rendered so difficult that much of it is swallowed in pieces too large for immediate solution in the juices of the stomach. - * This does not explain the source of the muscular energy; I am inclined to believe the theory enunciated by Rosenthal that "combinations abounding in carbon, such as are at hand in the carbon hydrates and fats are fitted for the production of muscular force, and a given weight of these affords a considerably greater amount of work than can an equal weight of nitrogenous albumin."

It must be the fat in the case of all those who use pork so largely, not only here, but in

neighbouring counties, which gives the force.

In the winter where there are large families, they often cannot even afford to use foot unless in small quantities and one man assured me that during December and January last he used dripping and bread instead and still went about his daily task as a ploughman; here it must have been the fat which gave the muscular energy. -

2. Bread - This is good -

3. - Norfolk Dumplings. - These are a local kind of food, and as I find them in our cottages, are round pieces of dough with or without a piece of pork in the centre, boiled and eaten hot. They are very indigestible and have often given me a long journey in the evening owing to some poor fellow having taken too many of them. -

+ - As Drinks - Beer is not of a high quality and used too freely. Tea, is consumed

largely by the women and made very indifferently (See page 28 for further remarks). The average number of meals per day is three. -

- (a) Breakfast at 6 or 6.30 am. Consisting of bread and butter, eggs, or often, fried pork and bread - together with strong black tea.
- (b) Dinner - at noon - much the same. -
- (c) Tea - at 6 or 6.30 P.M., the great meal of the day, hot dumplings, pork and potatoes, often other vegetables when in season and again large quantities of tea. -

Summing up my predisposing causes, I am inclined to the idea that this very large consumption of pork, constant daily use of the Norfolk dumplings, drinking large quantities of strong black tea with food and especially animal food like pork together with bad and careless cooking which is universal here, are the primary

factors in making Indigestion so widespread. To these must be added the endemic influences. I have endeavoured to describe under section A as being secondary, and producing the peculiar every other day aggravation of symptoms. —

(7) Exciting Causes. —

Under this heading will be enumerated those causes in connection with food which have been the most prominent in cases who have been under my care during the past three years. —

(1.) Over-eating. —

This is the great exciting cause of the Indigestion found around here. It is truly surprising how long a Framer will endure his Indigestion, believing it to be a disease that cannot be relieved even a little; and then, perhaps at some friend's house or may be public festival.

of some kind, he will indulge in eating not drinking too much, and the sudden pain and distension of the Stomach caused thereby make known the long standing disorder. There might be an objection urged against my statement here; viz. is not what you are describing really due to the over-eating and nothing else? True; but I have carefully eliminated this class of cases, and confined my remarks to those whose sufferings have been known to them previous to the onset of the exciting cause. -

2. - "Bolting" the food too quickly. -

This is a common habit, as might naturally be expected where education is deficient and spreads slowly. Its effects considering the nature of the food, can easily be imagined, and especially when we consider also defective mastication in eating such a hard fibred substance as pork. -

3. - Bad Teeth leading to imperfect mastication. -

Dr. Wilmer Fothergill says that the pain of mastication is so great that it causes the loathing of food by those who know full well they will have to suffer for it. - Out of a list of 90 members of "Pride of the Hill", Forster's Lodge, I find that 10 members have consulted me for sudden aggravation of their Indigestion owing to the pain of decayed teeth during the past 3 years. - In every case, the removal of the offending members led to a satisfactory termination of the trouble without requiring any further medical aid. -

4. - Over indulgence in drinking hot tea with meals. -

This is frequently met with, and especially amongst the laborers' wives and children. It is drunk in the Fins in far larger quantities than can scarcely be imagined. It is used by 80 per cent of the women with every meal; that is, at least

three times a day, always very hot and strong. -

In collecting materials for a paper on "Tea and Tea drinking" two years ago, I found on enquiry at two shops whose trade is entirely in a definite portion of the Tees, that a population of 800 consume about 2 tons annually. This gives about $1\frac{2}{3}$ lbs to each individual a week - far too much. It is often infused too, in a very ignorant fashion. Unlike the method of Abernethy as described by Dr. Carlyon in his "Early years and Late Reflections", they place their full quantity of tea in the pot, pour on it a small quantity of water and then let it stew on the hot stove or hob for half an hour or more, and afterwards fill up with boiling water and use at once. I have frequently seen this infusion used at breakfast and then what was left over heated up again for dinner.

