were then brought together in the usual way; a long straight splint, reaching from the foot nearly to the axilla, was applied to the outside of the limb, having a deficiency opposite to the wound, where its place was supplied by an iron bar. There was still some inclination of the limb inwards. Water dressing was applied to the wound.

July 10th. He has been doing well; the limb is brought into a better position.

July 14th. The wound is looking healthy. The child's health is very good.

July 23rd. He has been progressing most favourably since last report.

REMARKS. The disease in this instance had proceeded so far as to render ultimate recovery doubtful, unless the child could have had the benefit of a residence at the sea-side, and great attention paid to his general health—advantages which it was hardly expected he would have been able to obtain; and, even if he could, the limb must have been, from its position, almost useless. Neither the symptoms nor the operation present any peculiar points of interest; but the subsequent restoration of the limb to its natural shape and position form an important subject. It was thought that the long straight splint, as above described, offered the best chance of securing this desirable object, as by its means gradual extension could be more effectually maintained, and any deviation of the limb from its proper position more easily rectified; while, at the same time, the interruption of the splint at the part corresponding to the wound greatly facilitated the daily renewal of the dressings, and removed all pressure. Much care was required for the first few days; and it was only by very gradually extending the limb, and the application of bandages, that complete success was attained. The patient is now free from pain; the shortening scarcely amounts to half an inch; and the limb is in an excellent position.

UNIVERSITY COLLEGE HOSPITAL.

STRUMOUS DISEASE OF THE ELBOW: EXCISION.

Under the care of J. E. ERICHSEN, Esq.

[From Notes by W. F. TEEVAN, Esq., House-Surgeon.]

THOS. M., aged 7½ years, was admitted into the Hospital July 8th. He had always lived in a salubrious locality, and never suffered from privation of food. He had three brothers and two sisters; these, together with the parents, are all alive and well. Although he appears in very good health, and is cheerful, yet there is a certain amount of struma about him. With a large head and plump cheeks, he has a small developed chest and limbs. He states positively that he is as stout now as he ever was. When at school four months ago, it was noticed that his left elbow began to swell gradually, and to become rigid. All this was unattended with pain or any derangement of health. About six weeks later, an abscess formed on the outer side of the joint; this was opened, and through the sinus diseased bone was discovered a few weeks afterwards. He was then sent down to the sea-side; and as, after his return, the arm was worse, and the disease increasing, it was determined to excise the joint. At the time of his admission, the left elbow was about twice the size of the right. Several sinuses led down to diseased bone. The apertures of the former were encircled with pale fungoid-looking granulations.

At 2 P.M., July 8th, he was placed under the influence of chloroform; and a T-shaped incision having been made, the joint was excised in the usual manner. There was nothing special to remark about the operation, except that the articular surfaces were found extensively diseased. Water dressings and a straight splint were then applied.

On July 10th, the lowly organised plastic matter around the joint assumed a sloughy aspect, and poultices were used for the four following days, at the end of which time it had entirely dissolved away, and healthy granulations were springing up. The arm was now put on an angular leather splint, and water dressing or red wash applied; and the boy was allowed to get up.

At the present time (August 2nd), the wound is all but healed. His health and appetite have continued good throughout; and, in the course of a day or two, the splint will be discontinued.

Original Communications.

SEQUEL OF A CASE OF PUNCTURE THROUGH THE ABDOMINAL PARIETES IN IMPASSABLE OBSTRUCTION OF THE BOWELS.

By Sir HENRY COOPER, M.D. Lond., Physician to the Hull Infirmary.

[Read before the British Medical Association, July 30th, 1857.]

IN February last I communicated to the *BRITISH MEDICAL JOURNAL* a case (with comments) of obstructed bowels, treated by puncture through the abdominal parietes. The subject of this history has since died from causes independent of the intestinal obstruction. I purpose now to relate the sequel to the Association, premising a very short review of the case, in order to connect the result with the previous history.

CASE. M. A. K., an unmarried female, aged 34, robust, healthy, and without apparent predisposition to disease, had experienced for many weeks difficulty in evacuating the bowels. This difficulty increased, with occasional attacks of colic, till December 1855, when I was requested to see her in consultation with Mr. J. H. Gibson. She had then been entirely without relief for ten days, and had had very imperfect evacuations for a much longer period. She was suffering from the ordinary symptoms of obstruction in an aggravated form, including meteorism, vomiting of suspicious matter, hiccup, and prostration. The usual means had been judiciously employed by Mr. Gibson during this period, and, in a modified form, were persevered in for two days longer, without relief, when, the patient being apparently moribund, and relief by ordinary means hopeless, an opening into the bowel was proposed and assented to. After much deliberation, we were induced, partly by the uncertainty as to the seat of the stricture, but principally by the patient's exhausted condition, to select the most prominent point of distension (which must necessarily be above the stricture), and puncture it with a large sized trocar. Immediate and complete relief was the result of this simple proceeding; the patient rallied and did well, recovering so far her health and strength as to have been able, at the time the case was communicated, to walk several miles, and to attend to her usual household duties. For the details of the management of the case, I must refer to the *BRITISH MEDICAL JOURNAL* of February 21st, 1857, where the precautions deemed necessary to secure success, and the advantages held out by this operation over the opening of the bowel in the loin, and especially over gastrotomy, are fully discussed.

