

surgical operations, that there has not long ago been devised some means to provide an aseptic inhaler, and one which could be cleansed of the secretions and exhalations of one patient before applying it to the face of another. It is simply horrible to contemplate the use of a Clover inhaler and bag which has already been used on the face of hundreds of other patients, and without any possibility of properly cleansing it, either by heat or chemical sterilisation." Thus, whilst I, in this centre of civilisation, have been mildly urging reform and gently suggesting a change in anæsthetic apparatus, my colonial friend has forestalled me by nearly two years in an onslaught which for dash and courage reminds one of the long lost "Rupert of debate."

My colleague Dr. Silk has done me the honour of discussing my paper in THE LANCET of March 20th from an "anæsthetist's point of view" in a very temperate article, though he must be regarded as holding a brief for the defence. What he says is perfectly true, that pneumonia from septic wound infection is practically removed from surgical practice; but surely this is all the more reason that direct lung infection, such as the case I quoted, rare though it may be, should be more strictly guarded against than at present. His argument against the bacillary origin of pneumonia would not, I am afraid, be accepted by any modern physicians, who are now beginning to classify pleurisies according to the particular organism exciting the effusion. It is sad to think anyone could now be satisfied with the view that the only relation of germ-infection to pneumonia is that the "conditions and secretions of pneumonia furnish very suitable media for the growth of the organisms in question." I will only state with regard to this remark that this was precisely the argument used by the older surgeons when antiseptic surgery was first introduced. They tried to teach us that the bacteria of suppuration were the result, not the cause, of the process. His third argument, that because in their concentrated form chloroform, ether, and alcohol are fatal to bacilli, therefore the masks which are subjected to a dilute vapour would be free from living organisms, is not one that would hold, seeing how difficult it is to destroy these organisms. Surely physicians would long ago have cured all cases of phthisis by the aid of their friends among the anæsthetists if the vapour of any of the drugs used for producing anæsthesia could be trusted to destroy tubercle in the lung. In the end, however, Dr. Silk and I are in perfect agreement that there is still room for improvement in inhalers, and he has long been at work to produce an instrument capable of being sterilised, though perfectly conscious that he could never have done any harm by one that was not capable of being absolutely cleansed. His inventive genius has broken loose in spite of his arguments, and he has been impelled to produce an instrument his reasoning shows is quite unnecessary. He has travelled from a leather mask, through a celluloid inhaler, up to a metal face-piece, and he ends by saying of this: "One of the advantages which I claimed for it being that it met with the demand for an inhaler which could be subjected to the same aseptic treatment as the instruments employed in the operation." Could any two persons be in more absolute harmony? Unfortunately, the ladder by which Dr. Silk ascended still stands against the wall, and the celluloid masks with their septic flannel linings and sponges are still in common use. Some time ago I proposed an Instrument Destruction Committee, to have power to destroy all instruments out of date, and so relieve hospital surgeons of having to operate with instruments invented several generations before. I think the Society of Anæsthetists would do good work by appointing a committee to report on inhalers meeting the requirements of modern surgery, and at the same time empower it to do what is possible to stamp out those belonging to the septic era. My own suggestion, that toughened glass would be the best material for a mask, has, according to Dr. Buxton, been anticipated by Vajna of Budapest, and since this invention has been so highly spoken of I hope we may soon see specimens in use in London.

I am, Sirs, yours faithfully,

R. CLEMENT LUCAS, B.S. Lond., F.R.C.S. Eng.,

Surgeon to Guy's Hospital.

Wimpole-street, W., March 29th.

To the Editors of THE LANCET.

SIRS,—The question indistinctly asked by Dr. Florence Nightingale Boyd in your last issue arises only from the strange tendency there seems to be to forget or ignore in

one generation the facts established in that preceding it. It cannot be more than fifteen years since the following facts concerning ether as an anæsthetic were proved beyond dispute: 1. That during its administration the secretion of urine is suppressed. 2. That in damaged kidneys this temporary suppression sometimes becomes permanent. 3. That in certain diseases where structural alteration of the kidneys becomes almost a matter of course, as in large tumours of the uterus and chronic syphilis, rapid and fatal pneumonia or suffocative pulmonary œdema, resulting from the use of ether, adds greatly and unnecessarily to the mortality of operations. 4. That ether is a far more fatal anæsthetic than chloroform, only its victims die some days after the administration, and there are no inquests.

I am, Sirs, yours faithfully,

Birmingham, March 29th, 1897.

LAWSON TAIT.

## THE RETURN OF MIDWIFERY CASES IN POOR-LAW UNIONS.

To the Editors of THE LANCET.

SIRS,—As many persons seem to be interested in a return of midwifery cases in Poor-law unions for which I have given notice, I shall be obliged if you will allow me to inform them through the columns of THE LANCET that I have received information from the Local Government Board that they cannot at present grant the return owing to the pressure in the statistical branch of the Board, where the work is considerably in arrear and many returns are wanted, particularly in connexion with the Local Taxation Commission. There is no prospect of obtaining the return except as an unopposed one, and as no useful purpose would be served by keeping my notice on the paper I have no alternative but to withdraw it.

I am, Sirs, yours faithfully,

House of Commons, March 25th, 1897.

J. H. JOHNSTONE.

## "SHOULD EPILEPTICS MARRY?"

To the Editors of THE LANCET.

SIRS,—The question raised by Mr. W. G. Thistle as to whether acquired characters are or are not transmissible is one of immense importance to medical men, but it is one which has not received the attention it deserves from them. Rightly or wrongly, very many—I believe the vast majority—hold the opinion that acquired characters—e.g., the effects of injury or disease—are transmissible, and in medical literature one constantly meets statements implying this belief. For instance, not long ago an ophthalmic surgeon advised his students to pay increased attention to the eyes of children, for, argued he, these young people have yet to bear offspring, who will suffer from the transmitted effects of parental disease; whereas the effects of disease in the aged will not afflict an unborn generation. Again, "M.R.C.S., L.S.A.," writing in THE LANCET of March 27th (p. 931), tells us of a hare-lip which resulted, as he supposes, from the circumstance that the pregnant mother was frightened by a hare. In the words of Mr. Herbert Spencer, "Clearer conceptions of these matters would be reached if, instead of thinking in abstract terms, the physiological processes concerned were brought into the foreground." It is constantly forgotten that an animal (a man, for instance) is not the offspring of the whole of his parent's body. He develops out of a very minute portion of it only—the germ cell. His eyes are not the offspring of his parent's eyes, his legs have not origin in his parent's legs, and his brain is not descended from his parent's brain; but every portion of him arises solely from the germ cell, which, so far as we know, is indebted to the other cells only for shelter and nutrition. This consideration renders unbelievable the hypothesis that acquired traits are transmissible. Suppose, for instance, a man injures his eye or receives such injury to his brain that epilepsy supervenes; then, if his acquired character is to be transmitted, his spermatozoon, situated far distant, must be so structurally altered, so profoundly modified in a particular direction, that long after separation from the parent organism it will proliferate into an organism which has, inborn, the peculiarity which the parent acquired. By what machinery is this modification of the germ cell brought about? The case for the transmission of such maternal impressions as "M.R.C.S., L.S.A.," chronicles is even harder. What magical influence, does he suppose, emanated from the brain