over with a little sand, which is washed away by the tide, or removed by the wild dogs at night, when they come for their evening meal. At this place it is quite common at all times to see half-devoured dead bodies lying exposed. During the month of December the stench from bodies in all stages of decomposition was so overpowering as to render the place unapproachable, and thus Zanzibar disseminated the very essence of the cholera poison to all the coast towns and adjacent islands, both towards the north and south. In all the Sultan's dominions where there was open intercourse with Zanzibar the disease appeared in its worst form. It passed slowly towards the north *against the monsoon*, and was conveyed to Mombassa, Melinda, and Lamoo in slave dhows. From Mombassa it passed into the interior among the Wanika, but the mortality was not great. The arrest of its progress further north than Lamoo seems simply to have depended upon the circumstance that the strong north-east monsoon effectually blockaded the Somali ports, by shutting off all intercourse for the time, for towards the end of April when the monsoon changed, and trade was opened between Zanzibar and these ports, the epidemic appeared at Brava with great virulence, and reports have recently reached us that half the population has perished. Towards the end of December the deaths at Melinda were estimated at 2000, but at Lamoo the mortality was said to be small as compared with that during the epidemic of 1865.

The progress of the epidemic from Zanzibar towards the south was much more rapid, and in the course of a short time it raged in all the Coast towns, as far as Cape Delgado, the southern boundary of the Zanzibar dominions, beyond which it did not pass at that time. Zanzibar dhows, however, conveyed it to Comoro and Johanna islands, but Ibo, Mayotta, Nossi Be, and Mozambique escaped, although they usually carry on at this season a large trade with Zanzibar. This may be accounted for by the fact that there was open communication with Comoro and Johanna, but that at the other ports there was strict quarantine. The epidemic did not appear at Mozambique till so late as the 6th of May; and, in all probability, while the seaboard was guarded by strict quarantine, the disease may have spread along the coast from the neighbouring Zanzibar territory. That the rapid spread of the epidemic towards the south did not depend so much upon the direction of the monsoon, in itself considered, as in the fact that the Zanzibar dhows, taking advantage of the favourable winds, made rapid runs to their several ports of destination, appears probable from the following case. On the 20th of January the crew of a Portuguese brig which was to sail on the following day for Mozambique, were attacked with cholera. In the course of a few days seventeen were seized. They were all removed on shore, and the vessel was cleansed and fumigated. Four deaths occurred, and those who recovered went on board the day before sailing, the 6th of February. The vessel reached Mozambique in about eight days; and, having a foul bill of health, was put into quarantine for a month. No fresh cases occurred on board ship, and she was allowed to come into the harbour. Had this vessel put out to sea as the native craft invariably did, and been allowed to communicate with the shore, the epidemic would certainly have appeared in Mozambique in the month of February, as it did then or previously in all the ports at which Zanzibar dhows arrived, and in which no quarantine regulations existed.

In Quiloa, a small island close to the coast, and to the south of Zanzibar, the mortality was excessive; averaging, in January, as many as 200 deaths daily. This island is a centre of commerce to a large district, and is the place to which nearly all the slaves from the interior are brought, and from which they are shipped in dhows for Zanzibar; and when we consider that from 25,000 to 30,000 are driven annually through this narrow gateway, and that when they arrive at Quiloa their physical condition, after many months of toilsome march and starvation, baffles description, we may imagine the fearful mortality that must have taken place amongst these living skeletons. The prices were so low, owing to the great mortality, that purchasers could not be found willing to pay a dollar for a slave, and hence they were allowed to accumulate and die of starvation and cholera. The mortality amongst these miserable beings at Quiloa will never be known, but it must have been unexampled in the annals of epidemics.

We have but little information regarding the progress of the disease towards the interior of Africa, but from what we do know there is reason to believe that every town on the mainland became, to a greater or less extent, a new centre of dissemination. From Bagamoyo, nearly opposite Zanzibar, it followed the great ivory caravan route towards Uniamenzi, and raged in Usegura, Usagari, Ugogo, and Mgunda. Mkhali at an early period of the epidemic, and letters recently received from Uniamenzi report that it is now prevalent in that district. It appears that the regions mentioned are not yet free from the epidemic, for the porters of a caravan from Uniamenzi, which arrived at Bagamoyo about a week ago (August 16th, 1870), were attacked by cholera in Usagari, and six were said to have died at the coast, thus bringing the disease back to within twenty-five miles of Zanzibar. During the height of the epidemic, when caravans from the interior reached the infected districts and were attacked by the pestilence, the survivors refused to proceed, threw down their loads of ivory and fled to their homes, while the leaders of the caravans had no choice but to conceal their valuable cargo in the bush, hurry on to the coast, and await the result. For the same reason porters could only be collected with great difficulty, and sometimes they could not be got to carry merchandise to the interior, and when cholera appeared amongst them in the infected districts the loads were thrown down and the caravan completely disorganised. On two occasions supplies forwarded to the interior for the relief of Dr. Livingstone could not be passed through the infected districts, as the bearers were attacked with cholera.

