

one first removed weighing within a grain or two of the corresponding bullet. During this time he was subject to intense pain, with nearly complete deafness, and a sensation of weight if he lay on the left side. These symptoms were partly relieved after the last operation, but a continuous discharge of pus remained, with an occasional powder grain in it, and facial paralysis gradually supervened. In August, 1885, he went into University College Hospital under Mr. Barker's care, at which time it was not considered justifiable to search by operation for the second bullet, but careful antiseptic treatment of the wound in the ear resulted in the Eustachian tube being freely opened, but no permanent relief was given. He came under my notice early this year with a discharge of muco-pus from the ear, which occasionally became obstructed, causing most acute pain in the ear, accompanied by tenderness over the mastoid bone, which were relieved when the discharge flowed freely again. There was facial paralysis, with difficulty in swallowing, and dribbling of saliva, worse when the discharge was retained. He was still unable to lie on the left side, was seldom free from pain, and was quite deaf in the right ear. Finding I could give him no permanent relief, and thinking there was another bullet in the temporal bone, I advised him to consult Mr. A. E. Barker again with a view to an operation, and he went into University College Hospital on June 14th. On June 22nd he was placed under chloroform, and Mr. Barker made an incision, beginning half an inch above and half an inch behind the external auditory meatus, running vertically two inches and a half upwards, joined by a horizontal one an inch long at the top. The flap, including the ear, was turned forward, the bone bared, and the periosteum raised. The front part of the base of the mastoid was widely gouged away, and three small pieces of lead removed, which were embedded beneath the mastoid antrum. The mastoid process was so densely sclerosed that it had to be cut out with the surrounding bone. The cavity of the antrum was opened, with a drop of muco-pus in it, syringed out, and made to communicate freely with the opening cut in the bone and with the external auditory meatus, which was almost impervious before. The wound was stitched top and bottom, a drainage tube placed in the antrum, and a dressing of iodoform and salicylic wool applied. The symptoms were relieved after the operation, the temperature never rose above 100°, and the patient made a rapid recovery. The wound in the antrum was kept open until the drainage tube was forced out by the growth of new bone. The facial paralysis was much lessened, and, beyond a slight discharge from the ear, the patient got well and resumed his occupation.

Remarks.—The interest in this case centres round the second bullet. It was not thought probable at the time that he could have discharged two bullets into the ear, and the room was searched for the second bullet; but though it was not found, no search was made for it after the pieces which seemed to correspond to one bullet had been extracted. Probably the second bullet fired, if the portions removed by Mr. Barker belonged to it, followed the track of the first one, struck its base and splintered; if so, the portions of bullet first extracted may have belonged to the second bullet fired. The extreme density of the bone probably saved the man's life, and concussion did not occur with sufficient rapidity to prevent him firing the second shot. The facial palsy is interesting, being probably due to pressure from the new material thrown out for the repair of the bone. I am indebted to Mr. Barker and to Mr. Sydney Holder, house surgeon at University College Hospital, for the notes of the operation and subsequent treatment.

Cardiff

CALOMEL AS A DIURETIC IN CARDIAC DROPSY.

By A. G. AULD, M.D.

IN no department of practical medicine have more brilliant results been achieved of late years than in that of cardiac therapeutics. This is partly owing to a more extended knowledge of more or less familiar drugs, and partly to the introduction of certain new ones of acknowledged excellence in their several spheres, of which the chief is strophanthus, the discovery of Professor Fraser. Within the past year or two, mercury, in the form of calomel, has specially engaged the attention of several observers. As a cholagogue purgative, indeed, notably in mitral stenosis with engorgement of

the liver, its beneficial properties have been long recognised, while blue pill is well known to increase the efficacy of digitalis and squill. Nevertheless, the powerful diuretic properties of calomel seem to have been overlooked until quite recently, when the investigations of Jendrassik, Stillier, Mendelsohn, and others directed attention to the subject. I have observed this action of the drug in causing a copious discharge of urine and dispelling anasarca; and it does not seem to be impeded by the complication of a certain amount of structural disease of the kidney. In two of the cases medium doses were employed till diuresis set in; in a third, in which the effect of mercury was known, a single dose of twelve grains was administered, which was quite as efficacious.

As to the mode in which calomel exerts this diuretic power, there seems to be some difficulty in determining. Mr. Locke,¹ guided by the researches of Dr. Noël Paton, suggests that the diuresis is caused by an increased production of urea, consequent on the supposed hæmolytic action of mercury on the blood corpuscles. This view, however, is open to serious objection. It is no doubt true that urea acts naturally as a diuretic; but we find that those cases wherein the blood is loaded with urea are frequently just those in which the secretion of urine is diminished, but which nevertheless tends to increase after the administration of calomel. Also, if an increased secretion of urea be the cause of the diuresis, we should expect such drugs as antimony and salicylic acid to be even more powerful as diuretics, as their exhibition is followed by a greater excretion of urea than in the case of calomel. Again, it could hardly be possible for a few doses of calomel to have such a hæmolytic action as that described, but rather the reverse, and, even granting that it had, the resulting anæmia would be accompanied rather by an increase than by a diminution of the dropsy.

