down on a thimble; the part where it struck the left knee was just inside the ligament of the patella. From that day the knee has been painful and swollen. She says that it is not so large now as it was three days after the accident, but is more painful. Right knee (normal): above patella, 12 inches; across patella, 12 $\frac{1}{4}$ inches; below patella, 11 $\frac{1}{2}$ inches. Left knee (diseased): above patella, 12 $\frac{3}{8}$ inches; across patella, 12 $\frac{3}{4}$ inches; below patella, 11 $\frac{3}{4}$ inches. The swelling was not fluctuating, but soft and quaggy. The pain was not great; was most at night, as though "the joint would burst." I intended from the first to try the effect of pressure in this case; but as the knee was hot I believed that the inflammation was still too active. I, therefore, had a pasteboard splint applied, and ordered six leeches, to be followed by a blister. An aperient of tartrate of potash and senna. As she lived near, I promised to see her in a day or two.

Feb. 16th.—The pain in the knee was less; the blister still open; the draught had acted sufficiently. To have three grains of iodide of potassium and infusion of gentian three times a day. To dress the blister with lint and cold water.

19th.—Blister healed, and the pain returned; but the joint is not hot, or at least hardly perceptibly more so than the other. A bandage very tight at the knee, with a pad on each side of the ligamentum patellæ, was applied.

21st.—The pressure gives ease, and, therefore, tight strapping with pad in the same places was employed with benefit.

March 4th.—The patient is very much better, but on account of family duties must move about, more than is desirable, and is impatient of the restraint caused by the strapping. The left knee measures above the patella, 12 $\frac{1}{4}$ in.; across the patella, 12 $\frac{3}{8}$ in.; below the patella, 11 $\frac{1}{2}$ in. This is very little more than the right; but as she is not likely to use the bandage as well or as much as she should, the improvement will hardly be permanent.

Other cases might be given, but these suffice. I have wrapped the joint, before applying the plaster, in lint spread with blue ointment, as recommended by Dr. Scott. This plan is not advisable in strumous cases. I have once used iodide of lead ointment in the same way. It may have been advantageous, at all events was not injurious; but the mere mechanical pressure appears to me to be the beneficial agent. In strumous inflammation of the synovial membrane, that sac is, as we know, filled with a soft, more or less translucent, and but slightly vascular jelly, which tends to spread and to permeate all the surrounding structures, and it seems that pressure prevents such luxurious growth, causes a greater concentration of this material, and subsequently its absorption. The cases, however, for this application must be properly chosen, or it will give not merely no relief to the patient, but absolute torture. There must be no active inflammation—a point which can be best ascertained by the absence of heat in the part, and of acute pain on pressing with the finger. Furthermore, those cases are most benefited where the patient complains of a pain as though the bones of the joint were being forced asunder, or of a sense of distension and bursting—a pain which results, I believe, from the interstitial fungus like growth, which the gelatinous infiltration is constantly undergoing.

Old Burlington-street, October, 1859.

ON

A CASE OF POISONING BY STRYCHNINE, AND RECOVERY.

By GEORGE BENNETT, M.D., F.R.C.S.

ABOUT a quarter to seven A.M. of the 13th of October, 1856, I was requested to attend a lady, aged forty-two, who had, in a fit of despondency, taken the entire contents of a packet of "Battle's rat poison." On my arrival, I found that about half-past six A.M. she had mixed the powder in a tumbler of water, drank it, and by adding water again, had taken every particle of the powder. The bitter taste, she afterwards remarked to me, was not perceived until some little time after the powder had been swallowed, which I have observed is peculiar to strychnine. After taking the poison, she went and dressed the children; but, suddenly repenting of the crime she had committed, she informed her husband, who, after giving a dose of antimonial wine, which produced no emetic effect, came for me. She told me what she had taken, and appeared agitated;

