

to it by bending the wires, which circumstance alone gives it a great advantage in practice over the canula.

### DR. PEASLEE'S NEW MICROSCOPE.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—Knowing the interest you feel in the advancement of sound medical learning, permit me, through your valuable Journal, to call the attention of the New England public to a short description of a microscope which Dr. E. R. Peaslee, Professor of Anatomy, &c., of Dartmouth College, and Lecturer on Anatomy and Surgery at Bowdoin College, has just received from Paris. I ought to premise, perhaps, that this instrument was ordered by the Professor in season for the last medical course at Dartmouth College, but owing to the delay of the manufacturer has but just arrived.

The doctor writes me, in relation to this instrument, that “the workmanship is of the most splendid kind in all respects, and, so far as I have had time to test it, its optical powers fully equal its mechanical perfection. Decided improvements have recently been made in the construction of microscopes by Chevalier, of Paris. Professor Baillie’s instrument, which he has employed at West Point, as you are doubtless aware, has been regarded as the best in this country. “The extreme magnifying power of this instrument,” the doctor continues, “is also greater than I had expected—3,000 diameters or 9,000,000 areas. The minimum is 50 diameters. It has also a great variety of apparatus, besides that necessary for common purposes, and by reason of which, it truly deserves the name of ‘Microscope *Universel*.’ It can be used as a *vertical* or *horizontal* instrument; it has an apparatus for *chemical* observations; one for *anatomical*; another for copying the magnified objects by means of the camera lucida; and another for viewing objects by polarized light.”

It is due to the doctor, also, that the public should be informed that this instrument, the workmanship of the best optician on the Continent—Chevalier, of Paris—has been procured at his own private expense; and it cannot but be hoped that the doctor’s success in investigating and elucidating the truths of science with this splendid instrument, may be as great as has been his self-sacrifice in procuring it.

Yours truly,

LYMAN MASON.

### ON CHRONIC PERITONITIS AND TABES MESENTERICA.

By C. J. B. Williams, M.D., F.R.S.

CHRONIC peritonitis may proceed from the acute disease, or it may begin insidiously. The symptoms of the chronic disease are: continued frequency of the pulse; fever, of a subdued character, with which more or less pain and uneasiness in the abdomen are combined. A pricking pain, acute in some parts, is felt from time to time, with a degree of tenderness

and soreness. When the disease begins in the chronic form, it is much more insidious ; it may steal on gradually without appearing to exist, and the first sign is an enlargement of the abdomen, with liquid effusion. There is, sometimes, vomiting and purging, or there may be constipation, attended with symptoms of dyspepsia. The pain and uneasiness in the abdomen are not so soon developed in the chronic form, but there is rather an inability to bear anything tight on the abdomen. As the disease goes on, the abdomen becomes enlarged, not only by the effusions I have mentioned, but by serous congestions. This takes place whilst other parts become emaciated. The limbs become smaller, while the belly gets larger. There may be constipation, or there may be the opposite state ; and the faces themselves are generally disordered in character, being either too light or too dark. The tongue, in this disease, is usually covered with a fur of a purplish-brown color, sometimes glazed and red ; the lips cracked, and the skin pale, sallow, and wrinkled. On examining the abdomen, you will never fail to find some physical signs of disease. The walls of the abdomen are loose, but the viscera may be felt underneath, in a hard and knotty state, and in irregular masses : some parts being more resisting than natural. Generally speaking, there is some tenderness in particular parts, and the sound on percussion is very irregular, some parts being tympanitic, and others having a degree of dullness. If there is liquid effusion, it may be difficult to distinguish it from pure ascites or dropsy, which we shall have hereafter to consider. But the liquid effusion, accompanying peritonitis, is usually attended by some irregularity in the swelling, a great amount of tenderness in the abdomen, and the absence of the signs and causes of ascites. There is, usually, no disease of the liver, with the effusion arising from peritonitis : no disease of the heart ; yet there is progressive emaciation ; there is fever ; and, at last, anasarca may occur, and the patient become generally dropsical. This is not an uncommon result of peritonitis. The nutritive functions become deranged, with the altered state of the viscera of the abdomen.

