

drainage-tube left hanging from each end. The whole operation was done under the carbolic spray. The wound was dressed every other day, and it remained quite sweet and antiseptic throughout. The sutures were removed on the sixth day, and the drainage-tube on the eighth day after the operation. The temperature and pulse were normal during the fourteen days he was in the hospital. He was discharged cured on April 29th, 1878.

FORTY-SIXTH ANNUAL MEETING  
OF THE  
BRITISH MEDICAL ASSOCIATION.

*Held in BATH, August 6th, 7th, 8th, and 9th, 1878.*

PROCEEDINGS OF SECTIONS.

SUBJOINED are abstracts of most of the papers presented to the several Sections of the Association at the Annual Meeting. The papers themselves will, as opportunities occur, be published in full in the JOURNAL.

SECTION A.—MEDICINE.

*Wednesday, August 7th.*

THE Chair was taken at 2 P.M. by the President, T. GRAINGER STEWART, M.D., who delivered an Address, which was published at page 211 of the JOURNAL for August 10th.

INTESTINAL OBSTRUCTION.

A discussion on this subject was opened by Mr. JONATHAN HUTCHINSON (London), who read a paper, which is published at page 305.

*On Intestinal Obstruction.* By E. LONG FOX, M.D. (Clifton).—Dr. Long Fox related the history of two cases of internal strangulation, in which recovery had taken place from sudden and violent change of posture. He referred to the frequency of cancer as a cause of gradual occlusion of the bowel, and to diarrhoea as being an early symptom of this condition. Two cases of blocking the intestine by the growth of colloid cancer were spoken of, and the advantages of any surgical interference in such cases was contrasted with the cautious use of aperient waters and belladonna. Obstruction by cicatricial stenoses and by foreign bodies was touched upon, and the value of the induced current in localised paralysis of the gut insisted on. A brief *résumé* was given of the chief points in intussusception of the bowel, and the value of some important symptoms—vomiting, pain, meteorism, hæmorrhage, and constipation—in the diagnosis of the various causes of obstruction was commented upon.

*On Large Doses of Belladonna in Intestinal Obstruction.* By NORMAN KERR, M.D. (London).—(This paper is published at page 307.)

*On Latency of Symptoms in Acute Abdominal Affections.* By E. MARKHAM SKERRITT, M.D. (Clifton).—(This paper is published at page 308.)

*On the Differential Diagnosis and Treatment of Bowel-Obstruction, illustrated by his own Experience.* By H. J. HEYWOOD, M.R.C.S. (Manchester).—Dr. ANDREW (Shrewsbury) showed the *post mortem* specimen, taken from a case of malignant stricture, just above the cæcum, in a gentleman aged 73. Aching pain in the abdomen and sickness, with almost fæcal vomiting, were the first symptoms. The abdomen was only full over the cæcum, and the pulse and temperature were normal. The abdomen gradually increased; the fæcal vomiting returned; but the patient was kept fairly comfortable by belladonna and opium combined. He died after some weeks, and Dr. Andrew's diagnosis proved correct; but the disease was rather higher up than he had supposed. He believed great weight could be placed on temperature, if there were no vomiting, which reduced temperature. There were very few cases of small intestinal obstruction without rise of temperature and pulse. In such cases, an artificial anus in the ileum was to be considered. He alluded to another case, in which the obstruction was removed by a large dose of strychnia (given by mistake). Convulsions ensued, and the patient was relieved.—Mr. DENTON (Leicester) mentioned a case of obstruction in a pregnant woman. It occurred after exertion, and fæcal vomiting quickly ensued. The point arose: Did the gravid uterus ever induce obstruction? Also: Should he induce labour? He decided in the negative, and simple treatment brought a cure.—Dr. O'CONNOR (Cork) spoke as to the difficulties of diagnosis and prognosis. A cure in fæcal accumulation is almost certain. A palpable tumour is valuable. An examination of the fæces is very useful

to determine which are recent, which not. When you have got rid of the tumour which fæces may cause, and find there is still a mass left, your prognosis would be unfavourable. He related the case of a lady who came to him with grumous bloody discharge *per anum*. Two large round hard masses were discovered in the rectum—lumps of magnesia, which drug she had taken in large quantities. These were removed, and she was cured.—Dr. A. P. STEWART (London) bore evidence as to the value of inspection of the fæces, and alluded to cases of fæcal accumulation of twenty days' standing. The stethoscope and enema together were valuable in diagnosis. He used to apply belladonna over the abdomen, and now he employed enemata of belladonna in every case of intestinal obstruction from the first; in simple cases always with success. One case of stricture of colon, which afterwards resulted in death, was relieved for a time by enemata. Stress was laid upon the dangers of the O'Beirne's tube.—Dr. ELLISTON (Ipswich) strongly recommended the syphon enema above all others.—Dr. TOTHERICK (Wolverhampton) related a case in which thirty ounces of sweet-oil were injected *per anum*, the patient being placed on his hands and knees. He recovered. Oleaginous matter was vomited after the enema.—Dr. CLIFFORD ALLBUTT (Leeds) remarked that too much stress should not be laid on the rapidity with which symptoms came on. In chronic cases, such as cancer, acute symptoms may usher in any knowledge of the case. In chronic cases, however, there is compensating hypertrophy of the intestines above the seat of disease, and the coils of hypertrophied bowel can generally be seen; besides, the stools are generally voluminous. If we knew that a band or twist were present, we should open the abdomen to give the patient a chance. He had known such cases successful. He would leave alone most of the cases of intussusception. He met with the case of a little boy, who, eight days before, has pain and evidence of obstruction, and peritonitis. He was soon better, but a dose of oil brought back the symptoms. It was then found that the ileo-cæcal valve and the whole of the colon were in the rectum. The child was kept under large doses of opium, and, in two months, recovered. He should advise operation, especially in young people. He believed injections were useful only in fæcal accumulations; certainly they were of little use in intussusceptions, and most dangerous in twists or obstructions by bands. He would not say do nothing as a rule; only a few things, such as rest and the use of opium. He had punctured the distended intestine for many years with a small trocar, simply to relieve distension, which it did; but would not advise puncture of intestine in laparotomy cases.—Dr. DYER (Ringwood) made a practice of looking at the gums in all obstruction cases. He was accustomed to see many cases produced by lead-poison, the people in his locality being temperate and fond of acid drinks prepared in earthen vessels glazed with preparations of lead.—Mr. BROWN (Islington) thought that accumulation often caused muscular paralysis, and the converse. From experiments he had made, he thought galvanisation of the pneumogastric in the neck would be useful in such cases, and drew an analogy between them and cases of bladder paralysis with retention of urine.—Mr. LAWRENCE (Bath) warned the meeting against the nurses in private practice interfering with the orders as to diet. He found that opium had increased obstructions.—Dr. BROADBENT (London) advised a diagnosis at once, for opium obscured many important points in a case. Age, sex, etc., would help the diagnosis much. He believed a patulous state of the rectum was of singular value, as showing there was a mass above the reach of the finger.

Mr. HUTCHINSON, in reply, said that he felt obliged, in consideration of the shortness of time, to follow the President's example and decline to attempt a summary of all that had been advanced. Much that was of great importance in what had been said he must pass by unnoticed, and should confine his attention almost wholly to the points in which the speakers had dissented more or less from the opinions put forward in his opening remarks. Before doing so, he must, however, say a few words respecting the very interesting specimen and case brought before them by Dr. Andrew. This specimen showed an almost circular malignant stricture of the colon just above the cæcum, and it might be taken as a type example of the commonest class of obstruction cases occurring in old persons. Its progress had also been typical, and it might be usefully employed as a demonstration of the principles which should guide the treatment of similar ones. Those who had taken the trouble to look at the specimen would have observed that the bowel above the stricture, including the cæcum itself, was greatly dilated, and that there were several discoloured patches where the mucous membrane was ulcerating and perforation threatened. They would have observed, also, that the stricture was not very tight, but that it now admitted a little finger easily. No doubt it had been stretched somewhat since removal from the body; but probably during life it was by no means very close.

Probably some hard mass of fæces had rested against it and completed the occlusion. The conditions strongly supported the rule of treatment for these cases to give, not opiates, but laxatives—medicines not intended to purge, but rather to liquefy the fæces. By repeated small doses of salines, this might be effected, and the stoppage, for a time at least, removed. Copious injections of warm water might be employed with the same object; but inflation with air should be avoided, as it might easily pass above the stricture and increase the tympanites. When the time came that internal medication failed—and in most cases it would come after, perhaps, several threatening attacks—it was clear that the patient might be offered a prolongation of life, and probably a diminution of suffering, by the performance of an operation for artificial anus; and the surgeon's choice lay between lumbar colotomy and iliac enterotomy. In the present instance, the disease was so close to the cæcum, that the latter might have been preferable, although the former was just practicable. It was of importance to note how speaker after speaker in the course of the debate had confirmed by fact and assertion the statement made as to the extreme difficulty of prognosis in cases of obstruction. Case after case had been related in which, from conditions apparently hopeless, recovery had taken place. Sometimes it was beladonna which had acted as a charm; sometimes opium; and in others the recovery appeared to have been spontaneous. Probably a majority of these cases were instances of impaction only; but, be that as it might, they suggested very strongly indeed the necessity for great caution before deciding that any given case is hopeless as regards other means, and therefore one which justifies exploratory opening of the abdomen. Some of the recoveries were probably from twists or similar obstacles, and in connection with this suggestion it was important to note that two or three speakers had mentioned instances of success from unintentional but violent jactitation. One patient had accidentally fallen out of bed; another, by the mistake of strychnia for morphia, had been severely convulsed; and in both action of the bowels had followed. Similar occurrences in cases of strangulated hernia were well known, and their lesson in support of the practice of systematic "abdominal taxis" was most obvious. One of the points which had intentionally been made most conspicuous in his opening remarks had been the dissuasion from exploratory abdominal section, coupled with the suggestion that abdominal taxis would succeed in the great majority of cases, and that, in those in which it did not, and which appeared to be hopeless, an artificial anus ought to be made. Through the greater part of the discussion, it had appeared likely that no one would take up the argument on the opposite side of this difficult question. The general opinion of the profession, as expressed in surgical manuals and as illustrated by the occasional practice of some of our best surgeons, seemed to be in favour of exploratory operations. He (Mr. Hutchinson) was, therefore, exceedingly glad when Dr. Clifford Allbutt undertook their advocacy. Dr. Allbutt had relied, not on theory, but had produced the most valuable of all evidence, and had stated his belief that successful cases had occurred in the hands of the Leeds surgeons. As these cases had not as yet been published, it was impossible to comment on them; but they would, when produced, constitute a most welcome and valuable contribution to our knowledge of the subject. In the meantime, however, he (Mr. Hutchinson) could but say that an occasional success from exploration must be expected, and would by no means invalidate his argument, which was to the effect that this measure was not warranted in the early stage, and far less safe than the operations for artificial anus in the later ones. Not only had Dr. Allbutt, in the course of his very able remarks, endeavoured to sustain the propriety of abdominal section in cases of intestinal obstruction from unknown causes, but he had invalidated it in cases of intussusception. Here again he had cited facts. The facts referred to seemed to have convinced Dr. Allbutt that opium was the one remedy for intussusception, and that the cure might be expected, not by sphacelus—which had been long known—but by spontaneous reduction; which was probably an almost wholly novel suggestion. Hitherto we had been accustomed to believe that, when once an intussusception had begun, the natural forces all tended to increase it; and, if it had attained any considerable size, that spontaneous reduction was impossible. Dr. Allbutt's assertion to the contrary was so important, and might possibly be so prejudicial, that it became necessary to scrutinise his facts. These consisted, first, in the assertion that a number of cases in which the diagnosis of intussusception seemed justified had recovered under opiate treatment only, and without sloughing. Now, respecting these, it must be remarked that only examples of *bond fide* and well-established intussusception can possibly be accepted as evidence. The diagnosis is, for the most part, so easily made certain, that all vague cases must be excluded. In one of the cases, however, no exception could be taken to the diagnosis, for the finger was introduced into the rectum and a long intussuscepted mass felt. What was

