like opening of the ventricle is called the false cord or ventricular band by Dr. Mackenzie, and the regulator of the glottis by Sir D. Gibb.

You should make yourselves familiar with the appearances of the healthy larynx, with its form and the movements of its various parts, and with the colour of its healthy mucous membrane. We will not to-day enter on the appearances produced by disease; but they consist of the changes of colour and form produced by congestion and inflammatory action and its results, and other causes; of loss of substance; of new growths; and of interference with the normal movements.

And rest assured, gentlemen, that you will not regret some time and attention devoted to the subject of laryngeal disease. It is too apt to be considered a specialism; but you will find abundant opportunities of proving it eminently useful in your daily practice.

TRUE AND FALSE ANEURISM OF THE ABDOMINAL AORTA; RUPTURE OF THE FALSE ANEURISM AND EFFUSION INTO THE SUBPERITONEAL SPACE; DEATH ON THE TWELFTH DAY.

By JAMES NEAL, M.D.,

Honorary Surgeon to the Lying-in-Charity, Birmingham.

J. G., aged 36, married, an electro-plater, came under my care Oct. 15, 1869. He had been ailing three or four years with severe pains in the back and left hip, and was treated for sciatica. When I saw him, he was much reduced and suffering from violent paroxysmal pains in the left hip, just above the sciatic notch, and affecting branches of the anterior crural nerve. There was also (at times) partial numbness of the left thigh. The attacks were worse about 8 P.M. and 4 A.M. He had a good deal of lumbar pain, and thought that his kidneys were affected. He had also internal pains of a cramping or spasmodic character, was anæmic and dyspeptic, and suffered much from palpitation. His urine was scanty and high coloured, and voided with difficulty. His bowels were costive, and great pain and prostration had lately followed defæcation; pulse 120, feeble. A careful examination detected no disease of the chest. I treated him for neuralgia, but without success. On Sunday, October 24th, I was hurriedly summoned to him at noon. He was said to be much worse. He had had an unusually severe attack the evening before, but had afterwards taken a morphia draught and slept well for three or four hours. About 4 A.M. another very severe attack came on, which he described as beginning at the heart with palpitation, and extending all down the left side; he spoke of it as a "tearing" or "burning" pain. It was followed by great faintness and prostration. When I saw him he was pale and anxious in appearance, and was just recovering from the attack. The pulse was 140, weak and fluttering. On examining his abdomen, I found that it was swollen and tense, with a distinct projection across the epigastric and hypochondriac regions. This swelling was dull on percussion, and pulsated vigorously—a violent heaving impulse—which spread all over the abdomen. All down the left side the abdomen was dull, both front and back, and tender to the touch; the tenderness being most marked just above the crest of the ilium. The dullness terminated by a distinct border in front, perceptible to the touch. Pulsation could be felt behind as well as in front. The front and right side of the abdomen below the liver were resonant on percussion. There was no bruit or *frémissement*; no sickness. I diagnosed an aneurism which had suddenly burst, so that a large quantity of blood was effused into or behind the peritoneal cavity. Dr. Russell saw him with me in about half-an-hour, and confirmed the diagnosis. He thought that the prominence across the epigastrium was the liver thrust forwards by an accumulation of blood behind it—in the subperitoneal space. The treatment was as follows. Perfect rest and quietude were enjoined; bladders filled with ice were ordered to be constantly applied; and a mixture of dilute sulphuric acid and tincture of opium in acid infusion of roses was prescribed.

On being questioned next day, the patient stated that he remembered straining his back badly about two years and a half previously, in lifting a heavy weight, since which time he had suffered a good deal in his back. Up till quite recently he had been in the habit of lifting heavy packages of goods, but a good deal of prostration always followed such exertions.

For the first two or three days there was great prostration, with tympanitis, local tenderness, and numbness of the left leg. He was kept well under the influence of opium, and, in the course of a few days, these symptoms subsided, and he appeared much better.