* - See "Nineteenth Century" February 1886 page
270 for an article by Dr. Buryer Geo
"Food Accessories: their Influence on Digestion".

The use of such a drink with solid food, such as fat pork and thick slices of dry bread, must be a fruitful exciting cause of Indigestion - tion amongst hardworking laborers and especially during hot and dry weather when working hard. Also, the excessive consumption of this quality of tea which I find amongst the Women's wives and children, is the ^{of many} cause of the so-called "heart diseases", "pains at the heart", "fluttering and flickerings" in the former. The food of these women consisting largely of bread and butter together with tea, which as a food accessory, according to Dr. Burney 920, is one of the greatest of all retarders of the digestion of starchy food. —

5. Excessive use of Opium and some of its Compounds. -

I have reserved this causation of Indigestion as found amongst France until the last, as I think it ought to be regarded as

a cause of Indigestion independent of anything else. It is the special vice of the Free laborers and especially the females, its prevalence is universal and every sense of necessities is sacrificed in order to purchase either opium itself, or laudanum, or Godfrey's Cordial. I have frequently met with cases of simply incurable Indigestion due to the use of one or more of these preparations; amongst middle-aged or old Free women; notwithstanding the blackest mental picture one can draw of the remote effects of the drug, it is simply impossible to persuade them to give it up.

How the habit came about I can only give a mere conjecture; viz., that it was first used in painful diseases, such as rheumatism or a fever, and what was then administered as a soothing agent or alleviator of pain, came, through hereditary habits, to be used

habitually as a stimulant. The habit is handed down from parent to child, and Godfrey's Cordial, in Ten districts several miles from a medical man, is found in every house. -

Whenever a shabby, somewhat emaciated, woman of 45 or over comes to see me out of the Ten, and especially if she has a peculiar pasty paleness of the face, complaining of flatulence, fulness after meals, headache, constipation, small flabby but not much furrowed tongue, complete loss of appetite, &c, together with a halting half-hearted manner of stating her case, I always carefully enquire for this dreadful habit and find it in about 30 cases a year. I have carefully noted them down, and find several are old, ^{ones} turned up after an absence of 12 mo. or more. -

They are, generally speaking, that class of individuals, who would be secret "topers"

if they resided near a public-house, and to whom the use of the drug is "second nature".

I have probably omitted many exciting causes; these are the chief ones (and in a sense remote) that are met with. -

Over-eating and bolting the food unchewed, are probably the commonest in men; excessive use of strong hot body infused tea, in women. -

Of course, in addition to the endemic influences and disorders connected with diet, and other causes which I have described in more or less detail, there are others due to alterations in the gastric juice and also to changes in the expulsive powers of the stomach. -

With regard to the former, the principle alteration is hyperacidity; next most common being deficiency of the gastric juice. As to changes in the expulsive powers of the stomach, want of muscular tone, or nervous tone, is probably the commonest affection. - The number of cases

which may refered with anything like certainty to either of these last two classes of causes is so small as to require no further description here. When it is remembered how Fenmen live, their food and its nature, and also the influence of soil, climate and water-supply; should any of these symptoms be prominent — such as hyperacidity or ~~and~~ lack of tone for example; they can be traced generally to the causes I have described, and are not diseases per se. —

Indigestion as an intercurrent affection, in connection with other organic disease, need only be mentioned. It does not come within the scope of my present thesis, although, perhaps, it might not be out of place to record a case which is highly interesting as showing how easily mistakes can be made: —

M. M., married woman, aged 44 years, living

in the Fall, consulted me last September for
 many symptoms of indigestion, especially
 extreme flatulence, distension, pain over epigas-
 -trum, feeling of weight. Her abdomen was
 very flabby. She had eight children all
 living. I tried dieting her; use of alkalies
 after food, then before; next tried acids
 but all little or no good. - Being dis-satis-
 -fied with the bad progress she was making
 after great persuasion, she went to Addenbury
 Hospital, Cambridge for five weeks in ^{February and} March
~~and April~~ last. She was then kept in bed,
 milk-diet, light food, &c and given an acid
 mixture with gentian. - She had a considerable
 loss at this menstrual period (which was
 the day she came home), and was never examined
 per vaginam by the physician at all,
 nothing being suspected, as she made
 considerable improvement for the first month
 and then fell off again. On her arrival

