

day work and more expeditious. I need hardly point out that it is much cheaper. Permanganate has of course long been known as a powerful fixing reagent, but I have been unable to find any evidence of its use in the preparation of fresh sections. As I have given it an extensive trial I wish to bring it to the notice of histologists, and more especially of demonstrators and others who have to prepare large numbers of sections for classes. By this method two operators (one to cut the sections and the other to carry them through the fixing process) could easily prepare sufficient sections for a class, without an inordinate expenditure of time. The sections are quite permanent. The steps in the process are briefly these: The sections are cut with a Cathcart or some similar microtome, and each as it is cut is plunged (on the knife) into a 0.1 per cent. solution of permanganate. The section must not remain more than ten seconds in the solution (four to five seconds is plenty for normal brain), but be taken out on a glass lifter¹ and transferred to a basin of clean cold water. The sections will be found slightly tinged yellow. This comes out in the process of washing and staining. The sections, which have been accumulating in the basin of water, are now put into a 0.25 per cent. solution of blue black (or a 0.1 per cent. solution of china blue), where they remain from ten to fifteen minutes. A large quantity of stain should be used and care taken that the sections are freely exposed to the dye. When stained they must be well washed in water, picked up on slides and allowed to dry. The best results are obtained by allowing them to dry slowly over night, but with care they may be dried in about an hour in a warm chamber. There are three points of importance—viz., to see that the water and permanganate solution are cold, to wipe the under surface of the knife-blade after cutting each section and not to freeze the tissue hard—it should cut like a potato. I use a deep quarter-plate developing dish for my permanganate solution. In it the knife can be readily submerged without wetting the handle and without having an inconvenient depth of fluid.

While on the subject of fresh section cutting, I should like to help in the removal of what seems to be a very widespread superstition with regard to the keeping of solutions of osmic acid. Osmic acid solutions are generally to be found swaddled up in brown or orange paper, or in "non-actinic" bottles, and kept huddled away in the darkest corner of a cupboard, under the impression that this will prevent decomposition. These precautions are quite unnecessary, and, unless the points to be mentioned are observed, quite useless. I have kept solutions of osmic acid over a year without any protection from light. Though they have been in daily use they are as good as when first bought (except for a diminution in strength, due to volatilisation). To keep osmic acid the bottle in the first instance must be clean. This is ensured by rinsing it out with strong nitric acid and then with distilled water. The only other precaution necessary is to wipe the neck and stopper of the bottle before using the acid, so that no dust may fall into the solution. The advantages which permanganate offers over osmic acid are these: (1) Its cheapness. (2) The solution is of a known strength, which can hardly ever be the case with osmic acid. (3) It is quicker, and by using it the section has not to be floated off the knife before being put in the fixing solution.

Rainhill.

¹ The lifter is a glass rod drawn out to a point and bent at an angle.

FRIENDLY SOCIETIES' MEDICAL INSTITUTE, NORTH-AMPTON.—The annual report of this institute just issued records a membership of 14,369. The income of the Society is somewhat less favourable than last year, as compared with the expenditure; but this is accounted for by the outlay necessary for the supply of new fittings. The death of the late assistant medical officer, Mr. J. N. Whitfield, was referred to in terms of regret for the loss of his valued services.

HOW INFECTIOUS DISEASE IS SPREAD.—A grocer's assistant was summoned last week at the Rotherham police court for being in a shop while suffering from an infectious disease. He went to his shop when recovering from an attack of scarlet fever, whither the doctor followed him and found him weighing up articles for sale, the defendant at the time being in a highly infectious state. The magistrates, in view of the expense to which the defendant had been put, imposed a fine of only 20s. and costs.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL AND THERAPEUTICAL.

SPASMODIC ACTION OF THE LOWER JAW OF SIX YEARS' DURATION CURED BY OPERATION.

BY NOBLE SMITH, F.R.C.S. EDIN.,
SURGEON TO ALL SAINTS CHILDREN'S HOSPITAL.

ON March 26th of this year B. M.—, aged twenty-nine, came to me suffering from a spasmodic action of the lower jaw. There was a powerful grinding movement of the teeth, the lower jaw acting spasmodically towards the right continuously. This affection had commenced six years previously after an illness brought on by cold and involving paralysis of the left leg and back, for which she was laid up for six months. The teeth also became carious about this time. During the last four years the spasms had been very severe and continuous, and the pain and distress which the affection caused were becoming, the patient declared, "almost unbearable." The teeth were to some extent worn away by the constant grinding action. The temporal muscle and the pterygoids on the left side and slightly on the right were occasionally in action, but the muscle which acted incessantly and most powerfully was the masseter of the left side. I sent the patient to Mr. Collyer, who kindly extracted some teeth and informed me that he had removed every apparent source of dental irritation. There was some relief to the severity of the spasms after this, but it only lasted a few days. Mr. Collyer said he could do nothing more unless he extracted all the teeth that remained. Upon this I advised operation on the nerve supplying the masseter muscle. The patient was first seen by Dr. Hughlings Jackson and by Dr. Gowers.

