

isolation not only of declared cases but of all doubtful cases of diarrhoea is quite essential, and for this purpose it is clear that the hospitals must be relieved of the stigma cast upon them by the present regulations. The discipline within the hospitals must be such, and the routine must be made so perfect, that it shall be impossible for cholera to spread within them, and when the private soldier once recognises that the hospital is a safe place, it will no longer be difficult to isolate the early developments of the disease.

But in addition to all this, wherever British troops are assembled, there should go the representatives of British science. The bacteriologist should be the pioneer; the water and the soil should be examined, and the movements of the troop should be made in accordance with the report. No longer should it be possible for troops to be forced out into encamping grounds, perhaps far more dangerous than the cantonments they leave, merely because a foolish man has brought the disease in with him from outside. Nevertheless, I do not say that moving out will never be necessary; if bacteriological examination should prove that the water and the soil of a locality are infected it may often prove the safest course to move into camp. This, however, will not be done by marches "at right angles, if possible, to the prevailing wind or track of the disease," but by a direct march to a place which is known by scientific investigation to be free from infection.

I need not here go into particulars which will more fitly fall into the province of the members of the Committee, but I would emphasise the importance of recognising that the object of the proposed reform is not a mere tinkering of the existing regulations, but the formation of a set of rules of action based, not upon old theories which have by tradition obtained in India a sanction almost like a religion, but on what is actually known to science about the origin and mode of spread of the disease.

THE BATTLE OF THE CLUBS.

FOLKESTONE.

As the outcome of a discussion opened by Dr. Frederick Eastes before the Folkestone Medical Society, the following memorandum has been signed:

"We the undersigned being medical practitioners in Folkestone and the neighbourhood, hereby undertake and agree neither to accept any appointment in any 'medical aid (or similar) society,' nor to have any professional intercourse whatsoever with any medical practitioner holding any appointment in or associating himself in any way with any of the so-called 'medical aid societies,' or with any similar company, so long as the methods adopted by these societies include:

- "a. The virtual sweating of their medical officers by the appropriation of the profits earned by his work.
 - "b. Canvassing for members in the interests of individual practitioners.
 - "c. The absence of a wage limit.
- "We sign this on the understanding that the clause implying professional ostracism be not enforced till the new Provident Association is formed."

C. E. Fitzgerald.
W. J. Tyson.
Thomas Eastes.
Percy Dodd.
Arthur W. Warde.
Charles E. Perry.
John Hackney.
Percy G. Lewis.
Lennox Wainwright.
Frederick Eastes.
E. D. Fitzgerald.
M. G. Yunge Bateman.
E. D. Tomlinson.
W. P. Barrett.
Matthew Dobbs.
H. A. Powell.

John Tennant.
Arthur De Butts.
Leo Ellis.
Cecil Latter.
Cecil A. P. Osburne.
Alan Murdoch.
A. Randall Davis.
Fredk. Wm. Henderson.
Charles F. Long.
W. F. Chambers.
W. L. Chubb.
W. E. Alston.
W. Howard Sturge.
Henry Lewis.
Edward Norton.
Arthur E. Price.

A Subcommittee has been appointed to draw up rules for the proposed "Folkestone Provident Medical Association. These rules will be brought before the Folkestone Medical Society at the annual meeting on January 8th, 1896.

We recommend this example to the councils of the local Branches of our Association.

THE CASE OF DR. LIONEL SMITH.

The following additional sums have been received at this office in response to the appeal from Dr. James F. Goodhart and Dr. de Havilland Hall, published in the BRITISH MEDICAL JOURNAL of December 21st, 1895:

	£	s.	d.		£	s.	d.
Sum already acknowledged	5	10	0	Mr. T. B. Goss, Bath	1	1	0
Dr. Francis H. Parsons,				Dr. John M. Bright, Forest			
Worthing	1	1	0	Hill	1	1	0
Mr. C. B. Humphrys, Bland-				Dr. E. B. Ffennell, Kimber-			
ford	1	1	0	ley, Nottingham	0	10	6

The above subscriptions have been sent to Dr. Hall, who desires to acknowledge the following in addition:

	£	s.	d.		£	s.	d.
Mr. H. T. Butlin	2	2	0	Dr. W. Domett Stone	1	1	0
Dr. de Havilland Hall	2	2	0	Surgeon-Captain Walsh	1	1	0

THE STIRLING COUNTY BALL POISONING.

CONTAMINATED WATER.