home, after a week's time, I was sent for in
 a hurry as the Haemorrhage from her
 vagina was again profuse. Plugging
 and Ergot checked it and on the 4th
 day, ~~it~~ ~~suspected~~ Dr. Wm Little of Upwell
 kindly came over and together we inspected
 her os uteri, by means of a Ferguson's
 speculum, and found well developed
 Cancer of the Cervix, from which she
 is now rapidly sinking, with all the
 symptoms of the same, such as glairy
 fluid stinking discharge, great pain, non
 retention of faeces and urine and cancerous
 cachexia &c:— No one suspected this till
 the second Haemorrhage; the Indigestion
 being so prominent, completely overmasked
 the organic disease. —

Indigestion due to mental worry, want
 of exercise, and too long hours without food in
 office work, is never seen here. —

Part II -

Its Symptoms. -

I will now endeavour to describe a few of the more prominent symptoms as found amongst those cases which form the great majority of all who consult me. -

1. - Feeling of weight together with pain in the epigastrium. -

This feeling of weight, or it may be pain, at the "sit of the stomach", is the most frequent symptom complained of. In asking a patient to point out the exact spot, in at least half of all the cases, he will put his hand into his epigastrium and say "It is here I feel the pain and it rises up underneath the breast-bone and passes through to my back and left shoulder blade." It is usually worst after meals, usually too within a short time. As to the character of the pain the general tale is it is a "gnawing, aching

sort of pain coming on after each meal and lasting for an hour or two, but it never wholly goes away.

2.- Flatulence. -

This is a very common and distressing symptom. - It is the flatulent distension of the stomach, pressing upon the heart and interfering with its movements which gives the "palpitation" after food, the "pain at the heart", and other terms in constant use, that are so often heard. The patient has an idea that the heart is all wrong, and I have lively recollections of an old lady - (50 years past), wife of a farmer, who came some 12 miles to see me a month ago, with indigestion due to excessive tea drinking, food and worry. She complained of "pain at the heart" and was sure it was diseased. On trying to explain to her why I thought it was not, she casually told

me I was the 23rd doctor she had seen and only one had said her heart was diseased and he had gone away from the district. - When Paget & Bradbury of Cambridge, Paley of Peterborough and others had assured her that it was all due to her stomach, and she brought me about 30 prescriptions to look at (being quite proud of them); it is needless to add, after a quiet and friendly talk, I told her I could do her no good. - Flatulence here was extreme. -

Why this symptom should be so prevalent amongst Fen women, as opposed to those who consult me from places out of the Fen, I cannot say with certainty. There are two probable explanations

(a) Living so far away (on almost impassable roads, as many of them do, and being as a rule confirmed sufferers

They never consult a medical man till the disease and especially this symptom gets unbearable.

or (b) the gas is due in part to the malarial condition of their surroundings tending to flatulence, this being probably due to portal obstruction, as Dr. Lauder Brunton points out in his Second Lecture in Lecture.-

In all probability, the combination of these two, is the most likely explanation.

This "wind on the chest", as it is invariably called, is looked upon as the cause of many other complaints; in fact many who have it as their most prominent symptom harbour the impression and are quite positive in their assertions that there is something radically wrong with them, and always live "in fear and trembling". -

3.- Acidity -

The eructation of an acid or some fluid into the mouth or fauces is not such

a common symptom as the others I have mentioned. Its comparative absence may be due in part, to the nature of the food used. —

4. - Headache. -

This is a great trouble. The "sense of misery" (to use a local phrase) is in many the cause of unfitness for work and inactivity. It varies in severity and its site in about three out of every four cases is the forehead.

