

Polyuria was present as a rule. The salivary and gastric secretions were usually deficient and digestion was retarded. Among the psychical disturbances were vague fears and mental obsessions, slight confusion of thought, and some defect of the power of attention and of recollection. There was, said Dr. Lalanne, an intermediate condition between simple anxiety with depression and the "anxious melancholia" of the alienist. This transition was furnished by "melancholia with præcordial anguish" (Krafft Ebing). Attacks of præcordial pain and distress of paroxysmal character marked the last named and were especially liable to occur in the morning. In the classical forms of established and chronic anxious melancholia the following stages could usually be traced—viz., first a stage of simple melancholic depression; secondly, a period of doubt and mental perplexity in which the patient showed a tendency to brooding and seclusion; thirdly, a delusional stage in which were developed delusions of ruin, damnation, "possession" by malign agencies, and the like; and, lastly, a stage of chronicity in which the above forms of delusions were succeeded by a transformation of the ego or sense of personal identity. In this last stage a phase of megalomania of a special kind, described by Cotard as "délire d'énormité," was often observed. In persons with a hereditary tendency to insanity the occurrence of states of anxiety should give cause for serious thought. Such states might be the prelude to an attack of mania, melancholia, or circular insanity, or they might herald an outbreak of dangerous frenzy with suicidal or destructive and murderous impulses. Such results were seen in both sexes and more frequently in the female sex, the affection occurring most often between the ages of 20 and 30 years. In children the malady showed itself in the form of morbid fears; in adolescents and young adults it led to attacks and dangerous impulses of the form above mentioned; and in the middle-aged and elderly it developed into persistent and refractory melancholia. As regards treatment, Dr. Lalanne advocates systematic hydrotherapy to overcome the circulatory and physical weakness, gymnastics or muscular exercise in moderation, rest in bed during the stages of mental confusion and acute melancholy, the administration of morphia, codeine, bromides, and chloral to secure sleep, and the use of nitro-glycerine and amyl nitrite to relieve attacks of præcordial spasm and anguish. Cold baths were, he considered, bad, as they tended to increase vaso-constriction and cardiac distress and therefore preference should be given to tepid baths.

THE PREVALENCE OF SMALL-POX

ON Wednesday, Dec. 3rd, there was 1 fresh case of small-pox admitted to the hospitals of the Metropolitan Asylums Board. The Local Government Board for Scotland intimates that during the period from Nov. 16th to 30th 8 cases of small-pox have been notified to them—viz., 1 case in the Ayr district, 1 case in the Dundee district, 1 case in the Burgh of Arbroath, and 5 cases in the Burgh of Dundee.

THE council of the Clinical Society of London desires to make it known that a considerable number of copies of volumes of the Transactions of the society have accumulated in past years and that it proposes to distribute them to such members of the profession as may wish to have them, in order of application and free of all cost except that of packing and carriage. Applications for volumes will be received until Jan. 1st, 1903. They should be addressed to the Secretary of the Clinical Society, 20, Hanover-square, London, W. The volumes required should be specified.

Mr. H. T. Butlin, through pressure of private engagements, has been reluctantly compelled to resign his appointment as surgeon to St. Bartholomew's Hospital. Immediately

upon his resignation he was elected consulting surgeon to the hospital and also a governor, while the school committee recommended to the governors that he should be asked to deliver a course of lectures on clinical surgery. We are glad to learn that Mr. Butlin's teaching connexion with St. Bartholomew's Hospital is not completely severed by his withdrawal from the active surgical staff.

ON St. Andrew's Eve (Nov. 29th) the Commendatore Dr. Laponi, body-physician to Leo XIII., made his first appearance at the Vatican after the serious operation which he recently underwent at the hands of his colleague, Dr. Guido Mazzoni, surgeon to His Holiness. Fully re-established in health Dr. Laponi thanked the Pope for his affectionate solicitude in his behalf and received, in reply, the cordial congratulations of His Holiness on his resumption of the duties he so ably discharges as "Archiatro Pontificio."