DR. A. K. CHALMERS, the joint Medical Officer for the City of Glasgow, has just issued his report "On Certain Associated Cases of Enteric Fever following Stirling County Ball on October 1st, 1895," and there is appended to it a report on the bacteriological examination of the oysters by Dr. R. M. Buchanan, Professor of Medical Jurisprudence in Anderson's College, Glasgow. The following is an abstract of Dr. Chalmers' report.

This ball was held in the Stirling Public Halls, and was attended by over 480 persons. After an interval several of those who had been present sickened. Three of them were resident in Glasgow, and, on the first notification being received, it was learnt that another gentleman, who had also been present, was likewise ill. A second case occurring in Glasgow was notified subsequently, and thereafter it was ascertained that several others had sickened in various parts of the country.

From this point the inquiry fell into two lines: Dr. Wilson collecting such information as existed in Stirling as to the condition of the Public Halls and the presence of enteric fever otherwise in and about Stirling at the time; while, for Glasgow, the special interest lay in the fact that all the food stuffs supplied during the entertainment had been purveyed by a well-known firm in Glasgow.

The patients were each under different medical supervision—three in Glasgow, five others in various parts of Scotland, two in England, and one in Venice. There need exist no hesitation in regarding them as genuine cases of enteric fever. It was observed, however, in two at least of the attacks, that the earlier symptoms were accompanied by evidence of local inflammation, which in one instance ended in a superficial abscess. This is not a feature of uncomplicated enteric fever at its onset, and Dr. Chalmers is disposed to attach some importance to it in connection, first of all, with the severity which otherwise characterised several of the attacks; and, secondly, because of the occurrence of symptoms of gastro-intestinal irritation in a few of the other visitors, who did not, however, ultimately develop enteric fever. In these latter cases the symptoms began within twenty-four hours, and apparently resulted from ptomaine intoxication. That is to say, they are to be regarded as resulting, Dr. Chalmers thinks, from the consumption of some article of food which was undergoing putrefactive change. These several factors, therefore, appear in some manner to be correlated, and suggest that the severity of the enteric fever may have been dependent on the contemporaneous action of other agencies, which acted in preparing the way for its entrance into the system.

The inquiry into the source of the food stuffs was much simplified by the fact that most of the articles were cooked. All such, however, as from their nature could be regarded as

possible carriers of infection were made the subject of inquiry. This list comprised aerated waters, ice, ice creams, creams, sweets (into the composition of which whipped cream entered), salads, and oysters.

The ice used in the preparation of claret and champagne cup, and also added occasionally to champagne and other beverages, was purchased by the Stirling agent from a Glasgow ice merchant. A question at one time arose as to whether this supply was not supplemented by some "home ice" obtained during last winter's frost; but Dr. Chalmers was ultimately assured that this was not the case, as the supply then obtained had been exhausted in August last.

Inquiry showed that the aerated waters, cream, and salads might be excluded. The oysters were obtained by the purveyors through Mr. William Milne, oyster merchant, Glasgow, who readily placed at the disposal of Drs. Chalmers and Buchanan every facility for acquiring much of the information they were in quest of, and voluntarily communicated much which otherwise they could only very laboriously have acquired. The oyster beds are situated in Holland, and an investigation undertaken by Dr. Saltet, medical officer of health for the city of Amsterdam, and Dr. Van der Loeff, medical officer of health for Zealand and East Brabant, showed that there was no evidence to support the view that the oysters had become specifically contaminated at the beds, in packing, or during transit.

The report from Holland stated that the bay in which the oyster beds lie is not generally polluted by sewage to any great extent, and that specially in the weeks immediately preceding September 24th (when the oysters were sent to Scotland), "the pollution must have been very insignificant."

These observations tended to exonerate the oyster from any active share in the introduction of the enteric fever virus, and confirmation of this impression was shortly forthcoming. It was already known that nine of those attacked by enteric fever had partaken of oysters during the course of the evening; but of two ladies, sisters, one had already succumbed to the disease, and the other was so ill that information could not be obtained until convalescence had become established. On December 19th, however, it was ascertained definitely that this lady had no oysters on the evening in question, and this very materially strengthened the impression which the description of the conditions of the growth and transit of the oysters already given created.

Not the slightest evidence, therefore, has, Dr. Chalmers continues, been discoverable pointing to contamination of the food supplies prior to their delivery at the halls on the evening in question. It has been stated, on the testimony of the oyster openers, that these were in good condition when opened. They were opened, however, and until required kept in a small side corridor adjoining one of the principal lavatories, an exceedingly unhappy site for such a purpose. Indeed, it would seem that some influence to which they were here exposed rapidly determined putrefactive changes in some of them. But the risk which attends the consumption of putrescent oysters is that of ptomaine intoxication; while an oyster bathed in liquid containing the germ of enteric fever may, like milk when similarly poisoned, be bland to the palate, yet virulently poisonous in character.