This is the most distressing and annoying symptom which troubles myself, when, owing to stress of work, any irregularity in taking food occurs. I most certainly feel it worse when walking in the damp fens, and can confirm Dr. Brunton's ^{statement} about the excessive tenderness of the upper surface of the eyeball. I have found it in several others. —

5. - Constipation. -

This is very common as might be expected from the nature of the food consumed and in some - perhaps I ought to say many - it is a serious and uncomfortable derangement. -

It is very hard to relieve it in many cases; and, considering that the great majority go in for plenty of physical exercise and hard work, I am rather puzzled at this, unless it be the use of so large a percentage of fatty animal food. —

6. - Loss of appetite. -

This, the anorexia of Cullen's definition (*Synopsis* Vol: II page 201), means want of the natural appetite. - Complained of in a certain number of cases, there is very generally a history like this told to the medical man, - "My appetite is gone, although I don't feel much else wrong with me, and if I were to take as food a dinner as I could a month ago, it would pain me

very much for the rest of the day." This symptom is oftentimes found around here in strong, hardworking, Finmen of about 18 to 25 years of age; upon careful enquiry there is generally found a want of variety in food, they do not use much else besides pork and bread day after day for dinner and tea. It is particularly noticeable in the early spring - in February and March in each year. —

7. - Feeling of languor, lassitude or depression. -

This is also one of the commonest symptoms of Indigestion as found in the Finns.

It is oftentimes noticed in those who come from the damper districts, and whatever may be its immediate exciting cause, there can be little doubt but that endemic influences pre-dispose to it. I will just note a case in a personal friend, whose Indigestion is well marked and where this symptom

is prominent:-

T. W. R., farmer and landowner, aged 36, suffers from severe pains and weight after food, no headache, bad appetite, attacks of palpitation, and this symptom of feeling of extreme languor and depression. He lives in Kelby Fen, on low lying damp ground, and can anytime drive off most of his troubles by going out to an uncle at Baxwell, a village 5 miles away, but right out of the Fens. - He is acquainted with the fact that I am writing this Thesis; and, in order to test the truth of my views, I requested him to see a physician at Lynn who gave the following opinion to a relation who accompanied him, "It is a great pity that your young friend will not leave the Fen altogether, as that indigestion is putting the nails into his coffin." - Rather strongly put but true!

I think this completes the list of the more commonly observed symptoms; many others, such as, stomach cough, thirst, voracious appetite, nausea, faintness, &c, need not be mentioned in detail as they are not so common. -

In addition may ^{be} classed the chief physical signs: -

(a) Furred or coated Tongue. -

This is generally pale, quite moist and the coating of a whitish color. The tongue, too, is flabby, often swollen and indented at its edges by the teeth. Occasionally, we have it more thickly furred and dry and very white.

(b) Foul or offensive breath. -

On asking a patient to take a deep expiration this is discovered and in some no such expiration is needed, as it makes itself known as

soon as the person enters the room. - This is not such a common sign, although it might be expected. -

(c) Passage of hard, fleshy masses by the bowels. -

This physical sign is not uncommon and often alarms the patient. Of course, its source is chiefly unmastered and then undigested pieces of pork. -

(d) Erucic - usually deposits abundant urates on standing. -

As exemplifying some of the above statements, together with any rarer symptoms which may have come under notice I will give a typical case or two: -

(1) John Tincham, aged 37 years, agricultural laborer in Helgaf Fen near the new Bedford River, consulted me on 21st May last complaining of pain in the pit of the

stomach and under the right shoulder-blade, right arm feels numb and cold, worst directly after taking food. Also headache, chiefly over the eyes and feels much worse on alternate days. He said "I was a man yesterday, and felt nothing much wrong, but to-day and on Thursday last I am good for nothing". He had also loss of appetite, tongue moist, slightly swollen and coated, urine high colored and full of urates; he was also perspiring freely after his walk to Hilgay and said walking any long distance always had the same effect. -

All physical signs of heart or lung or liver disease absent. -

Never had a day's illness like coming to live in the Fen six years ago. Had frequent headaches in damp weather during the past two years. -

Ordered rest, to diet himself and an

alkaline mixture after meals for his immediate symptoms, which improved him considerably except he still felt sleepy and his headache was also still worse every second day. I recommended him strongly to take his Whitt-seaside holidays at some place right away from his home, and gave him an acid and gentian tonic to take away with him. On June 3rd he came up to thank me saying that "going away had made a new man of him", and could now perform his 5 miles walk without any perspiration or sense of fatigue. —

(2) James Bowman - aged 36 years. Consulted me in May, 1886. Complained of feeling of weight and sinking in the pit of the stomach coming on after meals; severe pain between the shoulders; pain at the heart; headaches; restless and uneasy at night; perspired

freely on exertion. dry, turned tongue
 and especially on rising in the mornings
 also felt depressed. Could eat a hearty
 meal; took fat pork always two and
 then three times a day, and was fond
 of good tea (i.e. strong and hot) twice a day.