In endeavouring to determine the *modus operandi* of calomel as a diuretic, its influence, if any, on the heart and bloodvessels may first be considered. In moderate doses it is found to have, after the manner of arsenic, a somewhat paralysing action on the vaso-motor nerves corresponding to a slight fall in the blood pressure. It is evident, therefore, that its action in this wise may be eliminated from the causation. It may next be considered whether calomel may not exert a stimulant action on the secreting cells of the kidney, after the manner in which certain other drugs, such as caffeine, appear almost exclusively to cause diuresis, according to the experiments of von Schroeder, Langgaard, and other observers. That it should do so is, I think, probable, though only to a certain extent, as it is stated to have but a slight diuretic effect in health. In addition to this, its influence on the composition of the blood, in virtue of its alterative properties, has, doubtless, an important bearing on the phenomenon in question. In a few medicinal doses it causes an increased activity in the lymphatic system, and brings about the destruction of deleterious ingredients in the blood, with an improvement in its nutrition, and consequently renewed vigour in the kidneys.

It need hardly be mentioned that much discrimination is requisite in the employment of the drug, and trial should first be made of the effect of small doses. It is also useful to remember that mercury is best borne by dark-complexioned persons. In suitable cases, it combines the advantages of a purgative and diuretic, without leaving injurious effects on the heart or kidneys. To whatever extent it may ultimately be found useful, it is pleasing to note meanwhile that attention has been drawn *de novo* to one of the best of those of the old remedies which, like bleeding, have fallen, it is to be feared, into an unmerited neglect, in a too eager desire to adopt the latest novelty or to follow a shifting fashion.

Glasgow.

PROLAPSE OF THE FUNIS TREATED SUCCESSFULLY BY MANUAL REPOSITION.

By W. J. NICHOLLS, M.R.C.S., L.R.C.P.

ON Sept. 1st I was called to attend Mrs. F—, wife of a labourer, in her fifth confinement. The patient, though of small stature, was well built, with a normal pelvis. On making an examination, I found a large bag of membranes projecting half down the vagina through the partially dilated

¹ Practitioner, September, 1886.

os uteri. Within the liquor amnii I distinctly made out a large loop of pulsating umbilical cord. An examination between the pains discovered the vertex presenting within the os. Having unsuccessfully attempted to return the prolapsed funis with the membranes intact, I determined to try manual reposition more fully. Rupturing the membranes, I passed my hand into the vagina, and pushing back the vertex from the os, gradually returned the whole length of cord along the side of the head into the hollow of the nape of the neck, lying above the pubes of the mother, and retaining it there until, a pain coming, the vertex was forced down upon the now almost dilated os. Keeping my hand still within the vagina for some successive pains, and finding no further return of the prolapse, I left the remainder of the labour to nature, when in due course a living full-sized child was born, the cord following the birth of the head and shoulders. Both mother and child are doing well.

This same patient had been attended by me in July, 1883, with her second child. A long loop of the umbilical cord was then prolapsed, but upon my first examination the head was so low down that no reposition was effectual, the result being the birth of a stillborn infant. In her third confinement she was attended by one of my medical confrères, and again the cord was prolapsed and not returnable, with the result of another stillborn child. Her first and fourth labours, I gather from her, were natural, though difficult.

An interesting feature in this case, apart from the success of the artificial reposition of the prolapsed funis (which reposition, by the way, was exceedingly easily effected), is that three out of five pregnancies resulted in prolapse of the cord, which in each case was of unusual length, and not passed round the neck of the infant.

Somersham, Hants.

THE VALUE OF BELLADONNA AND HYOSCYAMUS IN DYSMENORRHOEA.

BY JAMES SHAW, M.B. GLAS.