At 2 A.M., Nov. 4th, my partner, Mr. Garner, was hurriedly fetched

to him. He found him in a state of great prostration, with feeble fluttering pulse, and evidently sinking beyond hope of recovery. He had had an attack of severe pain the evening before similar to the one before Sunday the 24th of October. Stimulants were administered, but he gradually became weaker, and died at 11 o'clock the same morning, the twelfth day after the rupture of the aneurism.

Post-mortem examination.—On opening the abdomen, recent coagula were found loose in its cavity, to the amount of eight ounces. A large fibrinous clot formed a prominent tumour occupying the epigastric and left hypochondriac regions, and extending down the left side of the abdomen as far as the iliac fossa, where it seemed to terminate in a rounded border. It was entirely behind the peritoneum. It measured from above downwards eleven inches, its breadth at its upper and wider part was over seven inches; it had thrust up the liver to the right, folding up its left lobe. The stomach lay in front. The convex surface of the liver was pushed up to a level with the upper border of the fourth rib on the right, and the spleen to a level with the fifth rib on the left side. The pancreas crossed the tumour obliquely at its upper and anterior part, and the descending colon coursed along its surface, being flattened by it against the front wall of the abdomen. A coil of small intestine (probably the duodenum, where it merges into the jejunum) seemed to run into the centre of the clot. Where the tumour was rounded off at the iliac fossa, an appendage was found to extend beneath the iliac fascia, and was probably arrested only by the anatomical attachments of that fascia. The coagulum was firm, and of the consistence and aspect of the spleen, and so closely attached posteriorly, that it was difficult to remove it. The thorax having been opened, the aorta was dissected from the spine from above downwards, and thus the tumour was removed *en masse*. The attachments became very firm opposite the sixth dorsal vertebra, and here an opening was discovered leading into a large aneurismal sac. After removing the sac and clot together, the bodies of the last four dorsal and first lumbar vertebrae were found to be much eroded, especially the tenth and eleventh dorsal vertebrae—the bodies having suffered more than the intervertebral cartilages. Only a thin layer of bone intervened between the tumour and the spinal canal. The mass when separated weighed 8½ lbs. On laying open the aorta there was found (near the origin of the cœliac axis) a smooth and rounded aperture on its right side, three inches in diameter when closed, but which readily admitted four fingers. This aperture led to a large sac of a *true* aneurism, of capacity to admit a man's fist, with smooth walls, and quite empty. On the left side of the aorta, by the opening discovered on dissecting it from the spine, the hand was readily admitted into the sac of a large *false* aneurism of the size of a foetal head. It contained a loose dry mass of fibrine. It was formed in front by the surrounding tissues, behind by the eroded bodies of the vertebrae, and was evidently the source of the extravasated blood. The transverse diameter of these two aneurisms was seven inches; the vertical, four inches and a half. There was no degeneration of the arterial coats in the neighbourhood of the sacs. All the organs of the body were healthy, except the heart, which showed well marked concentric hypertrophy of the left ventricle, which was contracted and empty.

On dissection of the mass, the left kidney, surrounded by its serous envelope, was found embedded in the lower part of the clot, near the front. It was surrounded by a layer of coagulum an inch or more in thickness. The appearance of small intestine running into the centre of the tumour proved to be fallacious; it was bent upon itself, and coursed backwards and upwards on the surface of the tumour, and closely adherent to it, to join the pylorus. It was with difficulty dissected off, and was nearly or quite empty. The pancreas was firmly adherent to the mass. The bulk of the mass consisted of the walls of the aneurismal sacs. Those of the false aneurism were several inches thick, and composed of concentric layers of fibrine, and covered in front with peritoneum. The extravasation had evidently taken place by a ragged opening directly in front. The structure of the upper part of the sac was much firmer than where it had given way.

REMARKS.—The case is interesting as a well marked instance of true and false aneurism of the abdominal aorta in the same subject. I have Dr. Stokes's authority for the statement that "true aneurism of the abdominal aorta is of rare occurrence". When fresh, the specimen was much more illustrative.* The length of time the patient survived the rupture (twelve days) is worthy of note. Of fourteen cases mentioned by Dr. Stokes, only one exceeded this time. The history of this case (No. 78 of the series) presents many points of similarity with the one I have recorded. The first effusion appears to have occurred more gradually, and the patient died on the twentieth day after admis-

* The case was brought before the members of the Pathological Section of the Birmingham Branch of the Association, at the meeting held Nov. 26th, 1869.

sion into the Meath Hospital. In eight of the cases, death was sudden. The others varied from half an hour to three or four days. The largest definite quantity of blood mentioned is three pounds.