Lived at Woodway Bridge, just out of the
 Fen, and did not notice any exaggerated
 symptoms on alternate days. -

Suitable diet and medicine soon set him
 right: but he gradually returned to his
 old habit of taking heartily ~~two~~ two or three
 meals a day of fat pork, and at ~~the~~
 1806 changed his residence to a house in
 Fendham Fen, probably, the dampest in the
 locality. He told us he got on well for
 first two months, never better in his life;
 but about the middle of December he came
 again with his old symptoms, saying they
 were worse every other day and he thought

The Sun did not agree with him, as he had tried his old diet but with not much good. - As soon as possible I advised him to leave his house and get away on the high ground again. He did so in February and lost all his headaches and other symptoms almost immediately.

He has had no attacks up to the present; being a very intelligent man, I asked him if he thought the Sun affected any others like himself and he told me, that those who took his Sun house off his hands had had nasty headaches and felt unwell every second day just like himself, but not so bad and especially during last month (May). —

These two cases, reported in detail, are just a type of what is generally found; of course differing very much in severity in individual cases.

Part III

Its frequency, and effects -

Indigestion as found amongst Females, is a very common disease. Taking the members of the various Friendly Societies who employ me as their medical officer as affording the most reliable source of information, I find that out of a total of 340, about 180 or 190 reside in the Town, and during the past two years at least 100 of these have consulted me for Indigestion more or less severe. Out of this number about 60 have had most decided opinions as to their complaint being worse every other day. This I can prove in a good many of the cases who have been seen daily for a time. -

These figures only give a relative idea of the total number of cases in the district; but I find that amongst females, non-members, the proportion is about the same; in fact, it

may be estimated that the proportion in the case of the club-men is 10 out of 18 in two years or 5 out of 18 per annum is about right; but to be within the mark, I may safely put it 1 out of every 4. —

The local clergy, one the son of a Manchester practitioner, tell the same tale, but put the proportion 1 in 3. — One clergyman even went so far as to suggest to me, that so far as the endemic effects of the district acted on his visitors, the sum of their symptoms ought to be divided as "Aquinah Dyspepsia", — a very expressive term. —

The remote effects on the individual as regards longevity, I cannot speak of with any degree of confidence, as only 3 1/2 years residence, is not long enough to afford a sufficient number of deaths to give any statistics. One thing is certain, amongst those

who have attacks pretty often, and who have lived on both dumplings, hot tea and white bread as their staple foods, owing to their Indigestion the evening of their lives is a burden to them and they often resort to the use of opium as a solace, with the result of aggravating their disease and hastening the end. —

As regards the effects on the man in otherwise good health, of course it makes him less able to perform his daily task - weakens him, and owing to the languor and headache, it very often makes him dull and stupid. In time, he gets an idea that there is some serious disease troubling him and often becomes nervous about it. —

What is gained in cheapness in the use of this kind of food I have described is lost to the community in its effects; not that a man cannot perform as much physical

labour on food as other foods. but owing to the loss of time, strength, ~~by~~ ~~due~~ due to the Indigestion brought on by these foods.

Part IV -

Its Treatment.

There is no disease about which so much has been written and advertised as Indigestion. Our daily papers, weekly papers and especially those that are so-called religious weeklies and appeal to the working man, are teeming with columns many pages of advertisements of solace, comfort and speedy ~~cure~~ ^{cures} for this complaint, from wind-pills, by all the local chemists, up to the latest pain-killer or safe-cure from America. - Take even our leading Medical Journal the "Lancet", in the issue of last Saturday (June 11th), I find a dozen or more pages of advertisements

from leading drug houses, of remedies ending in -posin; also bitters, Coca Wine, Mineral waters, &c, all for the same object.

Believing in the theory that disease or sickness is an effort of Nature to throw off a morbid condition, I venture to express my opinion that the best plan of treatment for Indigestion as found amongst Females ought to have for its object the assistance of Nature in her struggle, by better hygienic surroundings, appropriate food, and medicinal remedies.