The operation was performed on June 27th, Mr. Davis administering the anæsthetic. I made a vertical incision from the centre of the zygomatic arch downwards, and exposed and carefully dissected out the transverse branches of the facial nerve. Holding these branches aside, I cut down upon the masseter muscle, divided the oblique fibres and exposed the vertical, through which I cut towards the sigmoid notch, where I met with the masseteric branch of the inferior dental nerve, from which I removed a quarter of an inch. From this time all spasm of the jaw ceased, and it has not returned. It is needless to endeavour to describe the relief to suffering which the patient has experienced from the cessation of the spasm after six years' continuous pain and worry. She is nervous, fearing that the spasm may return, and sometimes, she says, gets a little twitch of the mouth, but there is nothing apparent to observation. In operating I accidentally wounded Stenson's duct, and there was a flow of saliva from the cheek for about a week. With a few applications of nitrate of silver the minute opening soon healed up. The rest of the wound had healed by first intention, and now there is only a trace of the incision.

Queen Anne-street, W.

HYPERTROPHY OF THE MUCOUS MEMBRANE OF THE UPPER LIP.

BY WM. ERNEST MILES, M.R.C.S., L.R.C.P. LOND.

THE case I am about to describe is of interest, not only because examples of hypertrophy of the mucous membrane of the lips are by no means of common occurrence, but because it illustrates the tendency to recurrence of these tumours *in situ* after removal by operation, unless that procedure is efficiently carried out.

A. M.—, a male inmate of Broadmoor Asylum, drew my attention to the existence of a small pendulous growth arising from the inner surface of his upper lip, a little to the left of the frænum and extending in an outward direction for the space of about an inch. The growth was not noticeable when the lips were closed, but presented a somewhat unsightly appearance when the patient spoke

or laughed. It had been slowly increasing in size and latterly had become a source of annoyance to him during mastication. Previous to his admission here he tells me he had been troubled with a similar growth in the same situation, which he removed himself with a pair of scissors. A cure however was not effected, since, very soon after the wound had healed, the growth again began to make its appearance, and had now become troublesome in the respect I have mentioned. Recognising the case to be one of hypertrophy of the mucous membrane, from the nodular and shotty character of the contents of the tumour, I decided upon removing it with the knife. This I did by means of an incision carried round the base of the tumour, taking care not to encroach upon the free margin of the lip. Having removed the superabundant tissue, I noticed several small yellowish-white bodies about the size of a split pea (the hypertrophied labial glands) scattered over the surface of the wound. These I removed carefully by means of a pair of dissecting forceps and then closed the wound with horsehair sutures. The wound healed by first intention, leaving no deformity, and although it is now some months since the operation there is no sign of a recurrence of the growth. Mr. Bryant has shown that this hypertrophy is due to an overgrowth of the labial glands and that unless these are all removed the growth is likely to recur. When my patient performed the operation on himself several of the hypertrophied glands must have escaped removal, and I have no doubt it is to this fact that the recurrence of the growth *in situ* is to be attributed.

Broadmoor, Berkshire.

DISLOCATION OF THE RADIUS BACKWARDS AT THE ELBOW-JOINT.

BY LEWIS E. PARKHURST, B.A., B.CH., B.M. OXON.

ON August 1st I was called to Mr. B—, aged sixty years, who had been thrown out of a dogcart, alighting on the palm of his left hand. I saw him within ten minutes of the occurrence of the accident, and before any swelling had arisen. His arm was semiflexed at the elbow and midway between pronation and supination, and it could not be moved without causing great pain. The elbow was found on inspection to be greatly increased in breadth when viewed posteriorly, and there was a prominence behind and just above the external condyle of the humerus, which was found, on rotating the hand, to be the head of the radius; the latter could not be felt in its ordinary position. The nature of the accident was clear and unmistakable, and that it had been caused by a fall on the hand was apparent both from the patient's statement and the existence of an abrasion of the skin over the ball of the thumb. Reduction was easily effected by extension of the forearm followed by traction, and the patient was at once able to move his elbow and fingers. The arm was put up at a right angle on a moulded posterior angular splint, and he travelled home next day. Mr. de Mesquita, house-surgeon to the Croydon General Hospital, who subsequently attended him, has kindly informed me that the progress of the case was in every way satisfactory.