wanting in this case was the proof that recovery without sloughing had really occurred; for Dr. Allbutt had, so far as he gave particulars, seen the patient but once. It was a fact of an almost unique description, and well worthy of detailed publication. The treatment of intussusception will assume a wholly new phase if, under the enforced quiet of opiates, we may rely upon the *vis chirurgicæ naturæ*. Amongst the more important novelties which had been incidentally mentioned in this debate must be cited the evidence given by two speakers that matters injected into the rectum were rejected by vomiting through the mouth. Henceforth, fæcal or stercoraceous vomiting, in its most absolute sense, must be admitted to be possible. That the ileo-cæcal valve did not, in the dead subject, prevent the passage upwards of fluids, had been demonstrated by experiment; but most authorities have doubted whether the contents of the colon could ever appear in the vomit. Mr. Hutchinson concluded by thanking the Association for the honour done him in asking him to take a share in opening the debate, and the meeting for the patience with which his remarks had been received.

*Rabies and Hydrophobia.* By W. R. GOWERS, M.D. (London).—Dr. Gowers presented a preliminary report of the Hydrophobia Committee, detailing the work at present completed, which comprised an account of the changes in the nerve centres in four cases of the disease in man (the material for which the Committee was indebted to Dr. Gray of Oxford, Mr. Marcus Beck, Dr. Savage of Bethlem, and Dr. Ringrose Atkins of Cork), and also in one case of rabies in the dog. Organs from three other cases were still under investigation.

Thursday, August 8th.

Dr. GRAINGER STEWART, President, took the Chair at 2 P.M.

*Case of Functional Hemianæsthesia with Muscular Rigidity (Exhibition of the Patient).* By E. MARKHAM SKERRITT, B.A., M.D. Lond. (Clifton).—The patient, a man aged 40, was first admitted into the Bristol General Hospital in December 1875. Eight years before, after a fit, he lost sensation on the left side of the body, while the arm and leg became rigid. In about four years, he recovered. Five months before, he had another fit, and the symptoms returned, special sensation also being blunted on the left side. On admission, there were left hemianæsthesia and ischemia; the eye was unaffected; there was coarse tremor of the right forearm, tonic spasm keeping the joints of the left arm flexed and of left leg extended; on the left side, the electric irritability was good, sensibility absent; there was no effect from metallic applications. A marked stammer existed. After an epileptiform fit, speech was lost, and the left eye became blind. After a year and eight months, speech returned, with a marked stammer, which has diminished. Muscular rigidity still remains, as does hemianæsthesia of general and special sensation. The patient has cut off a finger-tip and broken his leg on the left side, without any pain, and without bleeding, but with spitting of blood following. The peculiarities presented by this case are: the sex and age of the patient, the epileptiform fits, the persistence of anæsthesia in spite of faradisation and metallic applications. The chief evidence in favour of a functional origin is: the "hysterical" temperament, the first complete recovery and complete relapse, the instability of the anæsthesia, the "hysterical" type of muscular rigidity, the nature of impediment to speech, the complete loss of power of speech, and recovery with persistent stammer. As regards the cause of hemianæsthesia, this case contains evidence against the theories of "sham" and of "expectant attention", e.g., in cutting the finger and breaking the leg, and absence of pain when needles were introduced without warning. Again, strong mental, moral, and physical impressions did not have any remedial effect. A satisfactory theory in explanation of such cases has not yet been propounded.—Dr. BROADBENT (London) believed the man had an organic lesion. He remembered a case in a male, which lasted a few weeks, the patient getting well. The patient first had general venous stasis, quite like morbus crureus. A year afterwards, a hydatid tumour was discovered behind the liver. When this was cured, the stasis went. He then had one or two hemiplegic fits, with anæsthesia on the other side. He could be cut without bleeding. Dr. Broadbent believed the anæsthesia went under the use of certain metals. The extinction of every other sensation was not accompanied by loss of tactile sense. The anæsthesia was no doubt due to the bloodlessness.—Dr. ALTHAUS (London) said the real seat of the disease was in the vaso-motor centre in the medulla, and probably it was in a state of spasm. In some cases, the symptoms may be transferred from one side to the other. He did not think the disease was due to any coarse organic lesion. In all the cases related before, the temperature of the affected parts had been diminished, even eight or ten degrees; but, in Dr. Skerritt's case, this was unaltered.

*On Lateral and Posterior Sclerosis of the Spinal Cord.* By JULIUS



**ALTHAUS, M.D. (London).**—The author introduced his subject with some propositions on the nature and peculiarities of all the different varieties of primary and secondary sclerosis of the cord. He then traced the anatomical features of ataxy and spasmodic spinal paralysis, and analysed the various symptoms met with in these diseases, with constant reference to the functions of the different portions of the cord in health. In this way, the disorders of motion, sensation, reflex excitability—more especially with regard to tendinous reflexion, which was absent in ataxy and increased in lateral sclerosis—the state of the vaso-motor and trophic nerves, and of the bladder, rectum, and generative organs, were gone into. The peculiar course of both diseases was then described and their causes ascertained. The paper wound up with a full discussion of the prognosis and treatment of these affections.—**Dr. GOWERS (London)** had seen three cases in which the patellar test was not absent. He had found it absent, too, in several cases out of three hundred healthy people experimented on.—**Dr. SAWYER (Birmingham)** had seen cases in which the tendon-reflex was nearly as good as normally. He had no faith in drugs.—**Dr. CLIFFORD ALLEBUTT (Leeds)** found tendon-reflex quite preserved in one of his far advanced cases; on the other hand, he had found this test very valuable in the early stage of the disease in many cases. He had noticed that patients in the North Riding scarcely ever had pain or ocular deviations. He had found drugs and electricity of very little use.—**Dr. TIBBITS (Bradford)** had tried Dr. Corrigan's button down the spine frequently, with good effect.—**Dr. BROADBENT (London)** believed that the original cause of the sclerosis varied in the different cases, and that the treatment should be correspondingly varied.—**Dr. BALTHAZAR FOSTER (Birmingham)** confirmed Dr. Allebutt's remarks about the inability to cure; but he had seen one case cured by large doses of ergot, and certain cases fairly advanced by antisypilitic remedies. He believed the continuous current did good, and that rest was a very valuable adjunct to treatment.—The **PRESIDENT** stated that in Edinburgh no case had occurred with the tendon-reflex present. If it were present, the reason probably would be that the nerve-centre engaged in its production was intact.—**Dr. O'CONNOR (Cork)** mentioned a case which was cured.—**Dr. ALTHAUS, in conclusion,** stated that he looked upon nitrate of silver and ergot as specifics when used early in the disease. He would give the former up to one hundred and twenty grains, watching for albumen during its use: of the latter, a drachm of the liquid extract, three times daily, for six or eight months. Faradisation and hydrotherapy, with salt baths and douches, were also useful. So also was damiana, a Mexican plant, which appeared to act specifically on the lumbar part of the chord, and was useful in vesical catarrh and sexual debility. Salicylate of soda in twenty-grain doses was useful to relieve pain and catarrh of the bladder. He recommended the same treatment for lateral sclerosis, and also the extract of Calabar bean.

**Cases of Athetosis.** By **FLETCHER BEACH, M.B. (London).**—The author commenced by saying that cases of athetosis were sufficiently rare to merit a description, and to be brought before the British Medical Association. The three cases on which the paper was founded were imbecile children, aged respectively eighteen, eleven, and ten years. In the first, there was no evidence of hemiplegia or epilepsy having previously occurred; in the second, there was a probability, from the physical signs, that there had been hemiplegia (the history could not be obtained); in the last, the affection came on after a series of epileptic attacks while the patient was under observation in the Clapton Asylum. In the first case, both sides of the body were affected, though the left was more so than the right; in the second and third, the left side was alone affected. The third case differed from the first and second in this respect: when the will was brought into action, some of the fingers became first partly extended, and then all except the forefinger became firmly flexed; while in the first and second, the fingers from the commencement were extended and drawn widely apart. The condition of the limbs, in the first and second cases, had remained much the same while under observation; but in the third, they had become worse—there was less voluntary power. What was the cause of the first case it was difficult to say. The affection could scarcely have been produced at birth. The outline of the head showed it to be fairly symmetrical. The second case was probably due to hemiplegia; and the third followed what is known as "epileptic hemiplegia". Athetosis is quite different from chorea. The movements are less jerky and less uncontrollable than in the latter disease. It is also not a true paralysis. In the first and second cases, there was considerable power present. The disease was no doubt due to some change in the grey and white matter of those portions of the brain which experiment, as well as disease, have shown to be concerned in the movements of the upper and lower extremities, and hence the want of control over the movements. The first two cases had not been treated with medicine. In the last, the disease being recent, strychnia had been given.