HIS MAJESTY THE KING, patron of the Middlesex Hospital, has been graciously pleased to send the sum of £100 as an annual subscription to the hospital. The subscription is in continuance of the contribution which has been made by reigning sovereigns during the past 100 years. His Majesty has also sent ten brace of pheasants for the benefit of the patients.

THE council of King's College has made the following appointments at King's College Hospital in consequence of the resignation of the chair of clinical surgery by Mr. W. Rose:—Mr. W. Watson Cheyne, C.B., F.R.S., to be professor of clinical surgery; Mr. A. Carless to be professor of surgery; and Mr. F. F. Burghard to be teacher of operative surgery.

Dr. A. E. Wright is resigning his appointment as professor of pathology at the Army Medical School and has accepted the post of pathologist and bacteriologist to St. Mary's Hospital.

Sir Michael Foster is understood to be about to resign his seat as member of Parliament for the University of London.

REPORT ON AN OUTBREAK OF TYPHOID FEVER AND OTHER ILLNESS DUE TO OYSTERS.

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TOWARDS the end of the past summer numerous cases of typhoid fever occurred in the county of Essex which were attributed by the medical officers of health who investigated their origin to the eating of cockles or oysters. A number of these cases have recently been reported upon by Dr. J. T. C. Nash, the medical officer of health of the borough of Southend. Apart from the cases at Southend no connected series of cases were heard of until Sept. 29th, when attention was arrested by an alarming newspaper report of an outbreak of typhoid fever or other illness alleged to have occurred at Mistley and Bradfield, parishes on the extreme northern boundary of the county. Dr. J. W. Cook, the medical officer of health of the rural district in which these parishes are situated, had previously reported upon several cases of typhoid fever which had occurred in various parts of the district and which were apparently due to eating oysters derived from what is known as the St. Osyth

Channel, an offshoot of the Colne estuary below Brightlingsea. By arrangement with Dr. Cook, we together inspected this channel and made inquiries with reference to the oysters laid therein. We then learnt that besides the cases of typhoid fever there had been many cases of illness amongst people at Mistley and in the neighbourhood who had purchased oysters from J. F., the owner of certain layings in this channel. No information was obtained leading us to suspect that oysters from any of the other layings had caused illness amongst those consuming them. On the south side of this channel there are 15 layings belonging to five different owners in Brightlingsea and nine layings on the north side belonging to seven owners. Although a large number of these oysters are consumed in Brightlingsea there had only been one case of typhoid fever in the town (in August) and this was not in any way attributable to the eating of oysters. Altogether, from these and other layings in Brightlingsea 5,100 000 oysters had been sold during the previous three months.

J. F.'s layings are on the south side of the channel which here is of considerable width, and apparently the only sewage which directly enters the channel is from a few houses at St. Osyth, one and a half miles away. He lays down both American and Portuguese oysters, but the latter only are implicated in the outbreak to which this report refers. These oysters had been laid down for over a year before being dredged up for sale. J. F. after dredging up the oysters places them in baskets and then sets sail for various places on the coast where he sells them to the consumers or small dealers. The whole of the implicated oysters were sold on August 14th and 21st, on which days he was at Mistley. On each occasion he sold about 1000 oysters to 50 different persons. On the first visit all the oysters sold were Portuguese and on the second visit 350 were American. Of these 200 were sold to one person and the remainder to three others. There is no complaint about these oysters. After leaving Mistley quay he visited other places until his stock was sold out, but, strange to say, we can obtain no history of any illness due to eating these oysters elsewhere, save one case of diarrhoea at Ipswich. The total number of oysters sold by the man on the two voyages was 8000.

Upon making inquiries at Mistley we found J. F.'s statements confirmed. He had been there on August 14th and again on the 21st, his smack on each occasion lying at the quay. To the consumption of the Portuguese oysters sold on these days we have traced four cases of typhoid fever and 21 cases of illness. Doubtless others may have occurred which have not come to our knowledge.

The following is the history of the cases of illness which occurred after the consumption of the oysters sold on August 14th.