but having no symptoms to guide me as to the nature of the poison, and as vomiting had not occurred, I administered scruple doses of sulphate of zinc, and sent for the stomach-pump after a short space of time. On giving her some water, I perceived some slight spasmodic twitchings, which gradually increased in violence. I then suspected that strychnine was the poison taken, and as no vomiting had been excited, and the spasms precluded the use of the stomach-pump, I sent for the compound tincture of iodine. Before it arrived, however, the spasms had increased so violently that life appeared extinct; the face and hands were livid, the eyeballs protruded, and there was violent opisthotonos; pulse not perceptible. The most severe spasmodic action came on about a quarter to eight A.M., and about two minutes after the subsidence of a severe fit, the medicine having arrived, I gave her twenty drops in a wine-glass of water. Soon after a very violent fit came on, and in this the respiration was so feeble that we all considered she was dead. However, she again rallied; and as soon as she was capable of swallowing, being about ten to fifteen minutes after the administration of the first dose, I gave her thirty drops of the tincture of iodine. She soon had another fit; but it was evident to all about her that it was less severe, and lasted but for a very short period of time. On the fit subsiding, in about ten minutes I gave another dose of thirty drops of the tincture. The convulsive fits had now ceased, and in about twenty minutes from the cessation of the last fit, violent vomiting came on; and this being assisted by diluents, the stomach appeared clear of the poison. Now, a question may arise how the iodine acted in this case. Probably by forming an insoluble compound of hydriodate of strychnine, and by relieving the system from the spasmodic action of the poison upon the spinal nerves, the emetics which had been administered were enabled to take effect. She continued free from any further spasm; and, after an hour, I left her. On returning in about an hour, I found she still continued better, with the exception of a few very slight twitchings. She complained of great debility; and the pulse being very feeble, I ordered her nourishing diet of milk and arrowroot, and gave an ammonia mixture, with compound sulphuric ether; and, under their influence, she rallied very rapidly. I remarked that during the convulsive paroxysms no screams were uttered; and on making inquiry after her recovery, she informed me that no pain was felt during the fits, only an inconvenience from the spasms drawing the legs so rigidly down. She also stated she was sensible during the fits to everything around her, retaining the most perfect consciousness of all that was said or done—was unable to speak, but never felt any inclination to scream or cry out. In the evening she complained of a little soreness of the throat, and a slight feeling of cramps over the lower extremities.

On the following morning (Oct. 14th), I found her much better; pulse regular; had passed rather a restless night; soreness of the throat had subsided; and she enjoyed some tea for breakfast. She had no pain, and complained only of a feeling of lassitude. The next day I found she had slept well; but the bowels not having been relieved, an aperient mixture was ordered, which, however, did not operate until the evening. The stimulating mixture was continued occasionally, and afforded great relief from the feelings of nervous debility which came over her. From the 16th to the 18th she improved daily; and on the latter day she was able to leave her room.

The next question that arises is as to the quantity of strychnine taken. I first tested one of the powders by the colour test, and by using sulphuric acid and the bichromate of potass an intense maroon or deep violet colour was produced, diffusing itself over the whole of the liquid and remaining for a few minutes. On one of the powders being analyzed by Professor Smith, of the Sydney University, it was found that a paper containing ten grains of a bluish powder (probably smalt) with which the strychnine had been mixed, gave a grain of very pure strychnine. On administering one of the powders to a young dog, it remained for fully an hour without manifesting any effect or inconvenience from the poison, when suddenly the convulsive spasms came on, and, increasing in severity, the animal died in three minutes. An older and larger dog had one of the powders given to it, and about an hour after the dose had been administered a severe fit occurred, but it rallied in ten minutes, and moved about, with slight paralysis of the hinder extremities; it appeared quite free from any suffering, and was even wagging its tail and seemed to be recovering for nearly half an hour, when the spasmodic twitchings again commenced and gradually increased in severity, until one strong convulsive fit terminated its existence. The bodies of both the animals—as I have observed in the human subject—re-

remained flaccid for a long time after death. A very curious galvanic action was produced on the last dog on its recovering from the first fit: by tapping or rubbing the hair over the back an immediate twitching came on over the body, but did not appear to impart the slightest sensation of pain to the animal. During the action of the poison the animals did not appear to suffer any pain, and no sound of any kind was uttered by them.

Sydney, New South Wales, 1859.

A Mirror

OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

LONDON HOSPITAL.

NECROSIS OF THE END OF THE STUMP, IN AN AMPUTATION OF THE LEG PERFORMED IN INDIA; RE-AMPUTATION HIGHER UP.

(Under the care of Mr. ADAMS.)

DURING the past two years we have noticed a few cases wherein amputations in one of the limbs having been performed primarily in India, the patients have appeared in our London hospitals on account of ulceration and necrosis at the end of the stump. The number has, however, been too few to permit of any practical deductions being drawn as to whether the great heat of the country had anything to do with the healing process in the stump; in two instances the form assumed by the latter was conical, with the end of the bone actually projecting, as if the muscles in the first instance had become retracted. In all of the cases the primary operations were for gun-shot wounds, attended by their accompanying phenomena—namely, shock to the system, collapse, &c.

The last case of the kind which came under our observation was at the London Hospital, the patient being a healthy-looking young sailor, who had been wounded in the foot at the siege of Cawnpore, as stated by Mr. Adams, and whose foot and ankle had been removed just above the latter joint. The stump healed, but afterwards its edges became ulcerated, the end of the tibia took on a diseased action, and the leg became unfit for use in any artificial appliance that was proposed for progression. The patient was most anxious to have another operation performed; accordingly, it was deemed expedient to re-amputate the leg higher up, and this, under the influence of chloroform, was effected on the 20th inst. by Mr. Adams, at its upper third. He made short rectangular flaps of equal length, which, when brought together by sutures, appeared to answer well. Little or no blood was lost. The healing process has been going on satisfactorily since the operation, and as the patient's general health seems good, there are grounds for anticipating an excellent recovery.