In Stirling during the past autumn there has been little enteric fever among the population. One case of the disease was notified, Dr. Wilson tells me, on August 31st, another on September 20th, a third on October 17th (a gentleman who attended the ball); and there was no other during this month. The halls in which the ball was held are in large demand for concerts and meetings of various kinds, and food has been purveyed on nine of these occasions since August last, being in several instances cooked on the premises. The county ball alone among them was followed by cases of enteric fever, the greater part of the food here being cooked before being despatched from Glasgow. On November 14th information reached me which suggested that the drainage of the halls was defective, and this information I communicated to Dr. Wilson. On an examination of the drainage system being made by Mr. Wallis, M.S.I.Lond., resident engineer to the West of Scotland Sanitary Association, structural and other defects therein were found. The present tendency very largely is to discount the power of drain effluvia to cause specific disease. But with defective drainage there is usually pollution of subsoil, and when once the possibility of this

has been established, the presence or absence of the means of specific pollution, in a place of public resort, is reduced very much to a matter of chance. In the present instance all we know is that enteric fever, associated with a few other illnesses attributable to ptomaine poisoning, occurred; that up till the time the food supplies were delivered at the halls there is a complete absence of evidence pointing to contamination; that the subsoil there was exposed to pollution from defects in the drainage; and that the climatic conditions of the period were marked by an unusually high range of air temperature.

THE BACTERIOLOGICAL EXAMINATION OF THE OYSTERS.

Dr. R. M. Buchanan reported that experiments were undertaken without delay with the object of isolating and obtaining in pure culture the different species of bacteria which might be present in the oysters. The ordinary nutrient media, "gelatine" and "agar-agar," were inoculated and spread on glass plates. The inoculations were made with material (1) from the outer surface of the oyster shell, (2) from the enclosed water, (3) from the body of the oyster, and (4) from the sandy debris within the shell. The gelatine plates yielded, at the room temperature, abundant colonies of bacteria, comprising in all seven or eight species. When the colonies had sufficiently developed, in two to three days, the different species were transplanted into gelatine in test tubes for further examination in pure culture. The agar-agar series of plates, at incubation temperature, also produced a variety of species, and these were similarly isolated in gelatine tubes. A few colonies, both in the gelatine and agar-agar plates, presented a certain outward semblance to colonies of the typhoid bacillus, and the likeness was maintained to a large extent in the tube cultures. These growths were then submitted to the more crucial tests of microscopical examination, cultivations on potatoes, in milk, and in glucose bouillon, and it was found that the other characteristics which go to distinguish the bacillus of typhoid from other bacteria were wanting. The investigation here outlined, and extending over a period of six weeks, affords no evidence of the presence of the bacillus of typhoid fever in these oysters.

THE PENAL POWERS OF THE GENERAL MEDICAL COUNCIL.

WE have received from a correspondent a long letter drawing attention to the series of resolutions which have been from time to time passed by the General Medical Council in regard to "covering" unqualified persons and to the employment of unqualified assistants. These resolutions have been published repeatedly by the Council in the advertisement columns of the BRITISH MEDICAL JOURNAL. So far as their words go, they seem sufficiently stringent to enable the profession to purge itself of all complicity with the forms of misconduct there alluded to. Our correspondent, however, looking around him, finds instances on every side of apparent infraction of all the principles laid down in these resolutions, and, seeming to assume that such of these practices as go on have received the sanction of the Council, asks for some much clearer definition than has yet been given of the meaning of the words of the resolution and of the particular lines of conduct which will of a certainty be held to be covered by them.

* * It must be remembered that as an Act of Parliament has to be interpreted by the decisions of the courts, so in this case these resolutions must be interpreted by the decision of the General Medical Council on the specific points raised. We have carefully gone through the cases which have been adjudicated on by the Council, and it is quite clear that the resolutions are by no means a dead letter, and that condign punishment would fall upon many of those who act as our correspondent describes, if their misdeeds were properly brought before the Council. Indeed, a very large majority of the cases dealt with were found guilty, and removed from the *Register*.

Roughly, the cases may be divided into three categories, which are of very varying degrees of interest to medical men:

(a) Cases of pure "covering" of unqualified persons, cases in which the practice or the business belongs to the unqualified person, and the medical man has nothing to do but to protect him from legal action by the use of his name, will always meet with the reprobation of honest men, and against them it ought always to be possible to obtain a conviction.

But other cases occur in regard to which respectable practitioners may have a double interest on the one hand as pro-