It is not necessary to go minutely into the history of the appearances of chronic peritonitis, as the history of chronic pleurisy will serve to give an idea of them. Chronic peritonitis occurs especially in scrofulous children, and, in fact, it may be pretty generally considered as a scrofulous, or tuberculous form of disease, whether occurring in children, or in adults. When it takes place in children, there is fever, and gastric or enteric derangement, or diarrhœa ; there is slight tenderness of the abdomen ; but this is often very little complained of. Structural changes sometimes take place, without any marked symptoms occurring. It is occasionally observed to follow measles and whooping cough, and, in some instances, to be accompanied by liquid effusions into the abdomen. A slight degree of fever remains, and the patient loses strength, whilst the belly gets larger. I have known the same thing occur in a child, who had suffered from ascarides, and, owing to these symptoms, the latter disease had escaped attention. On examination after death, it was found that the peritoneum was very extensively tuberculated. Chronic peritonitis is generally tuberculous ; Louis says it is always so ; but there are forms of

chronic peritonitis, in which granular tubercles are not present. I have met with cases of the disease, in which all the intestines have been agglutinated together; there were no distinct tubercles present. The reason why chronic peritonitis is more constantly tuberculous than chronic pleurisy, I believe to be that, in the case of chronic peritonitis, there is less motion of the intestines, or less compression, so that the low products of inflammation assume the natural rounded character which slow effusions are apt to take, if unmolested. The effusion of lymph is first of all granular.

The *treatment* of this affection is, for the most part, palliative. When once the disease has reached to a considerable extent, as exhibited by a knotty state of the addomen, with more or less distention from liquid or solid effusions, and great emaciation, little is to be done but to palliate the symptoms. But if detected, or suspected, in the early stage, there is then reason to believe that a well-adapted treatment will remove it. I had several cases, under my own observation, of incipient symptoms of chronic peritonitis, with liquid effusion in the abdomen, tenderness on pressure in those parts, and all the symptoms I have mentioned, and they subsided under persevering treatment. Fomentations, followed by blisters, and, subsequently, the use of mercurial ointment, or mercury combined with iodine and iodide of potassium, exerted a very powerful influence. This treatment, persevered in, with mild aperients, succeeded in dispelling the symptoms of this affection. However, while in one patient all these symptoms subsided, the brother of the same child died under exactly similar symptoms, and the peritoneum was found to be extensively diseased. In case of more extensive liquid effusion, it is useful, if mercury has not been administered previously, to affect the gums with this medicine, giving diuretics in small doses, but taking care to guard against violent sickness and vomiting. The diet should be of a mild character in these chronic affections of the abdomen, but not too spare. Chronic inflammation is combined with derangement of the whole system, and the extreme reduction, that answers in acute inflammation, becomes, in many cases of chronic disease, injurious. With the diet, there should be a small allowance of animal food frequently given. Healthy air is of the greatest consequence in these cases.

*Tubes mesenterica* is closely allied with this disease. It consists of an undue development, or enlargement, of the mesenteric glands, and is very often combined with tuberculous peritonitis.

Sometimes it consists of a slight enlargement and disease of the glands, without any affection of the peritoneum itself. Where it occurs without peritonitis, it is frequently connected with disease of the mucous membrane of the intestines. Remittent fever, in children, is apt to pass into this disease. The fever is accompanied by inflammation of the mucous membrane of the intestines, which passes on to ulceration, and, connected with that ulceration, there is commonly enlargement and disease of the mesenteric glands. Sometimes, it is dependent on irritating matters absorbed from the intestines. This disease is common in children, from the age of two years to puberty, when the growth is rapid, and the nutritive