In order to explain these more fully let us consider them under three headings.

- 1. - Hygienic Treatment
- 2. - Dietetic "
- 3. - Medicinal "

1. - Hygienic Treatment. -

This consists in change of air. From what has been said in the

foregoing pages, it is quite evident that the change of air out of the Fens altogether is beneficial in those cases whose symptoms are sufficiently well marked as to consult a medical man. At the same time, it must not be forgotten that there are very many, whose ailments being less severe, probably seek this restorative without seeing their doctor at all. This is especially the case with recurrent Indigestion, as the patients themselves testify in conversation afterwards; the latter class people in particular tell me so. —

The sufferer being removed from his humid surroundings, damp soil and brackish water, rapidly recovers, his new hygiene bearing wonderful fruit as a mild kind of antiseptic material in removing those pernicious elements from the blood and tissues ^{origin} to the presence of which the disease is due. During the past two years, since

Dr. Sweeting pointed out to me the benefit of change of air in G. P.'s case (see the extract from his letter on page 16), I have recommended every case to go away (where practicable), when the symptoms have shown endemic influences. As this occurs in about 60% of the Fan cases, the number is very large and those who have taken the advice have nearly all been wonderfully benefited. It is a source of annoyance to find such a deep-rooted prejudice against change as I have mentioned; a goodly number still think their Fan and its climate perfection, and cannot or won't see any benefit in going away. Perhaps when such people can see what is done to others by change, they will have their ideas altered and their hereditary stubbornness broken down.

With further cultivation and more

drainage, as the soil gradually dries and settles into a firm surface, I believe these endemic influences will pass away, and Indigestion as found now, like Intermitent Fever of old, will become a thing of the past: How long it will take, I cannot pretend to say; there is no doubt about the transition stage of the present day, and that the keen competition in the 'struggle for existence' is making our cultivators of the soil use their utmost endeavours to obtain the greatest benefits from the same; this, of course, tending the more rapidly towards improvements in the hygienic surroundings of the workers thereon. —

2. Dietetic Treatment. —

This is doubtless the most important part in treating Indigestion, as usually it is possible to remove the disease

by a carefully regulated diet. The following remarks are confined to what is done here in my daily work, and although at times perhaps the accepted dicta of physiology may be departed from, it is because a rather broad view is taken. Often when a man knows he suffers from Indigestion, he tries to find out what to eat and what to give up, and in this case, so long as there is no excess, it is best to let him have his way although this may seem against "what the books say".

The first step in all cases who consult me with this disease, is to see to their teeth. Faulty mastication is often a cause of Indigestion per se, so when necessary, bad teeth or stumps are either extracted or advised to the dentist for stopping etc. It is highly important to be dogmatic on this point, as mastication in every case ought to be as

good and complete as possible.

After this, and apart from any endemic influences, the next most important indications in treatment are :- (a) what to avoid. -

(b) The use of such foods as are easily digested and at the same time are nutritious.

(c) Regularity in taking food.

(a) What to avoid. -

 Bread, owing to its fine fibre and fatty nature is usually the first article to avoid; next comes dumplings, as they are often complained of. It is very hard to persuade French and especially French women to give up their "light" dumplings as they call them. New bread, and the use of strong tea such as described are also forbidden and often, too, the use of vinegar, as it apt to be used too freely. These are the chief articles of food which are prime factors in the causation of Indigestion; a word

ought to be said against onions, as they are grown and used far too largely in the East. — At the first sight, it may be thought I am condemning nearly every article of food in daily use; perhaps so, but if it can be made evident to the patient that if he will give up all these as they aggravate his complaint, so much the better.

There is one drawback to this rather bold treatment, — the average trapes and its spending power are so small. It is satisfactory to find that the great majority will carry out this instruction as to what to avoid (unless it be the dumplings), and they will alter their diet to what can be more easily digested and assimilated. —