This is a very rare accident. Professor Langenbeck of Göttingen, in giving an account of the only two cases of dislocation of the radius he had ever met with, says: "Dislocation of the radius backwards" (at the elbow-joint) "must be an extremely rare occurrence, since Sir Astley Cooper¹ never met with this accident in the living and only once in the dead subject."

Brackley, North Hants.

¹ Fractures and Dislocations, 1842, page 459.

CLINICAL HOSPITAL, CHEETHAM-HILL-ROAD.—On Monday was opened, without any public ceremony, the new wing of the Clinical Hospital for Women and Children, Park-place, Cheetham-hill-road, for the accommodation of out-patients. The total outlay amounts to £2000, which has been raised by subscription.

PROPOSED NEW PARK.—There is some talk of converting the site lately occupied by the Wild West Exhibition into another breathing space for the inhabitants of London. A conference is now being arranged for by the parishes of Kensington, Fulham, Hammersmith and Chelsea to consider the new project, the estimated cost of which is £25,000.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

GREAT NORTHERN CENTRAL HOSPITAL.

A CASE OF TETANUS, WITH PROLONGED LOCKJAW,
SUCCESSFULLY TREATED BY CHLORAL AND
CHLOROFORM.

(Under the care of Dr. CHOLMELEY.)

THE successful treatment of tetanus is a subject which possesses constant interest for members of the profession, each case affording useful data for future help. It is true that this case presents characters common to the large majority of cases successfully treated, and the course was essentially chronic. We have recorded many instances of recovery from tetanus. In 1887 Mr. Meldon¹ read a paper on this disease and gave statistics of 937 cases collected by him. He had administered hyoscyamus, belladonna and conium in 17 cases, with only 4 deaths, in his own practice. Of the other cases, in 370 treated by chloral 83 recovered and 287 died; in 135 treated by curare 23 recovered and 102 died; 60 by nicotine, 3 recoveries, 57 deaths; 96 by opium, 4 recoveries, 92 deaths; 21 by conium, 3 recoveries, 18 deaths; 76 by cannabis indica, 12 recoveries, 64 deaths; 28 by bromides, 2 recoveries, 26 deaths; 103 by alcohol, 25 recoveries, 78 deaths; 41 by all other remedies, 17 recoveries, 24 deaths. He excluded from this table those in which the first symptoms were noticed later than the fifteenth day. In 16 cases which we have published in our columns since the appearance of that paper chloral hydrate was employed in 5 and bromide of potassium in 8; hydrochlorate of morphia, strophanthus tabloids and extract of physostigma in others; in 7 morphia was also used for the relief of pain. These, again, are not examples of the more acute form of tetanus, for the period which elapsed between the receipt of the wound and the onset of the disease varied from four days to four weeks. In the majority of cases the use of chloral produced the most marked effect, conjoined with rest and the due administration of fluid nourishment. Verneuil in 1885 recommended strong doses of chloral and bromide, with quiet &c.; and in the previous year a similar line of treatment was advocated by the Royal Academy of Medicine in Ireland. Of late there has been little new to record in the treatment of tetanus; the questions of immunity, infection &c. have, however, attracted much attention. Many experiments made with chemicals, to test their action towards weakening or destroying the cause of tetanus, have so far yielded no specific, nor indeed found a useful remedy. There are some cures announced after an extended trial of subcutaneous injections of carbolic acid. The use of chloroform to allay spasms, procure sleep and permit of proper feeding was most successful in the following case, and when this remedy is used the symptoms are usually very severe.

S. N—, aged seven, was admitted on July 22nd, 1892, with the following history. He had run a small but dirty splinter of wood into the palm of his right hand about three weeks previously. The small wound had not healed properly, but remained in an unhealthy-looking condition; a few small vesicles of watery pus occasionally formed around it. On July 18th his parents noticed that his face was apparently drawn to the right side, but as he did not seem ill he was allowed to go to school, where he was able to join in the play as well as the work and showed no symptoms of illness. On the following night he was convulsed several times, but was better in the morning and again attended school. At night the convulsions returned and he could only open his mouth a little way owing to the continued muscular spasm.

When admitted to the hospital two days later the boy was said to have taken no food for the previous forty-eight hours. His jaws were firmly fixed, his whole body was

¹ THE LANCET, vol. ii. 1887, p. 317.