PROJECTING ANEURISM OF THE ARCH OF THE AORTA BETWEEN THE SECOND RIB AND THE STERNUM; THE VALUE OF ICE APPLIED LOCALLY.

(Under the care of Mr. ADAMS.)

To the report of a case of aneurism of the arch of the aorta, with a visible swelling situated between the second rib and sternum, which appeared in a previous "Mirror," (THE LANCET, vol. i., 1859, p. 629), the following particulars can now be added. The patient is still in the hospital; he is composed and tranquil, and looks like a person in very good health. Under the persevering use of ice constantly to the surface of the tumour for about twenty weeks, it has entirely subsided, and no pulsation can now be seen by the naked eye. He has no palpitation, nor forcible action of the heart; both radial

pulses are equal in beat, volume, and general softness. He sleeps tranquilly and eats well, and so far as can be judged by the physical signs, although an aneurismal tumour is still present, with a distinct *bruit de soufflet*, it is quite possible that the greater part of the circumference of the sac is filled with fibrinous coagula. The dullness remains about the same, and the patient feels a slight inward beating at the spot corresponding to the situation of the tumour, and occasionally a little pain behind the sternum. He now has a belladonna plaster over the site of the aneurism, ordered to be continued for a month.

If this patient can change his occupation, from that of a London dock tea-warehouse porter to some other that shall not necessitate the carrying of heavy weights on his shoulder as hitherto, he may enjoy comparative health for a considerable time. His age is fifty-eight years; the aneurism has been noticed nearly ten months, and the result of the steady and unceasing application of ice to the external tumour has been most gratifying. It is a mode of treatment worthy of adoption in aneurisms situated in other parts of the body, externally. The patient will shortly leave the hospital.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

NEW OPERATION FOR THE RELIEF OF THE PAIN IN ACUTE GLAUCOMA.

(Under the care of Mr. HANCOCK.)

THE operation which has been suggested by Von Gräfe for the cure (?) of glaucoma, is described as follows in the eighth edition of Druitt's "Surgeons' Vade Mecum," just issued from the press:—"He makes a small linear incision in the sclerotic one millimetre behind the cornea, and removes a sixth of the iris. Von Gräfe gives no theory whatever, and candidly says that his practice is wholly empirical." We have seen this method put into practice several times, and we must acknowledge with relief to the pain; but the plan resorted to by Mr. Hancock is infinitely preferable, on account of the reasons mentioned in the details of the subjoined case, for which we are indebted to Mr. A. E. Sansom, house-surgeon to the hospital:—

Arthur H—, aged fifteen, a tall, tolerably healthy-looking youth, was admitted on the 8th ultimo. When he was five years old, he was hacking a mutton bone with a knife, when the latter slipped and wounded his left eye. From the effects of this accident he was confined to the house for some time. The pain soon subsided; but the sight of the eye was destroyed. There was no apparent breach of continuity. No pain recurred until May last; and then he noticed that the eyeball began to enlarge. He applied as an out-patient on the 7th of July. At first, by the treatment adopted, the pain was relieved; subsequently it remained stationary at one point of intensity. It has become worse since; swelling of the eyeball has been increasing. The pain is slight if the globe be still; but by the slightest movement or pressure, violent aching is occasioned. It was feared that the other eye was becoming sympathetically affected; and he has been overtaking it lately by writing.

Condition of the eyes.—The right healthy; sight good. The left swollen to about twice the size of the normal eye; sclerotic vessels dilated; choroid not showing through the sclerotic; pupil dilated extremely, slightly irregular. Masses of the capsule of a disorganized lens are visible. The enlargement of the whole globe is uniform. He complains of great pain when the eyeball is touched, which feels very tense and hard to the finger.

Operation.—On the 9th of September, Mr. Hancock introduced a Beer's cataract knife at the junction between the cornea and the sclerotic, the blade being inclined downwards, the point proceeding inwards and backwards. The place of puncture was the commencement, on the outer side, of the lower semi-circumference of the cornea. The point of the knife, now having traversed obliquely the layers of the cornea, was pushed backwards towards the interior of the globe, thus dividing the ciliary ligament in a portion of its extent. On the removal of the knife, a quantity of discoloured fluid escaped.

Mr. Hancock, considering that the great pain was due to tension of the iris and ciliary ligament by accumulated fluid, the product of the disorganized parts behind, believes that all the indications for the relief of the suffering will be fulfilled by this operation. And its advantages are:—