Family No. 1.—S. W., a boy, aged 16 years, living at Bradfield, near Manningtree, purchased on August 14th seven dozen oysters from J. F. at the quay and immediately ate one dozen of them. On the same evening he ate seven or eight more. On the 16th he was attacked with diarrhoea which lasted for three days, and from this date to the 30th he complained of being tired and listless and of headache and loss of appetite. On the date just mentioned he was attacked with vomiting and was found to be suffering from typhoid fever.

J. S. W., aged 50 years, father of S. W., ate 15 or 16 oysters on the evening of August 14th and four or five more next day. On the 16th he was seized with most violent diarrhoea and had some headache. The diarrhoea did not cease for four or five days and he did not fully recover until the end of the month.

J. W., wife of the above, aged 51 years, ate one dozen of the oysters on August 14th. On the 17th and 18th she suffered from "horrible spasms" and nausea but had no diarrhoea or further illness.

D. W., aged 18½ years, ate seven or eight oysters on August 15th and about the same number on the 16th. The oysters not eaten on the 14th had been kept in salt and water to which a little Quaker oats had been added. On August 21st she felt ill, complaining of headache and giddiness. There was no diarrhoea.

E. W., aged 81 years, ate four or five oysters on the evening of August 14th and four or five on the morning of the 15th. She was taken ill on the 18th with violent diarrhoea and vomiting and this condition lasted for a week.

There were four other members of this family who did not partake of the oysters and their health had not suffered in any way during the above period. None of the members of this family complained of any peculiarity in the oysters.

Family No. 2 were visitors who had taken a cottage at Bradfield for a holiday. Mr. W. bought 50 oysters from the smack at Mistley on August 14th and on the same day he ate one dozen of them. He was not taken ill until the 24th, when he complained of headache. On Sept. 1st he was attacked with vomiting and on the 3rd he was found to be suffering from typhoid fever. He had no diarrhoea during the incubation period. At this time he had returned home.

F. W., son of the above, ate two dozen of the oysters on August 14th and on Sept. 5th he was found to be suffering from typhoid fever. He had been ailing a few days previously.

An adult daughter ate three oysters on August 14th and was seized with violent vomiting on the same night. Recovery was rapid.

Mrs. W. ate one dozen oysters on August 14th and was not ill until Sept. 10th. On the 14th she was found to be suffering from typhoid fever. As she was nursing her husband and son she may possibly have contracted the disease from them.

A child, aged three years, had no oysters and remained well. There was no complaint about the quality of the oysters, but Mr. W. says there was some kind of meal on the shells as though the oysters had been kept in meal and water. This the seller indignantly denies.

Family No. 3.—H. B., a male, aged 33 years, bought four dozen oysters from the smack on August 14th and during the evening ate four or five of them. He was taken ill on the 16th, as he thought with a "bilious" attack. On the 17th diarrhoea set in and he felt so weak and ill that he remained in bed for 11 days.

B. B., his brother, aged 29 years, ate five oysters on August 14th and was taken ill the same night about 11 P.M. He suffered from sickness and diarrhoea which did not entirely cease until the first week in September.

A lady visitor in the house had one oyster. She is said to have been ailing a few days after but no particulars could be obtained.

One of the oysters is said to have had a "funny" taste but all seemed good.

The following cases implicate also the oysters sold on August 21st.

Family No. 4.—T. H., a male, aged 24 years, ate four dozen oysters on two occasions, the first on August 14th and the second on the 21st. After the second lot he felt "queer" for a week and suffered from diarrhoea. 14 days later—seven days after partaking of the second lot—he suffered much from headache and felt so ill that he went to bed and remained there for seven or eight weeks. He says that the oysters had a too yellow colour and a "bad" taste.

His brother, aged 23 years, had some of the second lot of oysters. They are said to have made him sick. No illness followed.

A third inmate of the family who did not touch the oysters remained well.

Family No. 5.—W. R. M., a lad, aged 18 years, often had oysters. He had some on August 14th and on the 21st he bought 25 oysters at the smack and ate them there and after dinner he returned and had 25 more. On Sept. 1st he was found to be suffering from enteric fever and he died on the 17th. He appears to have been attacked with diarrhoea and abdominal pains on or about August 18th and was ailing when he partook of the second lot of oysters.