In March of the present year (fifteen months after the operation), Miss K. began to fail in flesh and strength; her appetite left her; and she had feverish attacks, with much abdominal tenderness. In May, while making an extraordinary effort in moving some heavy article of furniture, she felt "something give way" in her body; and from that time her symptoms steadily and rapidly advanced. A tumour for the first time became perceptible above the pubes, occupying the position and having something of the feel of a gravid uterus; the tenderness increased, with some distension. Once only in the course of this last illness was any interference necessary with the artificial opening into the gut. It was examined with the finger, which it readily admitted; and some scybulous accumulations were washed out of the distended bowel into which it directly opened. After this no further difficulty was experienced. The tumour increased quickly, with severe constitutional symptoms; aphthae, and the usual symptoms of failing vital power, showed themselves, and she died on June 10th.

Twenty-four hours after death, a *post mortem* examination was made. The body retained considerable embonpoint; the abdomen was much distended, and partially tympanitic; there were several pints of effused fluid, with floating flakes of lymph, in the peritoneal cavity; but no other marks of recent serous inflammation. A large mass occupied the lower part of the abdominal cavity, reaching nearly to the umbilicus; its size equalled that of the adult human brain, and its appearance so similar that it might almost at first view have been mistaken for that organ. On section, it presented all the characters of cephaloid cancer; in the interior, and toward the lower portion, were several cells of the size of walnuts, filled with gelatinous fluid. There was much difficulty in tracing the connexions and origin of this mass, so much were the character

and relations of the organs disturbed by its size and structure; but eventually no doubt remained in our minds that the seat of the disease was the right ovary. The colon, especially the ascending portion, was much enlarged; it could be traced down, still much distended, to the commencement of the sigmoid flexure, where all traces of its structure were lost, and its calibre entirely obliterated by a growth of similar character to that of the ovary, but much denser and smaller. In front, the mass thus formed was crossed by a firm rounded band, which tied it tightly down to the neighbouring vessels. The uterus and left ovary were easily distinguishable, and quite healthy. The trocar was found to have punctured the caecum in the widest and most prominent part; the gut itself was quite healthy, the opening patent, and the connexion between the mucous membrane and the skin precisely like that which occurs in other similar positions. There were no marks of inflammation or injury, except the firm old adhesions which had glued the surface of the gut to the abdominal parietes: in fact, nothing could look more natural and free from disease than the new opening and surrounding parts.

REMARKS. It would seem that the first link in the chain of diseased actions was the disease of the ovary, which, by its growth, either directly or through the medium of the ligamentous band, pressed upon and partially obstructed the calibre of the gut. The increase of the ovary caused progressive interference with the intestine, and, eventually, total occlusion; which could not, however, have been so close at the time of operation as it was afterwards found to be, as it then allowed freely the passage of the long tube, and of very bulky injections. But there can now be no doubt that the sigmoid flexure was the seat of the obstruction, and that Amussat's or Calisen's operation would have been admissible so far as regards the mere relief of the distended bowel. Probably the bowels had lost their expulsive power from over distension; and hence no fecal matter or gas passed, though the stricture was sufficiently imperfect to admit the tube. The further progress of the case is due to the development of the cancerous masses, and to their mechanical effects on the neighbouring parts, but chiefly to the general effect of the disease in lowering and extinguishing the powers of life.

The practical object of making this statement is to point out that the operation performed was *in itself* perfectly successful; it at once and perfectly evacuated the canal, and restored the patient from imminent death; it produced no local ill effect; it answered its purpose for eighteen months, and might, as far as appears, have continued to do so to any period to which life might have been prolonged. The development of malignant disease, however, prematurely closed the scene.

ENLARGEMENT OF THE TONSIL AND UVULA, IN RELATION TO DEAFNESS.

By W. C. WILLIAMSON, F.R.S., Surgeon to the Manchester Institution for Diseases of the Ear; Consulting Surgeon to the Chorlton-upon-Médlock Dispensary; and Professor of Anatomy and Physiology in Owen's College, Manchester.

[Read before the Lancashire and Cheshire Branch, June 24th, 1857.]