and digestive organs are apt to be disordered. It is very insidious in its advances: sometimes coming on after febrile diseases, and sometimes as a sequela of the exanthemata—measles, whooping cough, small-pox, and scarlatina; and is commonly attended with remittent fever, and the sub-acute form of gastro-enteritis, in children. The chief symptoms are: some degree of pain in the abdomen, but of a slight character; tenderness on pressure; generally, enlargement of the abdomen; some febrile accession in the evening, and, sometimes, quite a hectic flush is found on the cheeks; the pulse is gradually quickened, and there is progressive emaciation. Hence, its name—*tabes mesenterica*. No doubt, it is connected with obstruction in the lymphatic glands. The appetite is disproportionate to the state of the nutritive function; it is voracious, but all that is taken is not converted into nourishment. The symptoms are not unlike those I described in worms; but their permanency, and the increasing emaciation, induce a suspicion of the disease. Pain of the abdomen is sometimes present; and, sometimes, there is no heat in the abdomen except at night. The enlargement of the glands can be felt in the middle region of the abdomen, more particularly when the stomach and bowels are empty, as after the operation of a purgative or before food is taken. The knotty state of the glands can frequently be felt, when the patient is lying on his back. The constitutional symptoms are exceedingly like those of phthisis pulmonalis, although the seat of the lesion is different in the two cases. If the disease goes on, very frequently it terminates in pulmonary consumption. In five-sixths of the children, affected with *tabes mesenterica*, tubercles are found in the lungs; in adults this is more unusual. On examination of those who have died in the more recent stages of the disease, the glands have been found enlarged and loaded with granular deposit, or a collection of opaque and cheesy matter. This condition is found particularly after fever: In the advanced forms of the disease, the enlargement of the glands is more extensive, and consists of a plastic kind of tuberculous matter. It is rarely, however, that you find it here in the same state as in the lungs; the reason of which I believe to be, chiefly, the smaller amount of vascular communication in these glands than in the lungs. In older subjects, where the disease has gone on longer, the glands are found to contain some cretaceous or calcareous concretions, some portions being quite osseous. The presence of these is a proof of age. In other cases, instead of the cheesy form of tubercles, there is more of a consolidation of the glands, and, sometimes, enlargement to a considerable extent—a sort of hypertrophy, with much less tendency to the tuberculous deposit. Sometimes, disease is found in other glands of the body; in the lymphatic glands in the cervical and the inguinal regions, &c. The lymphatic glands are affected more than any others in the system.

The *treatment of mesenteric disease* is much the same as that I mentioned under the head of chronic peritonitis. It is a dangerous disease in its advanced form, where it distinctly exhibits the characters I have described; but, probably, like chronic peritonitis, it is curable in the early stage, or when occurring in children, in whom diseases are more tractable

than in adults; at this period of life, the system is more elastic, and can adapt itself to circumstances more readily than at other ages; there is also, with them, a greater activity in the processes of renovation and of growth. The treatment, too, is much the same as that adapted to scrofula; the use of iodide of potassium, or iodide of iron, together with liquor potassæ, and tonics, should be persevered in for weeks or months together; in the earlier stages the employment of mercury, in moderate doses, and aperients, as may be necessary; strictly regulating the diet, and adhering to digestible kinds of food, chiefly farinaceous, but containing as much animal matter as the patient can, with facility, bear; often allowing a little malt liquor; promoting the circulation by regular exercise, or by friction; using, as an ointment, the iodide of potassium, or the iodide of lead, or mercurial ointment, rubbed into the enlarged abdomen. These are the means that have been found most useful, especially in some of the earlier forms of these affections. Sea-air, and sea-bathing, too, have been found of considerable efficacy in these diseases; and, even in the more advanced forms, these remedies, sometimes, stay the progress of the malady. As the recovery progresses, a more stimulating diet may be freely allowed to the patient. Where sea-bathing is employed, we should make use of warm sea-water, unless the patient is strong, and the season very hot.—*London Med. Times.*

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## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

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*Foot-prints of Extinct Animals.*—Several printed pages, accompanied by a lithographic plate, illustrative of discoveries, by James Deane, M.D., of Greenfield, Mass., have been received. Dr. D. is a laborious investigator, and is bringing treasures out of the rocks, of incalculable importance to geologists. A detail of his discoveries would be quite out of place, yet we cannot allow the opportunity to pass of reminding our medical friends, that they, above all men, have special reasons for studying nature and her laws. By economizing time, and allowing no moment to be lost, researches may be systematically conducted, of vast interest, illustrative of the early condition of the globe, the races that have successively occupied its rough surface, and of man himself, the greatest wonder of the whole.

Dr. Deane has already cut his name in the temple of fame, in connection with certain curious discoveries in the new red sandstone of Connecticut river. He has traced out, and is still progressing in the work of proving, that, at an epoch so remote that no philosopher dare define the period, animals of strange figures and anomalous proportions, perhaps unlike any of the present day, lived and gambolled in the majesty of unrestrained freedom,—so long ago, that the solid rocks on the margin of the Connecticut, were then a soft, yielding mass. While in that state, those known *unknowns* walked about, leaving the impressions of their feet in the then plastic mud, which has brought down an exact figure of them