**Syphilitic Neuroses.** By **W. R. GOWERS, M.D. (London).**—The object of the paper was to examine the question of the extent to which syphilis is a cause of the affections of the nervous system distinguished as neuroses, from the diseases of the adneurial structures, membranes, vessels, etc., which are known to be so frequently syphilitic. The conclusions were drawn from personal observation at the National Hospital for the Paralyse and Epileptic, all cases being rejected in which any indication of primary "adneurial" disease could be traced, or in which any other cause than syphilis could be assigned. The conclusions reached were that idiopathic epilepsy does not result from acquired syphilis, almost all cases of chronic convulsion after syphilis presenting indications of primary local brain-disease, or else of inherited tendency to epilepsy. On the other hand, idiopathic epilepsy was found to be an occasional result of inherited syphilis. No case of the association of chorea and syphilis, inherited or acquired, had been met with, although a few cases are on record in medical literature. Certain forms of general paralysis certainly followed syphilis, but they rarely presented marked optimism. Paralysis agitans cannot be associated with syphilis, but progressive muscular atrophy seems to be an occasional distinct effect, although, in inferring this, care must be taken to avoid mistaking for it the results of pachymeningitis. Lateral sclerosis of the cord, it was thought, only occurs as a consequence of syphilis secondarily to pressure higher up, but posterior sclerosis (locomotor ataxy) is certainly one of the most common neural effects, many syphilitic cases having been met with in which there was no evidence of pressure or initial myelitis, but there had apparently been a primary slow degeneration of the posterior columns. Cases illustrating the several affections were appended to the paper. Dr. Gowers had found that most of the cases considered in the paper were not amenable to antisypilitic treatment in the same degree as the primary adneurial diseases; but in most of the cases the diseases had existed for some time before they came under observation, and the importance of the trial of early treatment by those who had the opportunity was strongly urged. If it were found that in these affections, as in some of the late manifestations of inherited syphilis, tonic rather than specific treatment was needed, it was probable that the connection with syphilis was an indirect one. Some observations on the prognosis in the common syphilitic diseases of the nervous system (of membranes, vessels, and growths,) concluded the paper. It was urged that more caution in prognosis is necessary, by discrimination of the adneurial syphilitic disease, which could be cured, from the neural effect, which was not syphilitic and was often beyond treatment.

**A Case of Pityriasis Rubra Universalis.** By **W. ALLAN JAMIESON, M.D. (Edinburgh).**—The patient was a man aged 68, and the disease had lasted six months when it came under his care. It began on the scrotum, and spread with considerable rapidity over the whole surface. There was troublesome itching at the outset, but this soon ceased to be a prominent feature. The redness, the copious exfoliation, and certain peculiar indurations of the skin, hitherto scarcely much noticed, were well marked, but the general health was good. Dr. Jamieson regarded the disease as largely dependent on vaso-motor changes; and after referring to three examples recently published by Dr. HANS HEBRA, in one of which very peculiar atrophic changes were found in the skin, related a case of myelitis, in which cutaneous phenomena resembling those of pityriasis rubra, and unquestionably due to sympathetic nerve-influence, were present. The paper concluded with some remarks on treatment.

**Embolism of Right Middle Cerebral Artery followed by great Loquacity.** By **EDWARD T. TIBBITS, M.D. (Bradford).**—In this case, which was presumed to be one of acute tuberculosis, there was sudden paralysis of the left side, followed shortly afterwards by great loquacity, which lasted without intermission for more than thirty-six hours, death taking place about fifty-six hours from onset of paralysis. At the *post mortem* examination, a firm fibrinous plug was found at the bifurcation of the internal carotid, occluding both the right anterior and middle cerebral arteries. Granting that localisation of brain-function is established, the loquacity might be due to increased supply of blood in the left hemisphere. This view was corroborated by a case of "Plugging of Right Posterior Cerebral Artery", related by Dr. Broadbent, in which there were uncontrollable movements of the right limbs and a tendency to roll to the left. And further, it was possible that plugging of the anterior and middle cerebral arteries might increase the pressure of blood in the vertebral and basilar arteries, and thus produce hyperæmia of that portion of the nervous centre from which springs the spinal accessory nerve. But supposing the more recent views of Brown-Séquard to be correct, the loquacity might be thus explained: considering the brain a double organ, one part was disabled or destroyed, the other, with a double share of work, was performing its functions extravagantly and irregularly, the activity of certain cells being increased

or diminished, according to the amount and intensity of blood-pressure in each case.—Dr. ALLBUTT (Leeds) did not think, with regard to the hypothesis that increased blood-pressure in the left side of the brain produced an over activity of the centre of speech, that the blood-pressure would be so increased, but that only a very little general arterial pressure all over the body would ensue.—Dr. BROADBENT (London) had seen cases of left hemiplegia attended with loquacity; but all cases of plugging of the right middle cerebral artery were not attended with it. We ought to localise, not speech, but the various parts of the mechanism of speech.

*Dropsy of the Gall-Bladder Treated by Operation.* By GEORGE BROWN, M.R.C.S. (London).

*A Method of Self Registering Thermometry.* By W. D. BOWKETT, M.R.C.S. (Leeds).—The paper was an introductory description of an instrument designed for the purpose of obtaining a continuous registration of varying temperatures. The instrument ("Thermograph") consists of a flattened metallic box, capable of holding about an ounce of fluid, communicating with a thin metallic tube, bent into the form of a circle, closed at its ends, and connected with a small lever, which, on movement being communicated to it, traverses the dial of a watch. The dial of the watch is caused to revolve once in twelve hours, and carries a disc of smoked paper. The metallic box and tube connected therewith, is filled with a fluid (spirit). This, on the application of heat, expands; a pressure is thus produced, causing the curved tube to straighten itself somewhat, and to an extent proportionate to the pressure, which again is in direct ratio to the temperature. The movement of the tube is communicated to the lever, and by it registered on the blackened disc carried by the watch, and thus a continuous record of temperature for twelve hours is obtained. The whole is of a convenient form, so as to be worn with but little discomfort in the axilla, it merely being requisite to fasten the arm to the side. Change of position not influencing it, it can be equally well used on those who are up and about, as on those who are confined to their beds.

Friday, August 9th.

The Chair was taken by the President, Dr. GRAINGER STEWART, at 11 A.M.

*Gout at the Heart.* By J. MILNER FOTHERGILL, M.D. (London).—Dr. Fothergill traced our acquaintance with this subject from the time of Sir Charles Scudamore to the present day. Gout affected the heart in two distinct ways: 1. The chronic inflammation of the aortic valves, to which old gouty persons are subject, producing a distinct series of sequences well recognised; 2. Temporary conditions of cardiac embarrassment. These were, at one time, thought to be metastases from the joints to the heart. This view has been abandoned, though it is well known that cardiac disturbance may precede and be relieved by an attack of articular gout. The attacks of irregularity in the heart's action to which gouty persons are subject are often due to sudden arteriole spasm raising the blood-pressure in the arteries, so that the heart contracts with difficulty. Sometimes the attack is one of anginal character; at other times, palpitation is present. The latter is probably the least serious of the two, as indicating that the heart can still actively struggle. But, so far as can be made out from the literature of the subject, gout at the heart has been the phrase used to describe the attacks of dyspnoea and cardiac embarrassment which are occasioned by a flutulent state of the stomach or colon, where the heart is pressed upon by an elastic air-pressure, and thus beats under difficulties. Such a condition is very common with gouty persons.

*On the Elasticity of the Lungs and Thoracic Walls with reference to the Signs of Chest-Disease, and especially of Pleuritic Effusions.* By R. DOUGLAS POWELL, M.D. (London).—The author stated that certain physiological facts were not generally recognised respecting the mechanism of normal respiration referred to. The elasticity of the lungs was admitted by physiologists as playing a most important part in respiration, and especially in expiration. The thoracic wall, however, so far as it had been admitted to have an elastic function in respiration, was erroneously held to exercise this in opposition to inspiration. Experiments of the late Dr. Salter, Mr. Le Gros Clark, and the author had shown, however, that the elasticity or resilience of the ribs and diaphragm is a force of some importance, and operating throughout ordinary breathing in favour of inspiration. A schema designed by the author was described, which illustrated the mechanism of respiration, and served also to show some of the most important mechanical phenomena of chest-disease. In conclusion, some phenomena of chest-disease were referred to—viz., emphysema, pneumonia, local flutterings, rickets, and especially pleuritic effusions.

*On Woolstaplers' Disease.* By J. H. BELL, M.D., (Bradford).—This rapidly fatal disease is confined to sorters of alpaca, mohair, camels'

hair, and other dry hairs, wools, and furs. It has prevailed in the Bradford worsted district over thirty years, and at various times, as when several men working together have died suddenly and unaccountably, within a short time of each other, it has excited considerable public interest. Dr. Bell detailed cases of the disease, and said a typical case of the severer forms might be thus summarised: no rigor, thirst, pain, vomiting, or purging; very slight cough; no expectoration; hurried breathing, weak rapid pulse; temperature below normal; great exhaustion; mind clear; death in fifteen to twenty-four hours. When less severe, reaction takes place, with pleuropneumonia, and many die within three or four days. The *post mortem* appearances are those of blood-poisoning. In some districts, lung-diseases cause 80 per cent. of the total deaths of sorters. This disease is generally supposed to be caused by the fine dust and short hairs which arise during sorting; but it still prevails, notwithstanding respirators, ventilators, fans, etc. Dr. Bell was of opinion that it is a septicæmia, due to the inhalation of a septic poison, produced by the decomposition of animal matter within the bales. Those who open the bales are principally the victims. By exposure to air, virulently poisonous wool soon becomes innocuous, so that the disease may easily be prevented. It has considerable resemblance to splenic fever, but it has also distinct differences. It is never attended with external local manifestations. The *bacillus anthracis* exists in the blood of splenic fever; other allied diseases in the horse and pig have other kinds of bacilli in the blood; Pasteur has recently demonstrated the bacteria in the blood of septicæmia; typhoid blood abounds with organisms. Splenic fever and typhoid fever may arise from the introduction of sewerage products into the blood. How close is the relationship between the various forms of splenic fever, septicæmia, and typhoid fever.—Dr. SANSON (London) asked, is the disease a septicæmia or due to a specific poison, or an inflammation which will produce a specific effect? It may be a modified variola ovina.—Dr. BELL stated that no cases of endemic origin had occurred.

*On Lime in Relation to Insanity, and the Treatment of the Insane Condition.* By I. ASHE, M.D. (Dublin).

