

THE meeting of the Obstetrical Society on Wednesday evening promises to be one of much interest. Dr. Edis will read a paper on "The Forceps in Modern Midwifery," which is likely to give rise to discussion. Dr. Playfair will also contribute a paper on "Fibroid Tumour complicating Delivery," should time permit.

AN Executive Committee meeting of the General Medical Council has been summoned. In addition to other pressing business we imagine that the subject of the time of the next meeting of the Council will be fixed.

SANITARY CONDITION OF THE WAR OFFICE.

THE Report of the Commission recently appointed to inquire into the sanitary state of the War Office is issued as we go to press. The whole of the War Office buildings, in Pall Mall, from basement to roof, were examined. The Commission, while satisfied that by no alterations can the building be rendered sanitarily satisfactory, desire to suggest that the following means should at once be adopted for the purpose of mitigating some of the present defects:—

"1. The closets in the area should be removed, with the exception of those needed by the families resident in the building, which should be thoroughly ventilated.

"2. The laundry should be removed.

"3. If it be impossible to remove the printing establishment, or greatly reduce the staff, ventilating shafts should be introduced into the second and third rooms, as has already been done in the first.

"4. The whole of the gas-burners throughout the building should have hoods and tubes.

"5. The condemned waterclosets ought to be removed at once.

"6. The waste pipes of the lavatories, and the overflow pipes of the cisterns, should terminate in the open air, and be cut off from all direct communication with drains. No traps will efficiently supply the place of open air termination.

"7. All taps communicating with cisterns which supply waterclosets should be removed, so that there may be no possibility of the water being used for drinking purposes.

"8. The building has been so cut about and altered that we cannot recommend any one system of ventilation as applicable to the whole office. The ventilation of each room and passage should at once be taken in hand, every case being treated specially. We would however recommend, in every instance, that the ventilators introduced should be of such a nature as to be beyond the control of the occupants of the room, and so constructed as not to create draughts.

"To render the air of the rooms less foul we advise that rooms be set apart for luncheons, and that a special hour be fixed for the meal. The windows of the rooms should be freely opened by a porter during the absence of the occupants.

"It must be borne in mind that these suggestions, if carried out, will, in our opinion, only mitigate evils, not remove them.

(Signed) "WILLIAM JENNER, M.D.
"W. M. MUIR, M.D.
"EDWARD C. SEATON, M.D.
"A. B. MITTFORD."

MANCHESTER MEDICAL SOCIETY.—At the annual general meeting of this Society, held on January 10th, the following were elected office bearers for 1877:—President: Dr. Ransome. Vice-Presidents: Dr. Leech, Dr. Little, Dr. Lloyd Roberts, Mr. Windsor. Hon. Secretary: Mr. Walter Whitehead. Hon. Treasurer: Dr. Thorburn. Hon. Librarian: Mr. Cullingworth. Committee: Dr. Bird, Dr. Borchardt, Mr. Broadbent, Mr. Bradley, Mr. S. Buckley, Dr. Dreschfeld, Professor Gamgee, Mr. Galt, Mr. Heath, Mr. Jones, Mr. Pinder, Dr. Ross. Auditors: Mr. A. Bouflower, Dr. Maccall.

Correspondence.

"Audi alteram partem."

ON POISONING BY COPPER.

To the Editor of THE LANCET.

SIR,—Having, in the course of some recent inquiries into poisoning by copper, come across certain facts of special interest with which I was not previously acquainted, and which, if I am not mistaken, have not been noticed by English writers on toxicology, I should be glad if you could find place for them in your columns.

Acute Poisoning by Copper.

1. In the second volume of the "Medical Observations and Inquiries, by a Society of Physicians in London," published 1764, I find a letter from Mr. James Ramsay, surgeon, on "Copper Vessels," addressed to George Macaulay, M.D., and read at the Society, October 2nd, 1758. I will give the substance of this communication in as few words as I can.

On the 2nd Sept., 1757, William Carlile, aged fourteen, was suddenly seized with convulsions, and fell down on deck insensible. For a quarter of an hour he remained with eyes fixed, face convulsed, and head awry. Under the influence of hartshorn he became a little sensible, and soon after had a slight anodyne, which he immediately threw up with a large quantity of yellow bile. A messmate here recollected that he had seen him at dinner eating peas from the bottom and sides of the large copper kettle. He was then ordered an emetic, but before it could be given fell asleep. During the night he was frequently convulsed, cried out like a child, talked incoherently, and struggled so that two men could scarce hold him. In the morning he had pains in his bones and head, and nausea. An emetic of ipecacuanha was therefore given him, followed by an anodyne, and in two days he was quite well. Upon inspecting the kettle, a good deal of verdigris was found at the corners of it.