THERE are some forms of disease which have hitherto defied all known remedial agents; hence, on the alleged discovery of specifics capable of arresting their progress, the profession is usually prepared to give each new remedy a fair trial. But such trials are too often indiscriminately made. The fact being known that benefit has been derived in a given disease from some new plan of treatment, the latter is often resorted to with little reference to the peculiarities of the case; failures are frequent, and the new appliance falls into unmerited disuse.

Such epidemic recourse to new curative agents is not unknown in aural surgery. Oil of almonds, glycerine, syringing, and tonsil-cutting have had their turn, and with equally slight reference to the pathological causes of deafness in the cases to which they were applied. The real value and operation of the last of these methods of treatment is the subject into which I propose to inquire this morning.

When the excision of enlarged tonsils, for the cure of deafness, was first suggested, the treatment did not appear unpromising to men superficially acquainted with the anatomy of the throat. Under a vague impression that the orifice of the Eustachian tube was located somewhere behind the tonsil, it appeared not improbable that the former might be so compressed by the latter, when abnormally enlarged, as to impede

the free entrance of air into the tympanic cavity. But a more accurate knowledge of the anatomy of the throat renders the impossibility of such interference obvious, as both Mr. Harvey and Mr. Wilde have so properly pointed out. At the same time we must guard against the opposite error of considering that enlarged tonsils in no way interfere with the hearing, or that their partial excision is a useless operation. How and to what extent do they exercise such an influence? A correct answer to this query will guide us to sound and beneficial practice.

Every surgeon familiar with cases of deafness is aware how many of them originate in catarrhal attacks. Ordinary catarrhal inflammation of the mucous membrane of the throat, spreading in various directions, frequently extends along the Eustachian tube, and enters the cavity of the tympanum. Having reached this confined cavity, it soon effects injurious changes in the contiguous soft tissues, which not unfrequently extend to the surrounding osseous structures, especially in strumous subjects, or after attacks of scarlatina. In the class of cases to which I have now referred, irritation of the mucous membrane of the throat and nares is the primary cause of the aural disease; but whatever tends to perpetuate such irritation, indirectly increases the mischief in the ear.

Enlarged tonsils and uvulae are equally sources of pharyngeal irritation; hence they often require to be reduced to normal dimensions before much improvement can be effected in the impaired auditory function. If this cannot be effected by improving the general health combined with the topical application of astringent remedies to the throat, recourse must be had to excision. I need not remind a medical audience how much enlarged tonsils predispose to ulceration of the throat. The frequent recurrence of such attacks is sometimes regarded as indicative of a defective constitution; whereas neglected hypertrophy of the glands in question is often the local and sole cause of the mischief. But repeated accessions either of ulceration or enlargement of the tonsils, rarely occur without occasioning more or less of deafness: hence the necessity for a prompt removal of what may so soon prove the exciting cause of serious aural disease. The following case illustrates the opinions just uttered.

CASE I. E. B., a girl 15 years of age, consulted me early in June 1856. She had frequently suffered from catarrhs, accompanied by ulcerated tonsils; and when I first saw her the tonsils were large, the velum and uvula were much relaxed, and the voice presented the thick, non-resonant character so often noticed in these cases. The Eustachian tubes were closed, and the distance at which the tick of my watch could be heard was one inch on the right side and three on the left: the former being the side on which the tonsil was most enlarged. The use of astringent gargles and of the Eustachian catheter so far ameliorated the girl's deafness, that, by the beginning of August, the hearing distance on the right side was from twelve to fourteen, and on the left fully fifteen, inches, but beyond this we failed to make any progress. On August 12th, I removed the right or largest tonsil; and by the 9th of the following September so comparatively rapid had been her improvement, I found the hearing distance on both sides increased to twenty-four inches; and on October 2, she was discharged cured. But, having only removed one of the hypertrophied glands, I was not surprised to see her return early in March of the present year, with a recurrence of the deafness. I endeavoured for some time to remove it by means of astringent gargles and the Eustachian catheter; but we made little progress until March 27th, when I removed the other tonsil, and beneficial results ensued so quickly that in ten days afterwards she was discharged cured, and has continued well up to the present time.

The following case illustrates my statement, that precisely similar conditions result from an enlarged uvula, and its removal.

CASE II. M. B., a Spanish merchant, first consulted me early in April last. He had been deaf, in varying degrees, during eight years, the affection becoming worse each winter, as well as during any accession of catarrh. When I first saw him, he could only hear my watch when in direct contact with his right ear, and at the distance of one inch from the left. I tried the effect of astringent gargles and the Eustachian catheter for some days, without producing much improvement; the hearing distance being only prolonged on the right side to two inches, and on the left to four. On April 15th I removed the excess of uvula; and on the 22nd of the same month the hearing distance on the right side was prolonged to two feet, and within a month from that time he was perfectly cured.