*Report on the Action of Cholagogues.* By W. RUTHERFORD, M.D. (Edinburgh).—Dr. Rutherford presented the report which he had made for the Scientific Grants Committee of the Association.

## SECTION C.—OBSTETRIC MEDICINE.

Thursday, August 8th, 1878.

The Chair was taken at 2 P.M. by the President, ALFRED H. McCLINTOCK, M.D.

*On the Treatment of the Pedicle in Ovariectomy.* By HEYWOOD SMITH, M.A., M.D. (London).—The author commenced by reviewing the various methods that had been used at different times for the securing the pedicle; and, after a criticism on the fallacies of statistics as ordinarily compiled, he proceeded to analyse the statistics of Baker Brown, Spencer Wells, Keith, Knowsley Thornton, and his own; and said that the intraperitoneal treatment, on the whole, gave the best results. In conclusion, he advocated a better classification of cases as to adhesions, nature of the pedicle, etc.; and also that regard should be had to the fact of operators improving as they gained experience; that observations should be made of series of cases treated similarly; that ovariectomy should be performed antiseptically; and that records should, if possible, be kept on an uniform plan. He was in favour of the intraperitoneal method of treating the pedicle, whether by the cautery or by ligature.—Mr. SPENCER WELLS said that the antiseptic method of operating need not do away with the extraperitoneal treatment of the pedicle. He considered his own cases of the use of the cautery, brought forward by Dr. Heywood Smith, too few to give any reliable results, and the results with the clamp were altogether better than with the ligature.—Dr. GRIFFITH also took part in the discussion.

*Ovariectomy during Pregnancy.* By HEYWOOD SMITH, M.A., M.D.—The author narrated the case of a woman, aged 25, pregnant with her fourth child, the subject of an ovarian cyst, noticed after her previous confinement seven months before, who came under his notice on March 25th, 1878. He removed the tumour antiseptically on June 12th, the patient then being about four months and a half pregnant. The adhesions were strong to the anterior abdominal walls. The pedicle was tied with silk; and she left the hospital in twenty-eight days, the pregnancy not being disturbed. The temperature never rose above 99.8 deg. Fahr. He justified the operation by the consideration that, with any other method, whether by letting it alone, or tapping, or the induction of premature labour, the cyst would still be left to be dealt with, and there would have still been risk of miscarriage; and also by the fact that Spencer Wells's statistics of ovariectomy, during preg-



nancy, had given such good results. His prognosis was verified by the favourable issue.—Mr. E. SMITH (Bolton) did not consider the patient would be worse off if she aborted, had the operation not been performed.—Dr. GRIFFITH (Swansea) wanted to know if it were conjecture that cysts burst during labour; and asked what was the risk of allowing the patient to go her full time. He drew attention to the frequency with which patients menstruated eight or nine days after ovariectomy.—Dr. MARION SIMS said that his second case of ovariectomy was pregnant three months.—Dr. H. SMITH, in reply, said that the so-called menstruation arose from a general hyperæmic condition—from the superabundant energy of the circulation that had, before the operation, been utilised in supplying the tumour with blood; and that, on the removal of the tumour, the heart did not all at once accommodate its work to the lessened range. Hence also arose the albuminuria and the presence of urates on the third day after ovariectomy. He considered in his case, as the tumour was large and growing, that there was less risk to the patient from the operation than if she had been allowed to go her full time.

*Some Thermometric Observations after Labour.* By A. E. AUST LAWRENCE, M.D. (Bristol).—This paper was founded upon one hundred and fifty cases. It was found that the temperature of 98.5 deg. was not exceeded in fifty cases. In a second series of fifty, the temperature did not rise above 99.5 deg. In the third series of fifty, it was found that, in twenty cases, the temperature did not exceed 100 deg.; in the remaining thirty cases, they all registered a minimum temperature of 102 deg. These thirty cases were for convenience divided into classes, the first of which included five cases, and was headed cases of nervous hyperpyrexia; the chief points about these cases being that, from a temperature of 99 deg., it ran up in a short time to 102 deg. and 103 deg., the cause being mental anxiety; and, as soon as a good sleep had been induced, the temperature went down. In the next set of cases (three), a similar condition, with like results, was produced by excitement. In the next set of cases (six), the elevation of temperature and general disturbance were produced by an unhealthy condition of the secretions and loaded condition of the bowels; all these cases were cured by getting free action of the bowels. The next set of cases (two) were cases of mammary abscess, in which the symptoms referable to the breast were latent for some days; in one case, there was a high temperature for five weeks before the breast-symptoms showed themselves. The other case was apparently of a pyæmic origin. The next case noted was one where the lochia was free from smell, yet had such irritating properties that the temperature rose to 102 deg., and remained so until the vagina was well washed out with iodine and borax, when the temperature became normal. In five cases noted, the cause of the high temperature was offensive lochia; after the diligent use of disinfectant injections, the temperature came down to normal in each case. In one case, the cause of high temperature was phlebitis. In seven cases, the temperature rose to 101 deg. and 102 deg., owing to the breast not properly secreting; as soon as, by the aid of diaphoretics, the milk was freely secreted, the temperature came down.—Dr. MACNAUGHTON JONES (Cork) said that antiseptics were of the greatest service in the sick-room. An American writer has recommended examinations, from time to time, for a month after labour.—Mr. DONOVAN (Whitwick) never saw a case of puerperal septicæmia till a few months ago, when he had four cases in the hands of the same midwife. His plan was to clear out all discharges from the uterus, and to give iodide of potassium to increase the lochia, as he had noticed that it increased leucorrhœa.—Dr. HEYWOOD SMITH confirmed Dr. Lawrence's observations as to emotional temperature, not only in lying-in hospitals, but also in gynæcological practice. At his Lying-in Hospital (the British), they did not allow visitors till the eighth day; and he had often noticed at the Hospital for Women that, on visiting days, the patients' temperature rose.

*On Chronic Cervical Endocarditis, as a frequently overlooked Cause of Sterility and Abortion.* By ARTHUR W. EDIS, M.D. (London).—After defining the nature and seat of the disorder, Dr. Edis directed attention to the frequency of its occurrence shortly after marriage, due, in many instances, to contagion from latent gonorrhœa in the other sex. The treatment consisted in enlargement of the cervical orifice, where necessary, by dilatation or division of the cervix, and then the application of some strong acid, such as the nitric or carbolic, or of nitrate of silver. The employment of plugs of cotton-wool saturated in glycerine, and of a lotion of borax or zinc, was also recommended. Where utero-gestation had taken place, the application locally of one or other of the above agents was still recommended, as being less likely to produce abortion than if the disease were allowed to go on unchecked.—Mr. DONOVAN (Whitwick) had great pleasure in hearing such a paper, for he had met with similar cases, which he had treated in a similar manner.

Friday, August 29th, 1878.

Dr. MCCLINTOCK, President, took the Chair at 11 o'clock.

*How to reduce to a Minimum the Midwifery Mortality.* By HENRY ALLBUTT, L.R.C.P. Ed. (Leeds).—This paper dealt, the author said, with a medico-social subject, which should be solemnly considered by the members of the medical profession. Many who had large midwifery practices had no doubt witnessed most distressing and heart-rending scenes. Statistics proved that in England and Wales over 3,000 mothers perished annually from childbirth. In every 189 deliveries, one mother died who had been in excellent health up to the time of pregnancy. A certain law governed the various child-bearing periods in the amount of mortality. The first decennial, from 15 to 25 years of age, the maternal mortality amounted to about 668 in every 100,000 childbirths. The mortality in the second decennial, from 25 to 35, is 425 in every 100,000. From 35 to 45, the mortality was 633 per 100,000; from 45 to 55, it was 833 in 100,000. The question arose, could a large amount of those valuable lives be saved? The mortality was largest in the first and last two decennials. In the first five or six years of the first period—the mother had not yet reached her full development of bodily growth—various radical defects and imperfections, which a few years would in most cases remove, were tested for the first time and found wanting. In the last two periods, 35 to 45, and 45 to 55 years of age, the female soft parts suffered from more or less rigidity, and there were uterine inertia, rupture of the uterus, hæmorrhage, exhaustion, peritonitis, and many other evils. The smallest number of deaths occurred from 25 to 35 years of age, and the great reason of this was that woman had then reached her greatest prime of development and strength; the period of child-bearing should, therefore, be limited from about 20 to 34 or 35 years of age. During the above period, mortality was the smallest. Women should marry as soon after 20 years of age as possible. No woman should have offspring much after 35 years of age. Medical men, being the advisers of the public, should lift a warning voice against too early and too late marriages, as well as against the practice of too large families. Many very valuable lives might be saved if the profession would only speak with decision on this important social question. A large amount of indirect mortality arose from various diseases induced by the practice of over-childbearing and excessive lactation, viz., anæmia, phthisis, chronic neuralgia, varicose veins, ulcers of the legs, insanity, epileptic fits, and a score or two other complaints which made the poor creatures' lives miserable, and landed them in early graves.

