Reports of Societies.

MANCHESTER MEDICAL SOCIETY.

OCTOBER 4TH, 1865.

W. WHITE, M.D., in the Chair.

Zonular Cataract. Dr. LITTLE showed with the ophthalmoscope a well marked case of zonular cataract, and made some remarks on the diagnosis of different forms of the disease.

Entropion. Dr. LITTLE also showed, for Mr. Thos. Windsor, a severe case of entropion of both eyes, with firm adhesions to the eyeball and consequent blindness. By great care the adhesions had been dissected off, and a good amount of vision restored.

Lymphatic Leucocythæmia. Dr. THORBURN showed a specimen of this disease—the lymphæmia of Virchow. The glands of nearly the whole lymphatic system were affected. The spleen was not enlarged when the patient first came under observation, but was latterly becoming so.

Dyspepsia. Dr. BROWNE read a paper on dyspepsia. His main object was to prove that a satisfactory division might be made between the oral, gastric, and duodenal forms of the disease, as affecting the digestion of the amyloid, albuminous, and fatty constituents of the food respectively. By means of such a division, he maintained that a much greater accuracy might be attained in the diagnosis, prognosis, and treatment of dyspepsia. Dr. Browne entered into a full exposition of the symptoms of each form, as distinguished from the others. His paper will be published in full.

NOVEMBER 1ST, 1865.

W. ROBERTS, M.D., in the Chair.

Exophthalmic Goitre. Mr. THOMAS WINDSOR showed a well marked case of this disease.

Phimosis of Eyelids. Mr. T. WINDSOR also showed a photograph of a case of congenital phimosis of the eyelids, on which he was about to operate.

Fistula Lacrymalis. Mr. T. WINDSOR also showed two or three cases of this disease, illustrating its successful treatment by closure of the sac.

Hydrocele. Dr. BROWNE showed a specimen of encysted hydrocele, with hour-glass contraction at the ring, and containing a small amount of blood. The case was mainly interesting from the difficulty of diagnosis caused by the presence of a pelvic abscess which had been evacuated at the opposite side.

Short Forceps in Midwifery. Dr. HARDIE read a paper suggesting a much more frequent use of the forceps in natural labour. He quoted several of the standard works to show that it is advised to abstain from the use of the forceps till formidable symptoms are setting in. This he considered was due to a certain timidity, not very well defined, but carefully handed down from teachers to pupils, and pervading those without the profession also. The author believed that the forceps is a safe, efficient, and admirable adjuvant in ordinary practice, and recommended its use whenever there is the slightest hindrance to the speedy completion of the second stage of labour. In his own practice he allowed, generally speaking, about half an hour for this purpose; and, if it appeared that it would not be immediately accomplished, he at once applied the forceps. He has thus used them, with invariably good result, in 1 out of every 3½ cases. He combated the idea that labour, in a civilised community, should be considered as a purely natural process; and that it should not be assisted by art when this can safely be done, just as we are in the habit of assisting other natural processes. He believed that civilisation had modified the conformation of the pelvis and the size of the child's head, and also the capacity to endure the prolonged suffering of childbirth.

A spirited discussion ensued, in which all the speakers were agreed, although they might not go the same length with Dr. Hardie, that the forceps might safely and usefully be employed very much more frequently than is advised in almost any of the standard works on midwifery.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, DECEMBER 4TH, 1865.

PETTENKOFER'S THEORY ON THE MODE OF PROPAGATION OF CHOLERA. BY HERMANN WEBER, M.D.

THIS paper was based on Professor Max Pettenkofer's last publication on the subject, "*Ueber die Verbreitungsart der Cholera*" (*Zeitschrift für Biologie*; Jahrgang, 1865, p. 323).

With regard to the question of contagiousness, Pettenkofer believes that the disease is propagated by human intercourse, and never without this; not by simple contact with the diseased or their excretions, according to the old theory of contagion, but by means of certain local accessory causes contained in the soil. Temperature, wind, moisture or dryness of the atmosphere, and elevation of ground, are all not essential for the epidemic occurrence of cholera, although they may, under certain circumstances, exercise great influence on its course. The only indispensable conditions are, *human intercourse yielding the germ in the excretions of cholera patients, and the soil developing this germ into activity.*

The qualities of the soil considered as necessary for the development of the cholera-germ are—1. That it be porous—*i. e.*, permeable to air and water; 2. That water exist in a certain depth below the surface (ground-water or subsoil-water); and 3. That the soil be to some degree impregnated with the products of organic decomposition, especially those of excrementitious origin.

Respecting the first condition, Pettenkofer, and the members of the Bavarian Commission for the Investigation of Cholera in 1854, have found, without a single exception, that the soil in the towns and villages epidemically affected with cholera was porous; while localities built on impermeable rock were either entirely spared, or, at all events, exhibited only isolated cases. Several apparent exceptions were, on closer examination, found to confirm the law. The well known researches of Boubée and Fourcault are in accordance with this law.

