Q. What is your trade?—A. A dyer, in the strees—ah! ah! (making gestures of perplexity)—in the skins. Q. How are they dyed?—A. In the kins—in the kins. Q. What do you dye?—A. Ah! ah! (gestures of perplexity)—rabbits, and all manner of— Q. All manner of what?—A. (Gestures of perplexity) Amarris—rab—bits—and the others. Q. What others besides rabbits?—A. Rabbit, rab—bit skins—me, merikins. Q. What skins do you get from America?—A. There's, ah, ah (gestures of perplexity)—rabbits, and, and, squirrel tails as well. Q. What do you do with them?—A. The little things the women have (stroking his breast)—the maws. Q. How long does it take?—A. Sometimes a day; sumsums two or three. Q. How much do you get at it?—A. Se, seventeen shillings. Q. A day, or a week?—A. A we—week. Q. Where do you live?—A. Collingwood Street. Q. Where is that?—A. Just over there (making gestures of perplexity, and pointing), in Whitechapel (pointing), over there, you know—North Street. Q. What parish is it in?—A. Oh, oh (gestures of perplexity), I can't, cause of my— Q. What parish?—A. Mesmes Green.* Q. What is your brother's trade?—A. Sum-boilers (gestures of perplexity). Q. Sugar-boilers?—A. Yes. Q. What had you for breakfast this morning?—A. (Gestures of perplexity) Eh, eh—bread and butter, and—ah, ah, I can't say it—egg, egg. Q. What for dinner?—A. Meat, and meg—I can't say some of 'em—potatoes—beer. Q. What meat?—A. Beef (shaking his head)—I can't think of it. Q. What meat comes from sheep?—A. Ah, ah—you see it sticks always (pointing to his mouth); button—no, no, I can't—mutton—no, no, I can't say it. Q. What comes from pigs?—A. Bakacon (shaking his head)—bacon. Q. What from a young sheep?—A. Ma—mare (gestures of perplexity)—mag. Q. Is it lamb?—A. Yes, of course, if I could say it. Q. Say lamb.—A. I know how, if I could—only it's so thick.

The patient returned to his work; and all I know further of his case was, that he was brought to the hospital dead, May 10th, 1870, having had a fit.

Necropsy.—There were vegetations on the aortic, and on the chordæ tendineæ of the mitral, valves; the aortic valves were incompetent; and the left ventricle was very greatly hypertrophied. In the brain, there was softening on the left side in the district of the middle cerebral artery. The softening affected the outer part of the island of Reil, the lower part of the third (lowest) left frontal convolution, and about the lower third of the ascending frontal and ascending parietal convolutions. The third left frontal convolution, however, was only slightly touched on the under surface where it borders on the ascending parietal. The softening extended inwards to the extraventricular part of the corpus striatum and to the optic thalamus; the mass of these bodies was uninjured. The parts described as softened were diffuent, and of a mortar-like colour. No plugs were discovered in any of the arterial branches of the left middle carotid artery. There was an old embolic patch in one kidney, and a recent red one in the other.

THE GAINS DERIVED FROM THE USE OF THE LARYNGOSCOPE.

By ARTHUR TREHERN NORTON, F.R.C.S.,
Surgeon in Charge of the Throat Department, St. Mary's Hospital.

DR. GEORGE JOHNSON, in an able article in the BRITISH MEDICAL JOURNAL of May 23rd, on the Gains Derived from the Use of the Laryngoscope, refers to certain forms of paralysis of the laryngeal muscles, and remarks that, as they are difficult to explain, they must be left to the physiologist.

The physiologist, however, often relies upon accidents of nature and disease for the advancement of his science; and in the present instance, I think, our knowledge of anatomy, aided by manifest effects of disease, may prove the physiological argument. Dr. Johnson says that, when one pneumogastric or recurrent laryngeal nerve is compressed by an aneurism or other tumour, paralysis of the laryngeal muscles of that side only might be expected, but he instances cases in which compression of one pneumogastric or recurrent laryngeal caused paralysis of both cords. I think, however, we must conclude that compression of any particular nerve in its course may convulse or paralyse the muscles which it supplies, but certainly not those which it does not supply; and we must, therefore, presume that some other reason exists for any apparent paralysis of both sides when one nerve only is compressed. Anatomy teaches me, and my practice supports the view, that if a recurrent laryngeal nerve be compressed sufficiently to produce paralysis, there remain the crico-thyroid muscle, and in part the arytenoid, not affected. The crico-thyroid, no longer counteracted, holds the vocal cord of that side in a state of tension.