DURING the last year I have had occasion to treat several cases of that form of dysmenorrhœa vaguely and variously designated neuralgic or spasmodic, and occurring in young girls, whom it was of course very undesirable to examine. One of these cases was of marked severity, and, as it had continued for about a year, there was considerable nervous prostration. Morphia was the only drug that at all mitigated the suffering, but in consequence of its administration the patient was wretchedly troubled with headache and constipation, and so I was forced to abandon its use. I therefore prescribed the following mixture, one ounce to be taken three times a day, and it acted like a charm: val. belladonnæ, nine minims; val. hyoscyami, two scruples; syr. aurantii, two drachms; water, six ounces. The epoch has now been robbed of its terrors for her. Writing the other day from Germany to her mother, she says the last six months are the only happy ones she has known since the function was established. In the other four cases there was likewise considerable suffering, and in these also complete relief was afforded. I prescribe it to be begun a day before the period is expected, and continued while the pain requires it. The valoids I employ are those manufactured by Messrs. Burroughs, Wellcome, and Co., and for obtaining the characteristic actions of the drugs I know of no preparations that equal them. The old-fashioned tincture, though perhaps a trifle more elegant, is at once feeble, expensive, and unreliable. In the majority of them the spirit is the active ingredient.

Sheerness-on-Sea.

ENLARGEMENT OF THE GENERAL INFIRMARY, LEEDS.—The contemplated extension of this institution is about to be carried out, at an estimated cost of £30,000. An impetus has been given to provide the improvements and enlargement required by a donation from Colonel North of £5000 towards the erection of the building. Of late, subscriptions have rapidly come in, and a sum of over £30,000 has been received. The board of management, in conjunction with the Faculty of the Infirmary, are maturing their plans, which will comprise a children's ward, isolation wards, improved out-patients' rooms, a casualty ward, and new accommodation for the increasing work of the pathological department.

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. Proœmium.

ST. THOMAS'S HOSPITAL.

THREE CASES OF POISONING (RED OXIDE OF MERCURY, CORROSIVE SUBLIMATE, AND DINITROTOLUENE); RECOVERY; REMARKS.

(Under the care of Dr. ORD.)

AMONGST the other duties of the house physician at a large hospital is usually comprised the attendance on casualty cases, including those of poisoning by many and varied substances. There are few occasions in practice in which more depends on skill in rapid diagnosis, which, combined with a good knowledge of toxicology and prompt action, will often eventuate in the saving of life. The annexed cases are examples of such, where severe symptoms followed the swallowing of red oxide of mercury, corrosive sublimate, and of dinitrotoluene. In the two former the symptoms, though of a serious character, present little worthy of comment, but the third deserves special attention, as the symptoms produced by this compound are almost unknown. For the subjoined notes and remarks we are indebted to Mr. H. J. Macevoy, B.Sc., late house physician.

CASE 1. *Poisoning by red oxide of mercury; recovery.*—F. W. R.—, aged fifty-one; tailor. Admitted on July 8th, 1887; discharged July 20th. He has enjoyed good health, but drinks a good deal. Is of a reticent disposition. It appears that shortly after coming home at midnight on July 7th, being somewhat drunk (according to the wife's account), he swallowed the contents of a small packet which he took out of his pocket. An emetic was administered without effect, and he was brought to the hospital in a cab, being apparently unable to walk.

On admission at 2 A.M., the man was in an unconscious condition, and vomiting. Pupils of average size, equal, and inactive to light. Face and hands cold and bathed in sweat. Pulse weak, not abnormally rapid. There were traces of a reddish powder on his beard, chin, and shirt resembling that found in a small packet (referred to above) brought up by a policeman. Does not answer questions put to him or put out his tongue, but keeps his teeth clenched. There is otherwise general muscular relaxation, and his evacuations are passed under him. The stomach was washed out with the stomach-pump. The vomit consisted of a watery fluid containing mucus, and holding a red powder in suspension; no blood. The red powder, subsequently examined by Dr. Bernays, turned out to be red oxide of mercury, of which the patient swallowed about a teaspoonful.

July 8th.—11 A.M.: The patient was ordered milk, lime-water, and eggs, beaten up, to be taken frequently in small quantities, but has kept very little down (vomit contains no powder or blood). He still takes no notice of questions put to him, but his pupils now act to light. Bowels have been opened twice, the first motion consisting of loose faecal matter with mucus; the second motion is fluid and greenish, contains very little faecal matter, but mucus and streaks of blood.—4 P.M.: Patient has been conscious for the last two hours; apparently cannot protrude his tongue beyond his teeth. He complains of pain in the epigastrium and tenderness, and also of cramps in the legs. On examination the abdomen is rigid in the upper part, and slightly distended. Pulse regular, fair.

9th.—Patient is quiet, and feels better. Still occasional vomiting and diarrhœa, and the abdomen is rigid in the epigastric region and tender. No particular tenderness of gums; no salivation. He gradually improved after this, the vomiting and diarrhœa ceased, and he left the hospital quite well.

CASE 2. *Poisoning by corrosive sublimate; recovery.*—W. B.—, aged forty-nine; surgical instrument maker. Admitted Aug. 31st; discharged Sept. 7th, 1887. Has had no serious illness, but suffered for about six years from