*The Mortality of Infants.* By C. R. DRYSDALE, M.D. (London).—The author adverted to the interesting report of the Obstetrical Society of London of 1870 on infantile mortality. He adverted, in passing, to the want of strict accuracy in the returns of infantile mortality in this country, owing to the fact that the registration of birth is not compulsory until the sixth week; whereas in France births are registered on the third day, and in Norway on the day of birth itself. In England, the infantile death-rate is consequently much understated, as many infants are not registered at all, or treated as still-births, even when living a certain time. The registers of France, for instance, show that, of 1,000 deaths 0—1, 417 die in the first month; English statistics give but 311, a figure incredibly inadequate. Hence Dr. Farr's figure of 149, as the mortality per 1,000 born in the first year of life, is not comparable with more accurate Continental rates. It is not much higher than that of Sweden, 137; and too greatly lower than that of France, 187, making correction for falsely registered dead births. Norway has the lowest death-rate, 104. The main cause of early infantile mortality resides in the poverty of the parents. Charles Ansell's statistics show that, among the richer classes in England and Wales, only 80 per 1,000 children born die in the first year of life; whereas, among the poorer classes of Liverpool, Manchester, and Glasgow, as many as 330 per 1,000 die in the first year of life, destroyed by rickets, fevers, and bad food, air, etc. In Swedish towns, the mortality is 193 per 1,000 from 0 to 1; whilst the rural mortality in Sweden is 124, as compared with 186 in France, a fact probably due to the ignorance of the French peasantry. In some countries, all foreign children born die, e.g., in Senegal and in Egypt the children of Europeans have something like this mortality. The mortality of foundlings used to be in England, and still is in France and Russia, etc., enormous. It was at the rate of 874 per 1,000 born in the Loire Inférieure in 1860; and in France the death-rate of such children still oscillates between 500 and 700. In High Bavaria, the figure is 404, and in Austria proper 317 per 1,000 born. The minimum mortality possible is not well known. It is as low as 80 per 1,000 among English well-to-do people, and probably might be reduced to 50. It is supposed to be 71 per 1,000 among the children of the rich in

France. One-third of all infantile deaths from 0-1 occur in the first month; one-half among illegitimate children. The mortality of illegitimate children in France is 337, as against 175 legitimate. It is higher in country districts in France than in towns. In Bavaria, again, illegitimacy does not much raise the infantile death-rate. Maternal lactation is most important, and laudably prevalent in this country. Of 59,927 children born in Paris, 20,049 are sent out to nurses in the country; and there is a death-rate of those that remain in Paris of 243 per 1,000 under the first year. The death-rate of those sent out to nurse is from 500 to 700 per 1,000. The conclusions were these. The chief causes of infant mortality are, then, the poverty of the parents, want of lactation by the mother, illegitimacy when marriage is essential to the status of the mother, and town life. The main or leading cause, which, indeed, is so important as to throw the others into the shade, is poverty in the parents. This doubles, trebles, and even quadruples, the infantile death-rate in this and other countries. Poverty, then, is the chief factor in infantile, as it is known to be of adult, mortality.

*On the Evils of Practices intended to act as Checks of Population.*—A discussion on this subject was opened by Dr. ROUTH (London). He said that he wished the discussion not to be undertaken with animus, and invited temperance in debate. He criticised the papers that had just been read as both tending to the evils he had come there to combat, viz., that the way to lessen mortality in childbed, and also infant mortality, was to lessen the number of marriages, and then the number of births. 1. The proposition of Malthus rested on the statement, that excess of population always led to distress and increase of crime; and, therefore, that the population should be curtailed. The crimes that were specially referred to were infanticide and criminal abortion. 2. It had been stated, in one of the papers read, that over-generation was destructive to the womb, which was not correct. 3. It was also stated that increase of poverty led to increase of power of child-bearing; and that, therefore, measures should be taken to prevent poor women having too many children. 4. It was also said that wealth increased the sexual passion, and that must be provided for. In referring to this subject, he stated that the Contagious Diseases Acts gave increased facilities to immorality. The employment of measures whereby the passions could be gratified, without risk of increasing the population, were then mentioned, and strongly condemned. He then proceeded to give a list of physical evils that arose as the results of what he termed conjugal onanism, referring especially to Dr. Bergeret's work on *Sexual Frauds and the Diseases generated thereby*—views confirmed by Drs. Bourgeois, Mayer, and Richard, and many other French authors. Bergeret had given graphic examples of: 1, acute metritis (he had records of nine cases, with two deaths); 2, leucorrhœa; 3, hæmatocele; 4, cancer (of the kind called galloping cancer, seven cases); 5, hysteria; 6, ovaritis; 7, sterility; 8, prostatic disease and impotence; 9, insanity. He concluded by calling upon all medical men to protest, with all the weight of their influence, against all crimes of this class.—The PRESIDENT was so fully satisfied of the downright immorality of the practices referred to, that he did not think there was much ground left for the consideration of the physical evils.—Dr. HENRY BENNET considered that the amount of diseases of pregnancy, and during the first month after parturition, was due to the uterus being in a diseased condition at the time of conception. He believed that there was a very much larger amount of disease of the womb than was supposed. Thus he constantly found uterine disease two months after parturition. His youth had been spent in France, and so he could speak from immediate observation. He stated positively that the system of withdrawal was the way almost universally practised in France. It was partly the result of the law by which property is subdivided; and hence the desire of not multiplying children. There were in France six millions of landed proprietors; and the population of France was diminishing. This criminal condition of things led to promiscuous intercourse. On the whole, he agreed with Dr. Routh, but thought he had attributed too much disease to this cause.—Dr. MARION SIMS stated that such practices existed everywhere, in America as elsewhere. But in America they had made great strides against the evil in stopping the publication of obscene literature and the importation of instruments used for vile purposes. The laws of Malthus were not applicable to-day, as there was much more facility of communication. Overbreeding did not produce ill-health. A woman who had twenty-three children regretted that she did not have the twenty-fourth. No doubt onanism sent many persons to the lunatic asylums. He knew a married woman who confessed to him that, for thirteen years, she had never had a chance of conception. He had known a case where this practice had, in six years, produced obstinate leucorrhœa, and then sterility. Patients often came complaining of hysteria; and, if they were asked why they had no more children, they said that some doctor had advised to the contrary.—Mr. GEORGE BROWN (London) referred to some ill results of the practice

condemned.—Dr. HEYWOOD SMITH felt some statement was due from him, as he had been found fault with for having such a subject brought forward. He took the sole responsibility of having suggested the discussion; and he had selected Dr. Routh, both from his reputation in the profession, and also as being a man of high rectitude.—Dr. MACNAUGHTON JONES (Cork) could not separate the moral from the physical aspect of the question. He had often been struck with the fact that ovarian disease was less in Ireland than in England or Scotland. He asked Dr. Heywood Smith whether he could account for that, and he replied that perhaps it was that the Irish women were proverbially more moral and less given to irregular ovarian excitation. He said that John Stuart Mill was no prophet for him, and that in Ireland would be found a peasantry not addicted to such immoral practices.—Dr. NORMAN KERR (London) hoped it was in the power of the Section to pass a resolution condemnatory of the practice of medical men going to meetings attended by men and women to promulgate such doctrines as had been brought forward.—Mr. DONOVAN (Whitwick) while in practice in Ireland never had a case of uterine disease, but since he had been practising in England every second woman had uterine or ovarian complaints.—Dr. ROUTH in reply thanked the Section for their attendance and for the discussion. With regard to Dr. Henry Bennet, he did not suppose any one would think him so inexperienced as to assume that all diseases were to be referred to these causes. He thanked Dr. Marion Sims for his speech.

The following papers were taken as read.

*Positional Treatment of Spinal and Pelvic Distortions and Uterine Displacements by means of the Pelvic Band, recently improved in construction and adaptation.* By PROTHEROE SMITH, M.D.—Dr. Protheroe Smith called attention to recent alterations and modifications in the "pelvic band", by which he more readily effected the desired alteration in the relation of the pelvic plane to the spinal column. By these alterations, he said, he more easily removed the cause of spinal weakness and distortions, and the consequent displacement of the pelvic viscera. He said that this external mechanical appliance was the most successful mode of cure for flexed or otherwise displaced uteri. His plea for such a conclusion was, not only to be explained by reference to the results in practice, but also by the fact that it was consistent with the natural laws of gravitation. On the contrary, he affirmed that the ordinary and sometimes objectionable custom of using pessaries and other intra-uterine and vaginal instruments was, in many instances, opposed to scientific principles; to wit, the plan of propping up the flexed and displaced and movable uterus by pessaries resting on the yielding floor of the vagina, without also removing the undue weight above it, in the manner he had long advocated. This was too frequently proved by the failure of internal appliances to remedy these troublesome and distressing affections. In confirmation, he referred to cases in which his positional treatment had succeeded in instances of displacement and flexion which other modes had failed to redress. He regarded his external mechanical mode of cure as a means of restoring health in many of the maladies of women, and likewise of obviating the necessity for the too frequent custom of treating these ailments, especially in young and single women, by direct digital and instrumental examinations and appliances.

*On Peritoneal Adhesions as a Cause of Post Partum Hæmorrhage.* By G. DE GORREQUER GRIFFITH, L.R.C.P. (London).—In this paper, the author pointed out the rarity of such a complication, or, at all events, the scarcity of times in which it had had public notice directed to it by any published cases. Attention was first drawn to it by Dr. Graily Hewitt, who brought forward his cases before the Obstetrical Society. At that time, there was a very decided opinion as to the possibility of such a cause and effect, some disagreeing with Dr. Hewitt's views, others coinciding, if not altogether, at least in a measure; among the latter of whom was Mr. Spencer Wells. Since that time, no further cases had been published, and the author of the paper said that he established another link in the chain of evidence for the existence of the affection, and its bearing on *post partum hæmorrhages*. The existence of adhesions whereby the uterus may be bound to the intestines and to the diaphragm, and in this way lash the pregnant womb, advanced to the full time were pointed out, and were dwelt upon, to show more particularly that those firm adhesions, connecting the fully advanced pregnant womb to the spinal column, with, of course, the intervention of the soft structures—such as occurred in Dr. Griffith's case, which he recorded at length—are capable of effecting a more complete retention of the uterus in a position which is unnatural as soon as delivery of the child has been accomplished.

After the meeting had formally broken up, Dr. Heywood Smith gave a demonstration of the use and application of Dr. Protheroe Smith's pelvic band.



## SECTION D.—PUBLIC MEDICINE.

Friday, August 9th, 1878.

THE Chair was taken by the PRESIDENT at 11 A.M.