RECOLLECTIONS OF THE MEDICAL SCHOOL OF VIENNA.

By J. F. PAYNE, M.B.Oxon; late Radcliffe Travelling Fellow.

III.

THE arrangements for the study of anatomy and physiology at Vienna ought not to go unnoticed. These departments are by no means so well lodged as pathological anatomy; they are taught in a large building which was formerly an artillery factory, which has no conveniences or advantages beside its size. It is fair to say that these arrangements are regarded as temporary, and only intended to continue till the long-promised University buildings are ready. In this building are given the lectures of Professor Hyrtl, an unsurpassed teacher of anatomy, whose lectures have only to be heard to refute once for all the notion that anatomical lectures are useless. Hyrtl is a marvellous injector, and sent some remarkable preparations to the London and Paris exhibitions. Professor Brücke, the physiologist, is a Prussian by birth, and has, perhaps, the largest class and the most inconvenient lecture-room in Vienna. So inadequate is the latter, that there are more tickets issued than there are places for the hearers. Professor Brücke pays, perhaps, more attention to histology than to physiology proper, but the amount of lecturing he gets through would astonish a London or Oxford professor. Five lectures a week through the whole of the winter and the summer sessions are the regular amount, and there are often extra courses. In the same building is the histological laboratory of Professor Wedl, author of *Pathological Histology*, a most laborious and accurate observer, who is very cordial towards our countrymen. Histology is, in fact, very strongly represented in Vienna. There are other laboratories beside those which we have mentioned, where practical instruction is given; and, as several of the teachers speak English perfectly, want of acquaintance with the German language need be no bar to profiting by their instructions. Experimental physiology is less studied in Vienna since the departure of Ludwig, formerly professor at the Josephinum or Military Medical School, now head of the magnificent Physiological Institute at Leipzig; but the projected new University buildings will probably provide a suitable locality for this as for other now neglected studies.

As we said before, one of the main attractions of Vienna will always be the arrangements for the study of special branches of medicine and surgery; we may therefore run over the names of some of the more popular teachers of these branches. That for which Vienna has, perhaps, won the greatest reputation of late years, is the treatment of skin-diseases, especially as practised by the ingenious and humorous Professor Hebra. Originally a pupil of Skoda (and also of Bohemian birth), he was encouraged by his teacher to devote himself to the study of skin-diseases. How well he has justified the wisdom of this advice, is a matter of European notoriety; how amusing his lectures are, one must go to Vienna to know. In his most valuable clinique, there are few who do not learn, but perhaps fewer who do not laugh. The peculiarities of manner, costume, and character, of the Vienna patients, give endless opportunities for the humour of the professor; but, although he is certainly unflinching in the application of painful remedies, it cannot be said that he is really deficient in consideration for the poor and suffering. Some of his stories ought to be classical. A stalwart patient, who appeared in the middle of summer, once gave a remarkable extension to the phrase "out of work." Being asked how he could be out of work at this season of the year, when it was almost harvest-time, he replied that his only occupation was "snow-shovelling", or clearing the streets after a fall of snow, so that he really had very seldom anything to do! Professor Hebra is very severe on the French dermatologists, and fond of a little more good-natured chaff at the expense of the English. His favourite *mot* about the Skin-Hospital in Blackfriars Road, is that, though the name "Hospital" is put up in very large letters, it is really "no hospital at all, but only a *colossales ambulatorium*."*

Hebra's lecture-room is a kind of little amphitheatre, the patients being marched round the central area for inspection. The lecture lasts some two hours, and is quite distinct from the regular visit, or prescribing for out-patients, so that the whole time can be given to

demonstration. As is well known, the Vienna professor gives great prominence to local treatment, neglecting, comparatively, constitutional remedies; and for this reason it is absolutely necessary to see his practice, in order to pass any judgment upon it. For in these matters it is most emphatically true, "whatever's best administered is best", and the details of management are really the gist of the whole matter. To attempt to apply "Hebra's treatment" without the skilled assistance, or the baths and other appliances, which are at present almost entirely wanting in London, is really not to apply it at all. We must not call two things by the same name. To present an ignorant patient with a mass of ointment or a bottle of lotion, is one thing; to apply these remedies systematically and carefully, is something entirely different, and it is absurd to expect the same results from the two.