* Collingwood Street runs off North Street, Bethnal Green.

By the laryngoscope, it is seen that the cord is tense, and does not move either during respiration or phonation; phonation is necessarily hoarse, because the two cords are not adapted for the same pitch of the voice; respiration is but little affected, because the unaffected muscles can open the glottis sufficiently wide for the required amount of air to enter, unless excited by exertion when the space is insufficient, and inspiration is accompanied by stridor.

If both recurrent laryngeal nerves were affected, it appears to me that respiration could not be carried on, for there would be no power to open the glottis; whilst, on the contrary, the tensors of both cords, not being paralysed, would hold the glottis more firmly closed; therefore, slight compression of both nerves would be accompanied by stridulous breathing and dyspnoea, and, as the paralysis became complete, breathing would cease.

The following case illustrates paralysis of all the intrinsic muscles of the larynx, for, as will be seen, there was no fixed point for the muscles to act upon.

A patient came under my charge, at St. Mary's Hospital, suffering from subacute laryngitis. There was tumefaction of the whole mucous membrane, and about and behind the cartilages of Santorini the tissue was cedematous. Both lungs were tuberculous, and I looked upon the case as one of tubercular laryngitis. She was taken into the hospital on account of dyspnoea.

During the following week, the dyspnoea increased, and the respiration became stridulous; and I, therefore, performed tracheotomy.

In about three weeks, the laryngitis had subsided, and the lining membrane had become normal, yet no inspiration could be taken, any attempt to inspire approximating the cords. The tracheotomy-tube was obliged to be retained.

After six weeks, the patient died, with large vomice in both lungs.

At the *post mortem* examination, it was found that the cricoid cartilage had necrosed; the soft tissue between it and the œsophagus had given way, and the main portion of the cricoid had been probably swallowed; only a small portion of the anterior ring of the cartilage remained; all the rest had disappeared, yet the mucous membrane of the larynx was sound, and no communication existed between it and the œsophagus.

The reason was now evident why an inspiration could not be taken: there was no attachment for the arytenoid cartilage, and there was no power to open the glottis; therefore, air rushing towards the glottis filled the ventricles of the larynx and pressed the cords together in much the same way as a reflux of the blood in the aorta closes the sigmoid valves, but air was not prevented from passing from the lungs to the mouth, and so the patient could whisper.

This case precisely corresponds to one of paralysis of both sides, and it shows that with paralysis of both sides no respiration can take place, precisely what anatomy would teach. I would say, therefore, that paralysis of both cords does not take place from pressure upon one pneumogastric or one recurrent laryngeal, and that, if from any cause paralysis of both cords take place, death at once ensue unless tracheotomy be performed.

It may be borne in mind that, if one recurrent laryngeal be paralysed and the cord of that side rendered tense by the crico-thyroid muscle, the cord of the opposite side is also necessarily rendered somewhat tense, and may appear, to an extent, paralysed, inasmuch as its movement is less than normal; but the paralysis is only apparent and not real.

A CASE OF FIVE DISTINCT HERNIÆ IN ONE INDIVIDUAL.

By GEORGE J. MURIEL, M.R.C.S.,
Honorary Surgeon to the Whitehaven and West Cumberland Infirmary.

THE subject of this history was C. P., a girl 21 years of age, very tall, being over six feet, her trunk especially being unusually long. The pelvis was well formed, but above the general run in all its measurements. The breasts were almost entirely undeveloped. Her occupation had been that of a milliner. Her expression was florid, but she always had a worn look; her natural temperament was lively and spirited; she was certainly not of a hysterical nature, but was healthy in general external appearance.