*How far may the Flesh of Diseased Animals be safely used as Human Food?* By SAMUEL DREW, Sc.D., M.D. (Sheffield).—Dr. Drew stated, as the result of his inquiries, that in rare cases only is there any ground for believing the flesh of diseased cattle to be at all injurious if eaten; and that, if thoroughly cooked—that is, raised throughout to a temperature of 212 deg. Fahr.—probably it is never noxious. He divided the diseases of cattle into three classes: 1. The ordinary local or constitutional diseases, as enteritis or phthisis; 2. Contagious or epizootic maladies, as pleuropneumonia, rinderpest, glanders; 3. Parasitic diseases, as trichinia, measles. He alleged that no evidence whatever had been adduced showing that the flesh of animals affected by diseases of the first class was in any degree injurious as food, whether the animal had died of the disease, or had been slaughtered while ill. He stated that animals found dead of disease are habitually eaten by the shepherds and labourers on the sheep-farms of Scotland, and are frequently consumed by English labourers, without any known ill-effects. From the report of the late medical officer of the Privy Council, he quoted: "During my inquiries into the diet of the Highlanders, I had reason to believe that neither the nature nor the duration of the disease is very carefully inquired into, and that a sheep found dead without marked evidence of long continued disease is eaten. It is also a part of the ordinary food of the farmer in those localities, and also of his men, whether fed singly or on the bothy system. I made the most careful inquiries, but could not learn that any disease or disorder of the human system had been known to follow the use of this food; and it is almost universally believed to be good in flavour and wholesome in quality." With regard to distinctly contagious epizootic disease, Dr. Drew stated that, although the use of cattle dying of such maladies as food might not unnaturally be regarded as a dangerous experiment, yet the actual evidence is very strong that no evil result has followed on the use of such food, if sufficiently cooked. He quoted Coze, who stated that "at the siege of Paris in 1814 about a thousand oxen, sick to the last extremity of cattle-plague, were consumed as food; and that no malady was caused by this food." The report of the Cattle-Plague Commission said: "During the occurrence of rinderpest in England in 1865, large quantities of the meat of animals killed in all stages of the disease were eaten without ill-effects"; and "in Bohemia also, in 1863, the peasants dug up the animals dead of rinderpest and ate them without bad results". Parent du Chatelet writes that "during the siege of Paris, in 1870, the flesh of glandered horses was in large quantity used with impunity"; and that "on another occasion the flesh of three hundred glandered horses was eaten without injury". M. Renault (Director of the Veterinary School of Alfort) asserts that he "for many years made experiments, and that there is no danger from the cooked flesh of cattle, pigs, or sheep dead of any contagious disease, however much may be the natural repugnance these substances inspire". Of the third class of malady—the distinctly parasitic—Dr. Drew said that the use of flesh of animals so affected would be decidedly dangerous unless great care were used in cooking the food. The practical inference drawn by the writer was that it was impolitic and wasteful to prevent the sale for human food of the flesh of animals which had been affected by disease of the first class; that in but few cases of the second class was the destruction of the flesh of diseased animals necessary; that the flesh of animals affected by trichinosis or measles should never be used as food. He, however, stated that, although the flesh of diseased animals was not noxious, yet, inasmuch as it, in common with underfed meat generally, was distinctly less nutritious than that of fat cattle, its sale should only be permitted as avowedly "inferior meat"; and its substitution for first-class meat be treated as a fraud. Dr. Drew confined himself entirely to the question of the noxiousness of the flesh of diseased animals, stating that he gave no heed to any popular prejudice, which would condemn not only the flesh of animals dying of disease, but the flesh of the horse, and ass, and (in Mahometan countries) that of the hog, as alike unfit for human food. This being a matter which the consumer of food was able to decide for himself, legislative interference was not necessary therein. Dr. Drew did not touch on the question of the unwholesomeness of putrid meat or of the poison believed to be developed occasionally in overkept meat-pies or sausages.—Dr. TRIPE (Hackney) said that in the course of his experience, extending over twenty-two years, at Hackney, he had frequently ordered the destruction of diseased meat. It was not a fact that infected meat, if well cooked, was innocuous. Dr. Tripe instanced a case coming under his observation, in which sausage-meat had poisoned several who had partaken of it.—Dr. CARPENTER (Croydon) wished very much that he could support the

views of the reader of the paper, regretting the loss. He remarked on certain cases of poisoning from meat-pies, and mentioned that he had, out of water used in boiling potatoes affected with the blight, reproduced the *botritus*. He thought, therefore, that on either theory (volatile or germ) it was possible that, after being subjected to a boiling temperature, the poison might remain unaffected.—Mr. SISSONS (Barton-on-Humber) stated that some Blue Books issued by the United States Government supported Dr. Drew's views, but he did not think medical officers would care to eat the flesh of diseased animals, whatever theory they might hold as to its harmlessness.—Dr. BOND (Gloucester) was willing to take up the challenge of Mr. Sissons. Excepting in the case of a very few diseases, such as malignant pustule, and the parasitic disease commonly known as "measles" in pork, he would eat the flesh of diseased animals, if properly cooked. The instance cited by Dr. Tripe, where sausage-meat poisoned, and the case of poisoning due to baked pies referred to by Dr. Carpenter, proved nothing. Similar effects had occasionally followed eating shell-fish. Legislation had undoubtedly advanced beyond actual knowledge in the matter of diseased meat. Dr. Bond thought people ought to be allowed to purchase the flesh of animals affected with pleuropneumonia and like diseases (of course, at a reduced price and the character of the meat being stated) just as they were now permitted to buy butterine or adulterated coffee.—Mr. VACHER (Birkenhead) did not believe that any analogy existed between groceries mixed with harmless adulterants and diseased flesh. As medical officer at a port of debarkation of stock from America, Mr. Vacher was frequently called upon to inspect large quantities of meat. He was in the habit of condemning sheep or oxen affected with epizootic pleuropneumonia, rinderpest, blackquarter (including under this term splenic apoplexy, malignant pustule, and carbuncular erysipelas), acute rheumatism, and influenza; and pigs affected with pleuropneumonia, typhoid fever, scarlatina, anthrax, quinsy, and the parasite cysticercus. He frequently passed animals suffering from tuberculosis, and did not consider the presence of foot-and-mouth disease sufficient to warrant the condemnation of the carcase. In proof that cooking did not necessarily destroy the poisonous properties of diseased meat, Mr. Vacher mentioned an experiment made by Dr. Davies, who had successfully vaccinated with the contents of a tube of lymph buried in a leg of mutton while it was roasting.—Mr. NUNN (Bournemouth) considered any argument based upon the fact that animals could eat diseased meat with impunity carried very little weight, as animals were in the habit of eating offal and many kinds of food not fit for man.—Dr. BRABAZON (Bath) stated that, having himself been a sufferer through eating meat infested with the cysticercus, he condemned all meat visibly affected.—Dr. GRIFFITHS (Sheffield) thought it was not safe to pass the carcase of an animal affected with tubercle, except when the disease was recent. When one lung was fully affected and the disease had begun in the other, he refused to pass the carcase.—Mr. BALDING (Royston) hoped the onus of judging what was wholesome meat and what was unwholesome would not be thrown on the buyer.—Dr. CAMPBELL (Calne) found it difficult to decide in cases where the animals were only slightly affected, and asked how far medical officers were justified in condemning mild forms of pig-typhoid.—The PRESIDENT said that if, as Dr. Drew contended, diseased meat were a matter of no importance, the Government had been grievously misled by medical men. He thought that two subjects had been a little mixed up: the fitness of diseased meat for human food was one question, and whether it had been or might be used with impunity was another.—Dr. DREW briefly replied.

*On the Construction and Management of Hospitals for Infectious Diseases.* By HENRY J. ALFORD, M.D. (Taunton).—The object of this paper was to induce a discussion especially on the details of management of these hospitals. The necessity of their existence is too apparent to need proof. A typical one is in the course of erection at Taunton, for the use of the rural and urban districts. It consists of four blocks, each block containing one ward, forty-eight feet long, twenty-four wide, and twelve high. Each ward accommodates six beds, and has also a nurse's room, bath-room, water-closet, and lavatory. These blocks are joined to one another, and to an administrative block by a covered way or verandah. The administrative block is placed in front, and contains house-accommodation for the master and matron, and also medical officer's room, kitchen, etc. In the rear of the blocks, are laundry, disinfecting chamber, dead-house, and coach-house. The site is elevated, removed from dwellings, and every attention has been given to ensure thorough ventilation and every sanitary requirement. The buildings are of brick, the walls being hollow. The interior is cemented, and everything tending to retain infection is studiously avoided. The cost of the entire building is £2,652. When this money is borrowed and the payment spread over (say) thirty years, the burden upon the rates is of the slightest description. In

order to diminish the prevalence of infectious diseases, such institutions will be needed throughout the length and breadth of the land. The question of management is not as easy as that of construction. It cannot be expected in an agricultural district that a permanent staff of nurses should be maintained at an institution which, it is to be hoped, will very frequently be empty. A man and his wife should reside in the administrative block to act as master and matron of the establishment. Nurses should be available when required; and this will be a considerable difficulty in carrying out the scheme. As far as sanitary authorities are concerned, the great object is isolation rather than treatment of fever cases; hence, much cannot be expected of them; but it is needless to observe that, to render these institutions really valuable, the nursing must be good. The medical management of the hospital is, moreover, one with regard to which no settled plan has been adopted. Should a medical attendant be appointed to attend all cases at a fixed salary, or (which appears more feasible) should the health-officer act as medical superintendent, answerable to the authorities for the work of the establishment, and responsible for the treatment of those cases not attended by their own medical man? Such institutions being not merely for paupers, but for any cases in which isolation is necessary (such as domestic servants) the attendance of the family doctor may be desirable. A weekly payment in the case of all non-paupers on a fixed scale should be made. How far voluntary subscriptions should go towards the maintenance of these hospitals may be a debatable point, although it is difficult to see any objection to such a proposal. It is in the hope of eliciting the opinion of the profession on these various topics that this paper has been written.

—Dr. BOND (Gloucester) said that, out of thirteen authorities in his district, only two had combined to provide an infectious diseases hospital. Admissions to such hospitals should be perfectly free.—Dr. CAMPBELL (Calne) would make it compulsory on all classes to send their infected sick to hospital, where isolation could be insured.—Dr. BRABAZON (Bath) said that powers for removing all infected persons, without proper lodging or accommodation, were given in the 124th Clause of the Public Health Act. The practical difficulty was in deciding which were Poor-law patients and which Sanitary Authority patients.—Mr. JACOB (Battersea) congratulated Dr. Alford on his success in getting two authorities to erect such buildings as those described. Mr. Jacob was of opinion that admission in all cases should be free, and that, in the case of young children, the mother should be encouraged to accompany the patients.—Dr. ALFORD replied.

*Vote of Thanks to the President.*—It was proposed by Dr. BOND, seconded by Dr. SERGEANT, and resolved: "That the best thanks of the Section be given to Dr. J. T. Arlidge for his kindness and courtesy while presiding."

The following papers were taken as read.