There are other cliniques for skin-diseases in Vienna beside that of Hebra; and the lectures of Dr. Neumann, Privat-docent in the University, should be especially mentioned. Dr. Neumann, in his excellent *Manual of Skin-Diseases*, has for the first time given a clear account of the anatomical changes in these diseases, on the basis of modern pathological histology. For those who are drawn to other specialities, there is no lack of material for observation, or of teachers. In ophthalmic surgery, the names of Arlt and Jäger; in aural surgery, of Gruber and Politzer, are well known. In syphilis and venereal diseases, there are two very highly esteemed teachers—Professor Sigmund, who has charge of this department in the General Hospital, and Professor Zeissl, the author of a manual well known in Germany. Both, we may say, are decided supporters of the "dualist" theory. For the diseases of children, there is a charming little hospital, the St. Anne, where clinical lectures are given by Dr. Widerhofer. The Foundling Hospital presents, also, an immense field for the observation of infantile maladies, and there, also, clinical instruction is given. In obstetrics, the Hospital at Vienna has achieved an undeniable reputation; and the large number of births constantly taking place supply opportunities for study and practice which cannot be got in our own country without a very great expenditure of time and trouble. Well qualified students, also, have the advantage of being often able to perform important obstetric operations themselves, under proper guidance. It would be tedious to go through the list of special teachers, which would be a very long one; but we must not omit to mention one special and very interesting department of study for which remarkable facilities exist—namely, morbid conditions of the brain. A lunatic asylum exists in close proximity to the General Hospital, and the autopsies of patients dying there are conducted in the Pathological Institute by Dr. Meynert, well known for his brilliant researches on the structure of the brain. Dr. Meynert occasionally gives a course of lectures and demonstrations on the morbid conditions of the nervous centres, of which it is not enough to say that it is unrivalled, since it is probably unique in Europe.

In conclusion, we must say a word in answer to an obvious question which will probably occur to many readers: Why should we go so far in search of instruction in these subjects, when so many specialists and special hospitals exist at home? Is not London a sufficiently large field? The answer to this objection is certainly not that there are more patients or more remarkable cases in Vienna, since a population of three millions must supply more medical curiosities than one of half a million; nor yet that our physicians and surgeons are inferior in skill, for many in London are acknowledged to stand in the first rank in their respective lines of practice; but the simple fact is, that in Vienna these subjects are *taught*; in London they are, comparatively, not taught. There is all the difference between assisted and unassisted study. A visitor to the special hospitals, or special departments of hospitals in London, may learn much by using his eyes, and occasionally pick up a hint or two from the medical officer; but the latter seldom has the time or opportunities for, and therefore never acquires the habit of, serious teaching. It is not primarily his own fault. In the first place, he has far too many patients, and the managers or governors are anxious rather to swell the total number of patients receiving relief, and thus make out a strong case to the public, than to show their staff much consideration in this particular. In the next place, he has generally other irons in the fire, and is due at some other hospital three or four miles off, the moment he can get away; and, finally, the custom of teaching never having been formed, there is no class of students desirous to learn. This last difficulty certainly strikes us as the most formidable, and were there any demand, probably the others might soon be overcome by assigning a special hour to instruction, as is done in Vienna; but why there is no demand, and whether this depends on the absence of a supply of instruction, we cannot now inquire. One thing only must, in fairness, be mentioned: that the special courses of instruction in Germany (and notably those very valuable courses given by assistants and demonstrators) are supported in great measure by foreigners, especially by Americans and Russians, though also by gradu-

* The Germans quaintly call out-patients "ambulants", as being able to walk; and an institution or department for out-patients, an ambulatorium. The name hospital resupposes in-patients.