About three years ago, I was first called in to attend her, and found her the subject of a large femoral hernia on each side, and also a much larger one coming through the great sacro-sciatic foramen on the right side. Her mother told me that she first felt this sacro-sciatic hernia when about 12 years of age, and it was then about the size of a pigeon's egg. The mother's attention was then called to it by the girl's complaining that, when she went to the water-closet, "something came down which hurt her". The sight of it frightened the mother, and she

at once took her to two or three medical men, who all recommended her to let it alone for the present, until the change of life came on, by which time, perhaps, she might outgrow it, as she then seemed to be growing rapidly. This, however, went on, gradually growing larger as time went on, and the mother at length took her to Liverpool and consulted Mr. Bickersteth, who told her it would be necessary for her to wear a truss. By this time, the *left* femoral hernia had shown itself. The instrument was procured and worn, and this state of affairs went on until a little time before I first saw her, when the *right* femoral hernia showed itself; so that at that time she had three herniæ. Both the femoral herniæ came on without any immediate cause. She used to go to Liverpool occasionally to see Mr. Bickersteth, and to have her truss readjusted according to existing circumstances; for all these outlets used to increase from time to time, and the truss consequently required altering occasionally.

Her only symptoms were great pain in the epigastrium, constant vomiting of a dark green matter (and at times the food she took); generally attended with diarrhœa. These attacks had been becoming more frequent for the last two years before I saw her, coming on about every three or four months, and the pain each time increasing in severity. At the same time, she often had attacks of a milder sort, which she and her friends used to treat without sending for medical assistance. The attacks came on almost invariably when she was "unwell", and her monthly periods were at all times very irregular, any slight exertion, over-fatigue, or sudden fright sometimes stopping and sometimes increasing them. Her pulse, during these attacks, used always to be rapid (100 to 110), but very feeble; her skin hot and dry; her tongue parched and very red, particularly at the tip and edges.

Her symptoms during her last illness were in some respects similar to all her other attacks, but they seemed to be attended with much greater prostration, almost approaching syncope; the face and brow were flushed, but cold, and her extremities clammy, cold, and blue. When I first saw her on this last occasion, she was menstruating profusely, and continued in this state until the day before her death. After taking food (at the most, within five minutes), she invariably vomited a large quantity of clear bright green matter exactly the colour of verdigris; she had also violent diarrhœa, clearly of the food she had swallowed undigested. I was anxious that she should have further advice; but, in consequence of her peculiar abnormality, she had a very strong objection to seeing another medical man; and her friends, expressing themselves perfectly satisfied, would not consent, although I strongly urged such a step as being advisable. I used ice, and, in fact, every drug and other means I could think of, to stay these distressing symptoms, but they were of no avail. Strong astringent enemata were returned as they went in the course of a minute or two. After five days of the most intense suffering, she sank, being perfectly sensible to the very last, and for the last hour perfectly free from pain.

Twenty-four hours after death, with the full consent of her mother and friends, with whom she lived, I, in conjunction with Drs. l'Anson and England, made a *post mortem* examination; but I am sorry to say we were obliged to hurry over it, and were consequently prevented from making that minute investigation we should have wished.

The abdominal cavity was first opened. The intestines seemed on first sight to lie in a normal position. There was slight peritonitis, but of no great severity. After a more close examination, we found the duodenum and stomach passed through an enlarged œsophageal opening of the diaphragm into the thoracic cavity; so that there was, in addition to the three visible during life, a still larger diaphragmatic hernia, accounting for many of the symptoms spoken of above. This, we were of opinion, from its size and general appearance, must have been of long standing. The two femoral herniæ were of such a size, that three fingers could easily be inserted into the sac of that on the left side, while that on the right was not quite so large. The sciatic hernia was very large, and would admit the whole hand. A fifth hernia, which I did not discover until the necropsy, was situated behind the horizontal ramus of the os pubis, about its middle. There was a small piece of gut constricted by a strong band of fibres, but it had no appearance of having been strangulated. I could with ease pass the distal phalanx of my middle finger into the sac.