*Remarks on a Disease known by the names of "False Diphtheria", "Spreading Quinsy", and "Cyananche Pharyngea".* By CORNELIUS B. FOX, M.D. (Chelmsford).—The attention of the author, who has been so circumstanced for the last nineteen years as to have had unusual opportunities for studying diphtheria, was first directed in October 1875 to a disease which the union medical officer termed "spreading quinsy" and which has subsequently been referred to as "cyananche pharyngea" and "false diphtheria". After recalling the four principal signs that are characteristic of true diphtheria, namely, (1) the production of a tough, leathery, false membrane (*διαθέρμα*, a prepared hide); (2) the presence of albumen in the urine; (3) a great depression of the vital powers; and (4) subsequent paralysis in a certain percentage of cases. Dr. Cornelius Fox thus summarises the conclusions to which he has arrived respecting a complaint that has doubtless been frequently confounded with it. 1. The disease consists essentially in an inflammation of the tonsils, which extends more or less into the pharynx, and some times to the neighbouring submaxillary and other cervical glands. 2. Although yellowish spots are sometimes seen on the tonsils from an accumulation of mucus in the follicles of these glands, no ash-grey, tough, leathery membrane (characteristic of true diphtheria) is ever seen during the course of the disease. 3. The individuals affected present an anæmic appearance. 4. The disease is communicated from one to another, generally through the medium of schools, gleaning, etc. 5. Unlike diphtheria, it is rarely fatal unless those who suffer from it have been long exposed to most unwholesome conditions. 6. It is never followed by paralysis of sensation or motion as diphtheria often is. 7. It is not accompanied by albuminuria. 8. The pulse is full, as is noticed in cases of acute quinsy; whereas in true diphtheria it is small and feeble, indicating great prostration. 9. It presents characters dissimilar from those exhibited by cases of scarlet fever without the rash, from which it does not confer an immunity. 10. It may prevail in a district where no true diphtheria is known. 11. The average duration

of the disease is about ten days. 12. It is essentially a filth disease, being always associated with some organic impurity of air or organic impurity of water. Overcrowding, saturation of soil around dwellings with slop water, employment of pond water for drinking purposes are the most common insanitary conditions found in connection with infected houses. Quinsy differs from this disease in that it is not a communicable malady, although it may affect several members of a family at the same time who have all been similarly exposed to the same influences, or who may all have a family tendency to throat complaints. In quinsy, moreover, suppuration generally takes place, and the sudden discharge of pus is accompanied by a speedy relief of all the symptoms. In false diphtheria, this mode of termination does not generally occur. The reasons for thinking that this disease is not a mild form of true diphtheria or an erysipelous affection of the throat are then given, although, if Dr. Thorne Thorne's theory as to the evolution of infective properties be adopted, the disease might possibly be regarded as originating in erysipelas.

*Some Suggestions on Legislation for Rabies and Hydrophobia.* By T. M. DOLAN, L.R.C.P. Edin. (Halifax).

#### MEMBERS PRESENT AT THE ANNUAL MEETING.

THE following list includes the names of the members and visitors attending the meeting at Bath, which were entered in the book provided for that purpose in the reception-room.

Abbott, George, Esq., London; Adams, George, Esq., Nailsea; Adams, J. Dixon, M.D., Martock; Adams, W. Esq., London; Aitken, L., M.D., Rome; Aldred, Henry A., M.D., London; Alford, Henry, Esq., Taunton; Alford, Henry, J., M.D., Taunton; Alford, Stephen S., Esq., London; Allbutt, T. Cliford, M.D., Leeds; Amyot, Thos. E., Esq., Diss, Norfolk; Anderson, Mrs. E. Garrett, M.D., London; Amyot, Edwin, M.D., Shrewsbury; Andrews, Henry C., M.D., London; Andrews, Onslow, M.D., Redland, Bristol; Angear, J. J., M.D., Fort Madison, Iowa; Anstie, Thomas B., Esq., Devizes; Arlidge, J. T., M.D., Stoke-on-Trent; Ashe, Isaac, M.D., Dublin; Askwith, R., M.D., Cheltenham; Atherton, Dr., Fredericton, New Brunswick; Atkins, R., M.D., Watford; Atkinson, E. T., Esq., Richmond; Atkinson, Geo. P., Esq., Pontefract.

Bacon, G. M., M.D., Cambridge; Bagshawe, F., M.D., St. Leonard's-on-Sea; Baker, J. Wright, Esq., Derby; Balding, D. B., Esq., Royston; Barham, C., M.D., Truro; Barnes, J. Wickham, Esq., London; Barrow, Benj., Esq., Ryde; Bartlett, T. H., Esq., Birmingham; Bartram, J. S., Esq., Bath; Batten, William S., Esq., Bromsgrove; Bayley, Robert L., Esq., Stourbridge; Beach, Fletcher, M.B., London; Beddoe, John, M.D., F.R.S., Clifton; Begley, W. C., M.D., Hammersmith; Bell, John Henry, M.D., Bradford; Bennett, Henry, M.D., London; Benson, Arthur H., M.B., Dublin; Benson, Joseph H., Esq., Leckington; Black, J. Watt, M.D., London; Boileau, J. P. H., M.D., Netley; Bond, F. T., M.D., Gloucester; Booth, P. L., Esq., Barrow-in-Furness; Borchardt, Louis, M.D., Manchester; Bothwell, George G., Esq., Topsham; Bothwell, James, Esq., Horningsham; Bowkett, Thomas E., Esq., London; Box, W. H., Esq., Chirk; Boyd, R., M.D., London; Bradshaw, A. B., M.D., Bath; Bradbury, J. B., M.D., Cambridge; Bradshaw, W. H., M.D., Weston-super-Mare; Brailley, W. A., M.D., London; Bride, John, Esq., Wimslow; Bridger, John, Esq., Cottingham, Cambridge; Bridgman, Isaac T., Esq., Berkeley; Briery, James B., M.D., Manchester; Briggs, Henry, M.D., Burnley; Briggles, H. Middleton, Esq., Birmingham; Briscoe, William T., Esq., Chippenham; Broadbent, S. W., Esq., Walton-le-Dale; Broadbent, W. H., M.D., London; Bromley, Frederic, Esq., Oldham; Bromley, John B., Esq., Castle Hedingham; Brook, Henry, Esq., Bridgwater; Brookes, A. G., Esq., Shrewsbury; Broom, John, M.D., Clifton; Brown, George, Esq., London; Browne, Lennox, Esq., London; Brownfield, M., Esq., Poplar; Bryant, Samuel, Esq., Brimsington; Buckley, Henry C., M.D., Ilanely; Burder, G. F., M.D., Clifton; Bush, Charles A., Esq., Marshfield.

Callanan, Michael, Esq., Kilbrittan, Bandon; Callender, George, Esq., F.R.S., London; Campbell, Donald, M.D., Calne; Cardew, George S., M.D., Bath; Cardew, W. G., Esq., Cheltenham; Carleton, John S., Esq., Newnham; Carmichael, A. H., Esq., Liverpool; Carpenter, Alfred, M.D., Croydon; Carr, Alexander, Esq., Bristol; Carter, R., M.D., Bath; Chadwick, Charles, M.D., Tunbridge Wells; Chapman, T. H., M.D., Hereford; Church, Wm. J., Esq., Weymouth; Clark, Jas., M.D., Lichfield; Clark, Thomas E., M.D., Clifton; Cleaver, H. J., M.D., Keokuk, Iowa; Cockey, Edw., Esq., Frome; Coipel, Felix A., Esq., Havannah; Cole, Thos., M.D., Bath; Collins, Charles H., Esq., Chew Magna; Collins, W. C., M.D., Chew Magna; Colthurst, J. B., Esq., Wincanton; Colthurst, Richard, M.D., Cotham, Bristol; Coppinger, Albert, Esq., Bath; Corbin, M. A. B., Esq., Guernsey; Cornwall, James, Esq., Fairford; Cornwall, John, Esq., Meare; Coupland, Sidney, M.D., London; Cowan, Samuel B., Esq., Bath; Cowley, Thomas, Esq., Adelaide, South Australia; Creswell, Pearson R., Esq., Dowlais; Crickmay, Edward, Esq., Laxfield, Suffolk; Crighton, R. W., M.D., Tavistock; Cripps, Edward, Esq., Cirencester; Crisp, James Henry, Esq., Lacock; Crisp, Nathaniel, Esq., Keynsham; Crossby, H. E., M.D., Nice; Crossman, Edward, Esq., Hambrook.

Dalby, W. B., M.D., Torquay; Daly, W. H., M.D., Pittsburg, U.S.A.; Daniell, R. T., M.B., London; Daubeny, Henry, Esq., San Remo, Italy; Davey, J. G., M.D., Bristol; Davey, R. S., M.D., Walmer; Davies, Andrew, M.D., Swansea; Davies, David, Esq., Bristol; Davies, David, M.D., St. Leonard's-on-Sea; Davies, H. N., Esq., Cymer, Pontypridd; Davies, John, M.D., Ebbw-vale; Davies, John, Esq., Bath; Davies, J. Sides, Esq., Oswestry; Davies, Richard, Esq., Walsall; Davis, R. A., M.D., Lichfield; Davis, Wm. G., Esq., Heytesbury; Day, W. E., Esq., Bristol; De Bantolomé, M. Martin, M.D., Sheffield; Dennis, Fred. S., M.D., New York; Denton, Edward R., Esq., Leicester; Dickson, Walter, M.D., R.N., London; Dixon, W. H., M.D., Sunderland; Dobson, Nelson, C., Esq., Clifton; Doidge, J. G., Esq., Lifton, Devon; Dolman, A. H., Esq., Derby; Donovan, Wm., Esq., Whitwick; Dow, Wm. B., M.D., Dunfermline; Drage, Charles, M.D., Hatfield; Drew, Samuel, Sc. D., M.D., Chapel Town, Sheffield; Dun, Wm. G., M.B., Rutherglen; Duncanson, J. J. Kirk, M.D., Edinburgh; Durrant, C. M., M.D., Ipswich; Dyer, Samuel T., M.D., Ringwood.



Eager, Reginald, M.D., Northwoods, Bristol; Eagles, Woodfield, Esq., Aylesbury; Eddowes, Alfred, M.D., Market Drayton; Edwards, W. T., M.D., Cardiff; Elliott, Christopher, M.D., Redland, Bristol; Elliott, Thomas, M.D., Mansfield; Ellison, W. A., M.D., Ipswich; Erskine, Robert, M.D., Camborne; Evans, Maurice G., M.D., Cardiff; Everett, D., Esq., Worcester; Ewens, John, Esq., Bristol.