Six days after this Mr. Ramsay was summoned on board the *Vestal* frigate to consult with two other surgeons "about some people that were taken suddenly ill of a very surprising disorder." On the 6th September (two days previously) one man was seized in an instant with dulness, stupidity, and headache. He fell down, and struggled so hard that it required six men to hold him; soon became delirious, and behaved in the most extravagant manner. The next day (the 7th) several more were seized, and on the 8th sixteen more. They were all at times outrageous and mad, struggling violently, and snapping with their teeth at those who held them. One fancied himself a captain, and gave orders accordingly; a second called out "ground ivy to sell"; a third, "old chairs to mend"; one spat in your face, and laughed heartily; one was merry, and sang; another surly and ill-natured; another moped in a corner, stupid and insensible. All had lucid intervals, and complained of pains in their bones and of headache. The pulse, during the fit, was full, quick, and strong; but it became soft on a sweat breaking out. Their eyes were inflamed, their looks wild, their speech incoherent, and they slept little. None complained of gripes, and few of nausea. The fits returned after various intervals and more than once, and seem to have been rendered less violent by bleeding. Vomiting did not afford any immediate relief. After the 8th there were no more seizures, and all recovered in three or four days. The ship was large, airy, newly built, and hitherto very healthy. The men were served with fresh meat, and the beer and provisions were good. The seizures chiefly took place after dinner. On inspecting the kettles, "nothing remarkable was found in them."

Again, under date November 27, Mr. Ramsay witnesses "the like malady," "attended with the same odd symptoms," on board the *Adventure*, armed ship. The surgeon found the coppers very foul; but, upon remedying that fault, the disease stopped. About fifteen persons were seized with it.

Mr. Ramsay attributed these strange symptoms to verdigris; adding, that "though in the vessel the fault was not so very apparent, yet the disease, stopping all of a

sudden, cannot so well be accounted for in any other manner than from a little more caution used by the cooks in cleaning their kettles."

I will not at present comment further on this case than to note the extreme violence of the convulsions present, and that in this respect the cases are in harmony with the fact recorded by Percival, that the most violent convulsions he had ever seen occurred in a girl who had swallowed two drachms of sulphate of copper, but recovered; and with what is said of the three men who died of copper-poisoning on board the *Cyclops* frigate, in whom there was insensibility and "the body was violently convulsed."

2. I have been indebted to a curious treatise on the adulteration of food, &c., for reference to a work of which I was previously ignorant, and which I do not find quoted in works on Toxicology. I allude to the "Medical Essays" of John Johnstone, M.D., F.R.S., a Fellow of the Royal College of Physicians, and Harveian orator (1819). The work consists of four essays printed at various periods between 1795 and 1805, to which his Harveian oration is added. The first essay is on "Mineral Poisons," and gained the Medical Society's Prize Medal offered in 1793. It consists of 168 pages 8vo, and, considering the time at which it was written, is a very creditable production. In the chapter on Copper, after citing the fatal accident on board the *Cyclops* frigate, in which thirty-six men were poisoned by victuals prepared in a foul copper, of which number three died, and three well-known cases by Percival, with two from Neumann's "Chemistry," in one of which "severe vomitings, with gripes and convulsions," arose "from the application of the unguentum Egyptiacum to the mouths of children," the author goes on to say: "I have known the same inconvenience arise from the use of a cupreous ointment for the cure of aphthæ, and in one case the life of the child was saved with difficulty; though, from the quantity of ointment applied to the mouth, the portion of copper taken into the stomach must have been very small." The subject of poisoning by copper, as treated in the fifth chapter of Johnstone's essay, will well repay perusal.

3. In one of the works to which I have had occasion to refer reference is made, through inadvertence, to a certain lamentable occurrence that took place at Salthill in 1773. The writer was evidently under the impression that that was a case of poisoning by copper. As I have more than once come across a reference to this case (and to the best of my recollection it is mentioned by Howard), I referred to the pages of the Annual Register for 1773, and there found an authentic account of this lamentable occurrence. It turned out to be not a case of poisoning by copper, but one of the most painfully interesting instances on record of an attack of gaol fever, having for its victims a group of local officials, brought into contact, not with prisoners, but with paupers. All who came into contact with the paupers had the fever, and half the number died, the only one of the body who escaped being a gentleman who was not present when the paupers were seen. This case becomes doubly interesting when we find it confirmed, as it is, by Dr. John Johnstone in the essay in which he justifies his father's claim to the invention and use of muriatic acid gas as a disinfectant. He shows, by more than one instance in point, that the gaol fever which afflicted our prisoners in Howard's day made itself at home also in our workhouses. This fact, so interesting to the student of the health-history of England, is brought into strong relief by the tragedy of Salthill, and the cases which Dr. John Johnstone finds occasion to quote.