The mother of this boy, aged 39 years, ate one oyster only on August 21st and next day had an attack of diarrhoea which lasted for 36 hours.

A brother, aged 11 years, had three oysters on August 21st and was attacked with diarrhoea next day. He felt ill for a week.

Another brother, aged 13 years, had two oysters on August 21st and was attacked with diarrhoea the same night. He was ill for two days.

Three other members of this family did not touch the oysters and remained in good health. No complaint was made about the quality of the oysters.

Family No. 6.—G. A., a male, aged 50 years, ate 18 oysters on the day of purchase, August 14th or 21st. He was attacked with abdominal pain during the night and had diarrhoea on the following day. He threw some oysters away as he did not like the taste.

His wife put one oyster in her mouth but not liking the taste did not swallow it, and his son had one (or two?) of the oysters but did not experience any ill effects.

In a few instances only did the sickness and diarrhoea

supervene within a few hours of partaking of the oysters, as in ptomaine poisoning. In most cases the illness commenced from 24 to 48 hours afterwards, suggestive of infection by the bacillus enteritidis of Gaertner, and those who suffered later from typhoid fever were probably infected both by this bacillus and the bacillus typhosus. The outbreak is curious in several respects: firstly, since only a small portion of the oysters appears to have been capable of causing illness; secondly, since the nature of the illness varied from a mere feeling of nausea and weakness to a fatal attack of typhoid fever; and thirdly, since practically the whole of the cases occurred amongst those who purchased the oysters from the smack whilst at Mistley. Only one possible explanation suggests itself to me, and that is that the river water, which is greatly polluted here, may have been taken into the boat and infected the oysters lying at the bottom. This opinion is confirmed by the fact vouched for by one of the patients, who says that he bought the last of a lot lying at the bottom of the boat and got them a little cheaper because he took the lot. It would be extraordinary, however, if this peculiar condition should obtain on the two successive visits. The owner of the boat is certain that no water from the river was thrown over the oysters. The fishermen at Brightlingsea all give the opinion that some of the oysters could not have been fresh and attribute the illness to eating stale oysters. This, however, cannot explain all the facts.

These cases of illness also occurred during the season when the "native" oyster is "sick" and unfit for consumption. The native oyster (*Ostrea edulis*) is hermaphrodite and spats from May to September, whilst the Portuguese oyster (*Ostrea angulata*) is unisexual. The Brightlingsea merchants sell the foreign oysters all the year round and say that the Portuguese variety never shows the signs of "sickness" observed in the native oyster during the close season, which in this country extends from May 14th to August 4th. The Portuguese oysters which caused the above recorded cases of sickness had been laid in the St. Osyth Channel for over a year, but apparently laying for this length of time does not bring the oyster within the scope of the Fisheries (Oyster, Crab, and Lobster) Act, 1877. Even the assumption that a "sick" or "spawning" oyster is unwholesome does not explain why only a certain few sold at a certain time and in a certain place caused illness varying from mere nausea to well-marked typhoid fever. At present, therefore, the cause of the unwholesomeness of the oysters remains undiscovered.

We obtained a number of oysters from the implicated beds and submitted them to one of the patients who had suffered from typhoid fever. He examined them when opened and said that he could see no difference between them and those which he had eaten in August. From the liquid inside the shells of these oysters we isolated in one case a motile bacillus capable of growing in phenolated broth, of curdling milk, and producing indol, but which did not give gas bubbles in glucose gelatin, and from another oyster the typical bacillus coli communis. The spores of the bacillus enteritidis sporogenes could not be found in the shell liquid in either oyster. In the juice from the gastric gland the bacillus coli communis could not be demonstrated in either case, but in both the spores of the bacillus enteritidis sporogenes, or of an organism which we could not differentiate therefrom, were easily discovered. The bacillus typhosus was not found.

In cockles taken from sewage-polluted water we have invariably found both the bacillus coli communis and bacillus enteritidis sporogenes in the shell liquid and in the pulp of the animal. Whether the pre-ence of either or both of these organisms in the Portuguese oysters indicates sewage pollution or not it is at present impossible to say. The bacterial contents of the shells and organs of various shell-fish is a subject which requires investigation.