With regard to the presence of ground-water or subsoil water (landspring—"*Grundwasser*"—the first stratum of water reached at a certain depth below the surface, between about five and fifty feet), Pettenkofer points to the fact, generally acknowledged, that the cholera spreads with predilection along the course of rivers and in hollow situations; but he regards the water of the soil underneath the habitations as much more important than that of the more or less distant river; and maintains that, as a rule, those localities suffer more from cholera which lie nearer to the level of the ground-water, the distance of which from the surface may be regarded as depending on the first impermeable stratum of the soil. The fall of the impermeable stratum may be parallel to that of the surface, but is more usually not; if the former be greater than the latter, then elevation

means greater distance from the ground-water, and probably greater immunity from cholera, but not otherwise. The level of the ground-water in the same locality may vary considerably in the same year and in different years; and on this fluctuation the varying degree of susceptibility of the locality for the cholera epidemics seems to depend. Under equal circumstances, the rise of the ground-water will cause a greater susceptibility by moistening a higher stratum of the porous soil, which is generally more impregnated with organic matters the nearer it is to the surface. It is the period of receding of the ground-water from its greatest elevation which is most dangerous. As this occurs usually in July, August, and September, cholera usually makes its greatest ravages at that period; but the unfavourable condition of the soil may, through unusual circumstances, occur in winter instead of in summer; and cholera epidemics may, as experience shows, occur in the midst of a Russian winter.

With regard to the cholera-germ itself, Pettenkofer assumes it to be contained in the intestinal excreta of cholera patients; but believes that it cannot produce cholera by itself, but must first undergo some change under the influence of the susceptible soil, and thus become developed. This interchange between the cholera-germ contained in the excreta and the soil may, he suggests, either take place in the soil, and the developed germ may be thence inhaled or otherwise introduced into the body, or it may take place within the human body itself, the product being the active germ.

Pettenkofer adds hygienic suggestions for the prevention of epidemics, based on his views.

Dr. WEBER remarked that these views, though not yet altogether proved, were in accordance with the best ascertained facts, and deserved to be tested without loss of time. He added, that the observations of the position and fluctuations of the ground-water might lead to other important discoveries, and alluded to the researches of Professor Buhl of Munich, according to which the death-rate from typhoid fever in Munich was in intimate relation to the varying elevation of the ground-water in that town.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, NOVEMBER 3RD, 1865.

M. BAINES, M.D., Vice-President, in the Chair.

MR. ROUSE gave a series of cases illustrating the changes which take place in the fundus of the eye, the result of Progressive Myopia.

CASE I. A girl aged 18, came in January last to the Ophthalmic Hospital. She had noticed myopia for six years; it had increased much within the last few months. She had tension in the left eye, with rings of light passing before the eye towards night, and obscure pain in the globe. The ophthalmoscope showed well developed crescentic posterior staphyloma on the outer side of the optic disc, between which and the yellow spot, was great hyperæmia of the retina, also increased vascularity of the optic disc. Purgatives, blisters, cold douches, and omission of reading and needlework, removed the symptoms without increase of the staphyloma.

CASE II. A female, aged 25, had always (within memory) been myopic, and had used her eyes much for fine work. The right had been becoming worse more than five years, but during the last six or eight months so much so, that she could not see to work. She saw floating spots and flashes of light. The ophthalmoscope showed a small white optic disc, a well defined staphyloma, and small yellowish white patches with pigment spots scattered over the fundus.

CASE III was that of a myopic lady with cataractous left eye, and history of pain, flashes of light, and muscæ of many months' duration. The examination of the eye showed staphyloma, with congestion of the whole fundus and optic disc. The globe was rather tense, and there was some ciliary neurosis. Leeches, blisters, and purgatives relieved the tension and hyperæmia, but the flashes and muscæ still appeared from time to time.

CASE IV. A woman, aged 40, of anxious temperament, found the sight of the right eye to be affected three days before she presented herself, and in a few hours it was quite gone. Her myopia had always caused her to hold her work four inches from her eyes; her sight was so acute that she was employed for the finest work. There was very little pain. On examination, one-half of the retina was found separated from the choroid, quite concealing the yellow spot and three-parts of the optic disc. In the left eye there was a small hyperæmic optic disc, but no posterior staphyloma. She was free from any organic disease of the viscera. Blisters and the iodide of potassium in two weeks removed most of the fluid. The detached retina was lying in a sort of fold. This patient is still under treatment, with, as yet, little improvement of vision.

Mr. Rouse said all symptoms in myopia should be attended to. It was an error that a near sight is a strong sight, and will improve. He showed that glasses were needed, and gave rules for their use. An occasional leech to the temple, purgative, and complete rest in a darkened room, were all useful. Paracentesis might be required. Myopic patients should not hang their heads down.

Dr. BAINES gave a case of Delayed Parturition in consequence of enormous Distention of the Uterus from liquor amnii.

Mrs. C., pregnant for the first time, had enormous distension of the abdomen; an opinion was given upon examination, that twins were present. Labour began on September 29th, 1864. When examined, the membranes were ruptured. Much liquor amnii had escaped. The os uteri was one-third open, and the head presented. The pains were slight; the progress little. The next night—twenty-four hours afterwards—the os was dilated, and the head occupied the outlet of the pelvis, but made no progress. The pains ceased, and as they could not be excited by ergot or other means, the child was delivered by the vectis. Much liquor amnii had escaped, but the abdomen was not sensibly diminished. The head of a second child was then detected likewise in a large bag of membranes. No pain coming on, and the patient being excited, the membranes were ruptured, and a bandage applied. The head then came down to the outlet, and the vectis was again employed as there were no pains; a double placenta followed; the patient did well.

The distension of the uterus was, without doubt, the cause of the delay; and although the course pursued in the delivery of the second child differed from the usual rule, Dr. Baines felt justified in not waiting longer than an hour, the experience of the first delivery having shown how paralysed by distension the uterus was. Should turning have been adopted with the second child? Considering the ease of the first delivery by the vectis, and that the head was presenting, Dr. Baines preferred the vectis.