Falconer, R. W. Ibrahim, M.D., Bath; Fegan, Richard, M.D., Woolwich; Felce, Stamford, Esq., London; Fisher, Fred. R., Esq., London; Fitch, F. M.D., Chad-desley, Kidderminster; Fitzgerald, Charles E., M.D., Dublin; Ford, James, M.D., Eltham; Foster, B., M.D., Birmingham; Fothergill, J. Milner, M.D., London; Fowler, R. S., Esq., Bath; Fox, A. W., M.B., Bath; Fox, Charles H., M.D., Bristol; Fox, Edward Long, M.D., Clifton; Freeman, H. W., Esq., Bath; Freer, Edward L., Esq., Birmingham; French, J. G., Esq., London; Frost, Wm. A., Esq., North Staffordshire Infirmary; Fry, John B., Esq., Swindon; Fuller, W., M.B., Oswestry; Yffe, W., M.D., Clifton.

Gaine, Charles, Esq., Bath; Gamble, Samuel, Esq., Torquay; Gamgee, Sampson, Esq., Birmingham; Gardner, James, Esq., Box; Garlike, J. P., Esq., Sutton Benzer; Garner, J., Esq., Birmingham; Goodchild, John, Esq., Ealing; Goodridge, H. F. A., M.D., Bath; Goss, T. Biddulph, Esq., Bath; Gowers, W. R., M.D., London; Grace, Henry, Esq., Bristol; Graham, A. F., M.D., Liverpool; Green, F. K., Esq., Bath; Green, J. Lardner, Esq., Salisbury; Griffiths, T. D., M.D., Swansea; Griffiths, F., M.D., Sheffield.

Hall, J. G., Esq., Swansea; Hallett, T. G. P., Esq., Bristol; Hanham, F. Esq., Bath; Hardie, Gordon K., Esq., London; Hardy, H. Nelson, Esq., London; Hare, E., Esq., Bath; Harper, Charles, Esq., Bathurst; Harper, Thomas, Esq., Plymouth; Harris, Henry, M.D., Redruth; Harrison, Alfred J., M.B., Clifton; Harrison, Reginald, Esq., Liverpool; Harsant, W. H., Esq., Bristol; Hart, Ernest, Esq., London; Howard, E., M.D., London; Haydon, N. J., M.D., Minchinhampton; Heath, Richard, M.D., St. Leonard's-on-Sea; Hemmings, J. Hughes, Esq., Kimbolton; Henry, A., M.D., London; Hensley, Henry, M.D., Bath; Heywood, H. J., Esq., Pendleton, Manchester; Hicks, Charles C., M.D., Dunstable; Hill, Geo. M.D., Hooton, Chester; Hill, M., Esq., Bootle; Hitchcock, Charles, M.D., Market Lavington; Holdsworth, Samuel, M.D., Wakefield; Hooper, Charles, Esq., Aylesbury; Hopkins, H. Cullford, Esq., Bath; Hounsell, H. Strangways, M.D., Torquay; Howell, D. De Berdt, Esq., Clapton; Hudson, R. S., M.D., Redruth; Humphreys, J. R., Esq., Shrewsbury; Husband, W. D., Esq., York; Husband, W. E., Esq., Bath; Hutchinson, Jonathan, Esq., London.

Jackson, George, Esq., Plymouth; Jackson, Henry, Esq., Barnstaple; Jackson, J. B., Esq., Birmingham; Jackson, Vincent, Esq., Wolverhampton; Jacob, E. L., Esq., Battersea Rise; Jagielski, Victor, M.D., London; Jamieson, W. Allan, M.D., Edinburgh; Jennings, J. C. S., Esq., Malmesbury; Jessop, C. M., Esq., Clifton; Johnstone, Jas., M.B., Birmingham; Jones, H. Macnaughton, M.D., Cork; Jones, Talford, M.B., Brecon; Jones, Wm., Esq., Ruabon; Jordan, Furneaux, Birmingham; Joyce, Thomas, M.D., Cranbrook.

Keall, W. P., Esq., Bristol; Kestley, Thos. B., Esq., Grimsby; Keir, W. Ingram, Esq., Melksham; Kelly, W. M., M.D., Taunton; Kendall, E., Esq., Clifton; Kendall, W. B., Esq., Kidsgrove; Kenyon, G. A., M.B., Chester; Kerr, Norman, M.D., London; King, Louis, Esq., Bath; Knox, John, M.D., Bakewell.

Langmore, J. C., M.B., London; Lawrence, A. E. Aust, M.D., Clifton; Lawrence, Edgar G., Esq., Bath; Leach, John, Esq., Sturminster Newton; Lewis, J. R., M.B., Bristol; Liddon, W., M.B., Taunton; Liebreich, R., M.D., London; Livy, John, M.D., Bolton; Long, A., Esq., Trowbridge; Long, Mark, M.D., London; Lord, Charles F., Esq., Hampstead; Lougher, Richard, Esq., Cardiff; Lowry, T. H., M.D., West Malling; Lund, Edward, Esq., Manchester; Lunn, W. J., M.D., Hull.

McCheane, Wm., Esq., Liverpool; McClintock, A. H., M.D., Dublin; McIntyre, J., M.D., Olinah; McKendrick, John G., M.D., Glasgow; Mackenzie, J. E., M.D., Rugby; MacLagan, Douglas, M.D., Edinburgh; McNicoll, E. D., Esq., Southampton; Macreight, W. W., M.D., Torquay; Manby, Fred. E., Esq., Wolverhampton; Manley, John, M.D., Hants County Asylum; Marshall, Henry, M.D., Clifton; Mason, Frederick, Esq., Bath; Massiah, Benj., M.B., Cheadle, Manchester; Matunsell, John, M.D., Bath; Mercer, A. Clifford, M.D., Syracuse, New York; Metford, J. Seymour, Esq., Bristol; Miall, Philip, Esq., Bradford; Michael, W. H., Esq., Q. C. London; Monks, E. H., Esq., Wigan; Montgomerie, J., Barclay, M.D., Penzance; Moore, Charles A., Esq., Bath; Moore, W. Withers, M.D., Brighton; Moorhead, John, M.D., Weymouth; More, James, M.D., Ruthwell; Morgan, Charles, Esq., Steyning; Morgan, G. B., Esq., Sunderland; Morgan, Herbert M., Esq., Lichfield; Morley, John, Esq., Barton-on-Humber; Morris, Malcolm A., Esq., London; Morris, Richard, M.D., Birmingham.

Napper, Albert, Esq., Cranleigh; Nash, James, M.D., Worcester; Needham, Fred., M.D., Barwood House, Gloucester; Nicholson, R. H. B., Esq., Hull; Nicholson, T. D., M.D., Clifton; Notter, J. Lane, M.D., Netley; Nunn, Philip W. G., Esq., Bourne-mouth.

O'Connor, Denis C., A.B., M.D., Cork; O'Farrell, George P., M.D., Tangier; Boyle, O'Keefe, J. M., Esq., Widnes; Oliphant, John, M.D., Leicester; Ollerhead, Thomas J., Esq., Minehead; Osler, William, M.D., Montreal; Oswald, J. W. J., Esq., London; Owen, Edmund, Esq., London.

Paine, Wm. H., M.D., Stroud; Pancoast, Wm. H., M.D., Philadelphia; Parker, Robert W., Esq., London; Parsons, Charles, M.D., Dover; Parsons, Francis H., M.D., Hastings; Parsons, H. Franklin, M.D., Goole; Parsons, Joshua, Esq., Frome; Parsons, J. Fred., Esq., Frome; Partridge, Thomas, Esq., Stroud; Paul, James, M.D., Barnes; Pearce, W. E. G., Esq., London; Phillipson, G. H., M.D., Newcastle-on-Tyne; Phillimore, W. P., M.D., Nottingham; Phison, Wm., M.D., Cheltenham; Platt, Thomas, Esq., Oldham; Powell, R. Douglas, M.D., London; Power, Henry, Esq., London; Pranker, John, Esq., Langport; Preston, Henry, Esq., Ancoats, Manchester; Prichard, A., Esq., Bristol; Pridham, Charles, Esq., Faington; Pritchard, Urban, M.D., London; Probert, Jas., Esq., Merthyr Tydvil; Procer, William, M.D., York.

Randolph, H. W., Esq., Milverton; Rendall, Wm., Esq., Maiden Newton; Rickards, E., M.B., Birmingham; Ritchie, James, Esq., Muirkirk; Rivington, Walter, Esq., London; Roberts, Robert, Esq., Port Madoc; Robertson, D. Argyll, M.D., Edinburgh; Roedel, W. J., Esq., London; Rogers, Joseph, M.D., London; Rogers, T. Lawes, M.D., Rainhill; Ross, G., M.A., M.D., Montreal; Routh, C. H. F., M.D., London; Roysds, W. A. S., Esq., Reading; Royle, Peter, M.D., Manchester; Rugg, G. P., M.D., London; Rutherford, Wm., M.D., Edinburgh; Rygate, John James, M.B., London.

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## REVIEWS AND NOTICES.

GOULSTONIAN LECTURES ON THE NATURAL HISTORY OF PULMONARY CONSUMPTION. By A. B. SHEPHERD, M.A., M.D., F.R.C.P. London: Smith, Elder and Co. 1877.

DR. SHEPHERD, in the lectures which he delivered before the College of Physicians, and which he has published in the present volume, gave a masterly history of the various stages through which the problems of pulmonary pathology have passed before arriving at that stage of development which forms the fighting ground for the leading pathologists of the present day. The author begins by quoting Morton's definition of phthisis; viz., that it is a consumption of the lung, due to any morbid change arising *primarily* in the organ, and giving rise to a series of symptoms which owe their origin *solely* to its cause; and, in the stress he afterwards lays upon the words placed by us in italics, we see foreshadowed the views held by the author on the pathology of phthisis. These are for the most part nearly allied to the doctrines which have of late years been upheld by the more advanced authorities on the subject, and of which Niemeyer was one of the earliest exponents; but Dr. Shepherd has introduced some modifications in the terms in which he has stated the position held by that school of pathology, and there are a few points of detail in which he differs from most of those who have hitherto written on that side. These, for the most part, admit that there are two great varieties of pulmonary consumption; viz., a variety due to a primary tuberculous disease, and a variety in which a simple non-specific inflammation is the essential lesion. Dr. Shepherd, while admitting that there is such a thing as tubercle of the lung, asserts that this only occurs in connection with "acute general military tuberculosis", which he looks upon as "a disease of absorption and infection" from pre-existing collections of cheesy matter in any part of the body. He is unwilling to include these cases within the category of "pulmonary consumption", confining this term to those varieties of lung-disease which have a purely inflammatory origin, and these he subdivides into—I. Cases in which there is inflammatory proliferation of the epithelium of the alveoli and bronchi, blocking them up and leading to further destruction of the respiratory