The liver was larger than usual, slightly congested. The spleen and kidneys were also slightly congested, but otherwise healthy. The uterus was small, but healthy in appearance. The right ovary contained from one to two ounces of serum; the left was healthy. The stomach was occupied, the left side of the thorax pushing the left lung backwards and upwards. With the exception of a small piece of the upper lobe, which was œdematous, the whole lung was collapsed. The right lung was œdematous throughout, but occupied its proper place. The heart was healthy and in position.

I must again express my regret that circumstances did not allow us to

go more minutely into the case. It was one of so much interest and of such rare occurrence, that, although I am only able to state simple facts as seen by myself and colleagues, I feel sure that, even for its singularity, it will have some interesting feature to many of the profession.

CLINICAL MEMORANDA.

DYSPHAGIA CAUSED BY IMPERFECT MASTICATION.

IN reference to the very instructive case of Dr. Edis (in the JOURNAL for June 13th), in which dyspepsia was caused by imperfect mastication, I would draw attention to the fact, that the same condition very frequently leads to functional dysphagia—that is, to difficult deglutition on account of enervation of the constrictors of the pharynx and œsophagus. It is quite common to see cases where every form of nerve-tonic and of electricity has been tried, where bougies have been passed in the belief that there was a stricture, and where even malignant disease has been not only suspected, but asserted to exist, make a steady recovery after the dentist's aid has been efficiently given. I may, indeed, go so far as to say that I have never seen a case of such dysphagia in which, whatever the assigned cause, the teeth were not more or less at fault; for even if diseased teeth have been removed, and artificial ones substituted, it is not uncommon to find that the "bite" is defective—that is, that the upper molars do not properly articulate with the lower. It is important to remember, as Dr. Edis has indicated, that in all such cases the general system becomes considerably deranged if the local source of irritation have long existed, and that, while removing the actual cause, it is necessary to treat the effect by suitable medicinal and dietetic measures.

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IMMINENT DEATH FROM CHLOROFORM.

IN two late numbers of the JOURNAL are some remarks under the above heading. I can fully endorse what Dr. Carmichael says as to the necessity (sometimes, I fear, partly lost sight of) of watching the pulse and respiration without intermission while chloroform is being given. Even after the handkerchief is taken away, anæsthesia deepens for a short time (about a minute), as I have observed. Keeping this in view, the immense importance of noting the very first signs of failure of the heart's action is self-evident. I well remember, on one occasion out of several, when I took chloroform, how very differently I felt towards one medical man whose hand never left my pulse, and another who, I knew, would only put his hand on it now and again.

W. MUNRO, M.D., Cupar Fife, N.B.

SURGICAL MEMORANDA.

ON SIR WILLIAM FERGUSSON'S NEW OPERATION FOR CLEFT PALATE.

MY attention has recently been called to Sir William Fergusson's interesting Observations on Hare-Lip and Cleft Palate, which appeared in the BRITISH MEDICAL JOURNAL. He there proposes, as a remedy for the frequent failures which occur after operations, to close the hard palate, to "divide the palate, soft tissues, and bone, about a quarter of an inch from the margin of the gap on each side, cutting the soft tissue in the roof of the mouth with a scalpel, and the bone with a chisel". The margins of the cleft, previously made raw, can thus be readily pushed towards the mesial line and united by sutures.

This operation Sir William applied, in the first instance, to apertures in the bony palate, and subsequently to cases of complete cleft. The objections to the operation are, he thinks, more of a theoretical than a practical kind, and the results, in Sir William's skilful hands, were most satisfactory. He concludes the paper by expressing his conviction that he "has touched new ground in a most complicated field of anatomy and surgery, and added to, if not completed, the power of surgery in such cases of malformation".

I am induced to write these few lines in the hope that it may not be uninteresting to know, in connection with Sir William Fergusson's observations, that Dieffenbach recommended and practised a very similar method of operation in certain cases. Writing of operations for closing fissures extending through both the hard and soft palate, in his *Operative Chirurgie* (Leipzig, 1845, pp. 445-46, vol. i), he says: "In very wide fissures of the hard palate, where the soft is only rudimentary, union may be accomplished by a preliminary lessening or closure of the gap in the palate-bones. Each palate-bone should first be pierced near its margin