I am, Sir, your obedient servant,

Gordon-street, Feb. 26th, 1877.

WILLIAM A. GUY.

SPONTANEOUS GENERATION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 17th of February there is an article in which Dr. Tyndall and myself are referred to in the following terms. Speaking of Dr. Bastian and of those who share his opinions, the writer of the article says:—"These gentlemen deny the exclusiveness of the germ theory, and maintain the doctrine of spontaneous generation, which, at Glasgow last October, Dr. Tyndall declared

owed its existence to the untrained experimentation of its advocates. But about two months before this declaration M. Pasteur, whom Dr. Tyndall has placed in the ranks of 'experimenters who can walk without tripping,' had acknowledged an opponent in the right and himself in the wrong." The opponent here referred to is Dr. Bastian.

I should be much obliged to you if you would have the goodness to rectify this assertion in your next number. I was the first to demonstrate, fifteen years ago, that the sterilisation of organic liquids, when they are neuter or slightly alkaline, requires a temperature higher than 100° C. Dr. Bastian then, in heating only to 100° C. his urine on the one side and his potash on the other, and then mixing them so as to obtain neutrality, has made an experiment which takes its place in the list of those to which I refer. Confining himself to a temperature of 100°, he has obtained, and he can obtain, bacteria. It is in reference to this that I have said I agreed with him. How should it be otherwise? He has simply repeated one of my own experiments, and it is possible to compose a thousand liquids which will lead to the same result. It is only necessary to make them agree with the general formula which I have given. The error of Dr. Bastian consists in the assertion that these experiments on neutral and alkaline liquids—experiments which are mine, and which he has appropriated while confirming them—establish spontaneous generation. I have challenged Dr. Bastian to successfully make the experiment in question with urine, only imposing on him the condition that the urine shall be sterile and the potash be pure or sufficiently heated. I am ready to prove to Dr. Bastian that bacteria only appear when they are introduced either by the urine or by the solution of potash. Hence there is no such thing as spontaneous generation involved in this experiment. Dr. Bastian has accepted my challenge, and I have publicly thanked him before the Academy of Sciences, which immediately, at my request, named a commission, composed of MM. Dumas, Milne-Edwards, and Bousingault. We shall therefore soon know what we are to believe regarding the subject in debate.

I should have willingly spared Dr. Bastian the condemnation of an academical commission. On the 11th of last January I wrote to him thus:—"I entreat you, in the name of truth, to confess loyally that the conclusions you have advanced on the subject of spontaneous generation of bacteria in the solution of urine and potash are entirely erroneous. You will gain by doing so a reputation for scientific probity and honour, which will add more to your name and to the distinction of your career as a conscientious worker than even an important discovery."

Dr. Bastian has persisted in shutting his eyes against the truth.

Accept, Sir, the homage of my most distinguished sentiments.

Paris, February 25th.

L. PASTEUR.

TREATMENT OF VARICOCELE.

To the Editor of THE LANCET.

SIR,—In last week's number of THE LANCET there is a very interesting paper by Dr. Will, of Aberdeen, on a method he employs for constricting the vessels in varicocele. That plan is very similar to one I have been in the habit of employing in public and private practice for some years, and which I last applied on the 19th of this month to a patient now lying in the Western Infirmary. I employ a small trocar and cannula to traverse the tissues behind and in front of the veins, and I pass a loop of strong wire through the cannula, one behind and another in front of the vessels, taking care to place these loops in opposite directions. I find the trocar and cannula a very speedy and easily guided means of placing the wires in the desired position. I introduce two sets or pairs of wires, the one below the other—i.e., nearer the scrotum—and they are tightened, as described by Dr. Will, by passing the free ends through the loops, and when drawn tight the loops disappear within the tissues. The constriction is perfect, and has always, in my experience, performed the part required. I have never had to abandon the wires, nor have they ever failed to divide the veins. If it is thought right, the vessels can be divided subcutaneously with the tenotomy knife between the con-