(b) The use of such foods as are easily digested and are also nutritious. —

Those foods which give most satisfaction and which give ^{the} most

most favor amongst Females when suffering from Indigestion are milk, well boiled and allowed to cool and then sipped gradually either plain or mixed with soda water; mutton broth is nearly always beneficial and much appreciated when it can be obtained; chicken broth is oftener used perhaps than mutton and is equally suitable and always recommended; beef broth too, is recommended but not so frequently as it is apt to be spoiled by cooking; and stale bread, toast, light biscuits (always specify the Arrowroot or Milk Biscuits of Huntley & Palmers or Peck from G.), Rice is not a favorite, and although I often highly recommend it, the use of it is not often carried out. - As to the use of vegetables, good potatoes are always recommended in small quantities, also small quantities of well cooked cabbages, cauliflowers, & may be allowed along with the broth. —

Butter may be eaten frequently with stale bread or toast; but should always be well spread. —

As to liquid foods; perhaps I am a little prejudiced (as I am a strict abstainer of many years standing), in regard to the use of alcoholic and malt liquors. The only one recommended is brandy, as a medicinal agent, in doses of not more than two table-spoonsful in a tumblerful of water with the dinner. I must confess to a failing here, as in answer to continuous enquiries whether I can recommend malt liquors or port wine, I am rather rash in asserting that they are all more or less hurtful, when perhaps some of those to whom I have made this assertion, have used them for years with advantage. — Beer and stout, I am frequently told, give pain after drinking and flatulence, so the

patients' own feelings may here be trusted.

In regard to tea, I have included it amongst 'what to avoid', as it is made and drunk here; but where it is prepared properly, not too strong and drunk with plenty of milk, one or two cups a day are recommended. — Coffee and cocoa if well prepared are very food; but not so well liked as tea. —

Amongst the solid foods — animal foods to be used after the more acute symptoms have passed off, probably the best is cold mutton; then cold beef, and lastly cold thin slices of lean cut transversely.

These to be used very sparingly at first and with plenty of time between each meal in order to admit of perfect digestion.

Reviewing my work, I think perhaps that most of those who consult me, in leaving off their porridge, dumplings, tea, vinegar, &c.

and adopting a new diet as recommended for their Indigestion, generally go in for boiled milk, mutton broth, cold mutton, stale bread, arrowroot biscuits, brandy and water, eggs, and weaker tea. —

This completes the list of the chief articles of diet usually recommended to the great majority of the sufferers who consult me for this disease. —

(c) Regularity in taking food. —

This is always insisted on; breakfast about 8 A.M., dinner at noon or 1-0 P.M., tea at 5 P.M. and a glass of milk and biscuit for supper about 8 or 9 P.M. —

These remarks are, of course, applicable to the great majority whose Indigestion has not reached to extreme limits. —

Where there is very weak digestive power

as is found in a small percentage of the cases, then more refined cooking and the use of artificially prepared foods, are taken advantage of. Milk, as a food is much appreciated by women under these circumstances. —

There is one substance - oatmeal, which does not seem to be used by our Fen laborers at all. I don't know how it is that they should be so ignorant about so valuable a food. —

I have found that the change of diet (when required) has been carried out in most cases with advantage, and although I have perhaps omitted many minor details, I think the leading principles have been fairly well indicated. —

Females as a body, in addition to obeying instructions as to change of air and diet, ~~the~~ always expect medicine, so I must now briefly review the usual

3. - Medicinal Treatment -

From what has been said in the foregoing pages, it will appear evident that the tendency of the treatment adopted is ^{more} strongly in favor of better hygienic surroundings and appropriate food and less in favor of drugs. - As these last named must be used for relieving the ^{immediate} symptoms, I will endeavor to give a description of the ^{proper} medical work. -

The first indication in treatment, is the relief of spasm or severe pain if present. This is best accomplished by the application of a hot flannel or mustard poultice to the epigastrium, and if this fails either the administration of an anodyne draught

R/ Sod: Bicarb: gr̄ \overline{xx}
Epr: Chlorof: \overline{m} \overline{xx}
aq: Menth: Pip. @ 3T.