For comparative purposes we obtained some native oysters from probably the most celebrated fattening grounds in this country and our examination yielded the following results:—

Oyster No. 1.—(a) Liquid from the inside of the shell gave a negative result as regards the bacillus coli communis and the bacillus enteritidis sporogenes. (b) Juice from the gastric gland gave all the indications of bacillus enteritidis sporogenes. A motile bacillus grew in phenolated broth which curdled milk and produced indol in abundance, yet did not give gas bubbles in glucose gelatin.

Oyster No. 2.—(a) From the juice inside the shell the same motile bacillus which was found in No. 1 (b) was obtained but no bacillus enteritidis sporogenes. (b) In

juice from the gastric gland the same motile bacillus was present which was found in the liquid inside the shell. The culture gave every indication of the presence of bacillus enteritidis sporogenes. A few of these oysters were placed in sea water to which a bouillon growth of the bacillus typhosus had been added. On the second day the oysters were taken out and placed in fresh pure sea water. An oyster was removed on the first, third, fifth, and seventh days and the juice taken from the gastric gland examined. Up to the seventh day the specific bacillus could be recovered and identified, but not afterwards.

Our investigations on these lines are being carried further, but the results point to the necessity of being careful about drawing conclusions as to sewage pollution of shell-fish from the presence of organisms belonging to the coli group or the bacillus enteritidis sporogenes.

THE IRISH CENSUS.

THE Registrar-General of Ireland has favoured us with a copy of Part II. of the General Report of the Irish Census which has recently been presented to both Houses of Parliament. The present issue is in continuation of previous volumes for the several provinces of Ireland; it is signed by three commissioners, Mr. Robert E. Matheson (Registrar-General), Mr. T. Bellingham Brady, and Mr. Robert J. Brew, and completes the series of Irish census publications for 1901. The volume before us consists of 640 folio pages and contains a vast amount of interesting matter concerning the population of the country, with especial reference to the housing, age distribution, and so-called "civil condition" of the people, as well as to their occupations, religious profession, and educational condition. This portion of the report is replete with detail and will afford material for profitable study to those who are more particularly interested in the welfare and progress of the Emerald Isle.

There is, however, one section of the report which deals with the local distribution of sickness and infirmity and which therefore appears to possess the chief interest for our profession; this section is peculiar to the Irish reports, no provision for the collection of similar information existing in any of the Census Acts for Great Britain. The importance which the commissioners attach to this part of their subject may be gathered from the fact that they have devoted to its consideration as many as 18 pages of closely printed letterpress and 31 full-page tables. We shall in what follows confine our attention to this part of the report.

Before entering into detail we must point out to our readers that the facts of sickness and of infirmity which have been so minutely analysed in the remarks and in the tables before us are derived from the reports of the enumerators exclusively; they represent the statements or opinions of laymen who are for the most part members of the Royal Irish Constabulary and are in no sense authorised by medical testimony; nevertheless, the returns are exceedingly interesting and are clearly deserving of consideration. In the tables numbered 98 to 129 certain details are given respecting the sick and disabled in Ireland on the night of March 31st, 1901. These tables deal with two great classes of the people—namely (a) those suffering from ordinary forms of illness—the "temporarily" sick, and (b) those suffering from usually incurable maladies—the "permanently" disabled. The classification of diseases employed is that which was designed for general purposes of vital statistics by the late Dr. Farr and which up to the close of the nineteenth century has been universally adhered to in Ireland as well as in other divisions of the United Kingdom.

On the night of the census the total number of sick and infirm in Ireland is stated to have been nearly 70,000, giving a proportion of 1 to 65 of the population. Of this aggregate about 36,000 were "temporarily" sick and the remainder were "permanently" diseased. Of the former class, 15,000 were living at home, 5000 were in infirmaries or special hospitals, and the remainder were in workhouse hospitals. Special inquiry was made as to whether sick persons at their own homes were or were not able to follow their usual occupations. The sick in hospitals and other institutions were of course assumed to be unable to follow any occupation and less than 200 of those sick at home were able to