The draught to be taken at once

or, by the hypodermic injection of Morphia
 if the above do not succeed. - Should
 there be no spasm or severe pain, or if
 relief be obtained, I am old fashioned
 enough to believe in the idea of thoroughly
 clearing out the primæ viæ in every case
 or nearly so. I work upon this as of primary
 importance, indeed equally as important as
 seeing to the teeth: should I fail in seeing
 to this; as I must confess I have overlooked
 it occasionally in my hurry to get away
 from a garrulous subject, I consider
 my neglect deserves any censure it
 may obtain. - The remedies employed are
 either a Blue Pill if any biliousness be present,
 or a Colic & Stomach Pill, or if a good liquid
 motion be required, I give them a powder
 of Carlsbad Salts, as sold by Kirby of
 London, which I find a very good and
 highly appreciated remedy given in a

large draught of water. -

after careful examination for any other disease and especially those that simulate Indigestion, such as some forms of heart complaint, bronchitis, and neurotic disease; and, making sure of their absence, the Indigestion now requires its most beneficial remedies. The alkaline treatment gives the best results in such a large majority of all the cases, that I shall confine my remarks to it alone. -

I have found that where there is much irritation and flatulence the following gives great relief

- R/ Sod: Bicarb 3ʒ
- Ammon: Bic: ʒ
- Sp: Chlorop ʒʒ
- Tr: Capsici ʒʒ
- Aq: Ment: Pip: @ ʒʒ

Eq. One table spoonful at once after each meal.

Suppose lithiasis be marked in any of the cases, I usually substitute Pot: Bicarb: for Sod: Bicarb: in the foregoing prescription and leave out the Ammon: Carb:.

In cases where frontal headache is severe I find an effervescent mixture is very serviceable and prescribe thus

R/ Potas: Bicarb 3ʒ
Spir: Chlorop 3ʒ
Aq @ 3ʒ

R/ acid: Citr: 3ʒ
In. Cas: C: 3ʒ
Aq @ " 3ʒ
The acid mixture

Sign: Two tablespoonfuls of this mixture to be mixed with one of the acid mixture and drunk whilst effervescent every 4 hours.

Should there be any symptoms of biliousness along with Indigestion, in addition to Blue Pile I often, in fact always, add Ammon: Hydrochlor: to the prescription on

page 69 instead of Remon: Bicarb.

Other remedies, much in the same style, are prescribed where specially indicated.

At the end of a week or ten days, the more prominent symptoms are usually relieved and a tonic is now required.

I have found that the following is admirable:-

- Rf.
- Tinct: Nucis Vom: ʒii
- Tinct: Aurantii ʒʒ
- Syr: Zingib: ʒii
- Aq. @ ʒvi

Sign: One tablespoonful ^{or} three times a day between meals in two of water.

In cases where there is want of sleep and especially in nervous subjects I find a ʒoʒs: Draught of Cal: Brom: at bedtime to be successful. —

When there is considerable weakness and lack of appetite in those who live

in very damp districts, the following is
an admirable mixture and I can call
to memory several cases which were
greatly improved by its use:—

R/

Liii: Sulph: fss $\overline{\text{XVII}}$

Jr: Nucis Vom: $\overline{\text{III}}$

acid Nitro Hydrochlor $\overline{\text{III}}$

Syr: Zingiberis $\overline{\text{III}}$

Aq: @ $\overline{\text{III}}$

~~to~~

Seqⁿ

One tablespoonful to be taken after
breakfast and dinner in a wineglassful
of water. —

This gives some general idea
of the medical treatment adopted, and
it would be useless to multiply the list
of remedies. As a matter of fact, I trust
far more to change of air and appropriate
food than to medicines, and endeavour as

far as possible to impress this fact upon those who consult me. -

There are probably many more remedies of much service did I know of them; what I have mentioned have been up to the present so successful that I feel inclined to stick to my short drug list, and I venture to hope in concluding my remarks on medical treatment that it may yet get shorter and that I may be able to see Indigestion as found amongst Finmen, kept by hygiene and dietetic means entirely. —

Perhaps I ought to mention that a small book entitled "Memoirs of a Stomach," written by himself, has been not only an amusing but a very instructive means of fixing my ideas, although I have not quoted any passages, or actually used it frequently.

In summing up the foregoing, it will be evident that the purpose of my task has been to demonstrate the influences of endemicity and foods on Fenmen and especially the laboring population. I have based my remarks on experience amongst the laborers by preference, as they are the only constant residents in the Fens.

Cultivation and drainage in order to destroy endemic injurious influences; education, better class and more variety in animal food stuffs, and better cooking of the same in order to render digestion and assimilation more easy, — are, therefore, the two great highways by which we hope to attain better health in the future, and to lessen that universal and troublesome disease I have called Indigestion as found amongst Fenmen.