The Rev. L. Fraser, of the Universities Mission, was in Usambara throughout the epidemic, and he reported the mortality as having been very great among the people, and the symptoms as being very severe. At first he could not understand the nature of the epidemic, as the people seemed almost to drop down dead. At the solicitation of his friends, he returned to Zanzibar; and, although he had been well while in Usambara, he was seized with cholera on the very day of his arrival, and died within a week. The Rev. C. New, of the Free Methodist Mission, whose station is amongst the Wanika, about fifteen miles to the west of Mombassa, had not heard in May of the advance of cholera to the west of the people amongst whom he resides.

In all the turnings and windings of the cholera epidemic, there seems to have been one unvarying principle directing its course. It has invariably accompanied trade wherever its direction may have been. It came from the interior, and returned to it in a parallel line; it advanced to the north, and was intercepted by the monsoon blockading the harbours further north; and its progress to the south was intercepted, at least temporarily, by the quarantine at Mayotta, Mozambique, and Nossi Be.

(To be concluded.)

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

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. MARY'S HOSPITAL.

CASES UNDER THE CARE OF MR. HAYNES WALTON
(From records by Mr. BERNARD O'CONNOR, Dresser.)

THE following case contrasts favourably both with those in which the patella has been torn away from its tibial attachment, and those in which there has occurred transverse fracture of that bone, with considerable separation of the fragments. So complete a result as regards the restoration of the function of the joint, in spite of so much change in the motor apparatus, is, as far as we know, unique.

Extension of the Leg and Stiffness of the Knee-joint, the consequence of long-continued inflammation of the joint; Forcible Flexion; Result three years after.—Mary P—, aged twenty-three, was admitted into the hospital three years and eight months ago. All trace of acute disease had by that time passed away. The leg was straight and rigid. The ligamentum patellæ was so much contracted that the lower edge of the patella was drawn nearly to the tubercle of the tibia. That this was the chief source of the stiffness of the joint there was little doubt, but it was also certain that there were other changes about and without the joint which contributed to its rigidity. The muscles of the leg and of the thigh were much wasted from disuse. The patient walked with crutches, but very imperfectly. As there was no bony ankylosis, Mr. Walton thought the case to be a proper one for forcible flexion, by which adventitious adhesions about the joint might be broken through, and the extensor muscles stretched or more or less torn, and the joint made available. He thought, too, that if the joint were used the wasted muscles would regain much of their bulk and the limb its power. The patient was placed under chloroform, and, with the exercise of a great deal of force, the leg was flexed on the thigh to the full extent. The operation was followed by constitutional irritation and local inflammation. The limb was kept in a straight splint for two months; an iron apparatus was then applied, and the patient began to move about the ward on crutches; at the same time, slight flexion was made daily and gradually increased. She left the hospital at the end of five months. She was then unable to stand without the iron apparatus, but could walk without crutches. She could flex the leg to nearly the full extent when she was sitting or lying down. On leaving the wards she became an out-patient.

Eight months after her discharge from the wards the patient left off the apparatus and began to walk with a stick, bending the knee moderately well. A few days ago she was brought to the hospital by Mr. Walton, in order to show her present state. She has complete use of her joint, and can flex and extend the leg perfectly. She goes up and down stairs with ease and without halting. The muscles of the leg and thigh have nearly recovered their volume. The patella is still in its abnormal position; and when the leg is semi-flexed, the condyles of the femur, the trochlear surface between them, and the attenuated tendon of the conjoined muscles, can be distinctly felt.

Extraction of Artificial Teeth and Metallic Plate from the Oesophagus after eighteen days' impaction.—Emma N—, aged twenty-five, whilst in bed on Christmas-eve, dreamed that she was swallowing something hard, and on waking discovered that three artificial teeth fixed to a plate of silver and platinum had disappeared from her mouth. She experienced no difficulty at all in breathing. She could not swallow any solid food, the attempt to do so producing a feeling of sickness; but beef-tea, milk, and broth she found no difficulty in swallowing.

The patient was brought into the operating theatre on the 11th inst. Mr. Walton passed a pair of long forceps without meeting with any obstruction. He then passed an œsophagus bougie for the purpose of exploring. The instrument entered the stomach, but grated against something in its passage down the tube. The bougie on being withdrawn showed scratches caused by some foreign body. Judging from the upper—i. e., the last—part of the scratch, the object must have been in the œsophagus, at a point opposite the insertion into the sternum of the third costal cartilages. The scratch itself measured 9 in. in length, and there was about the same distance from the upper part of the scratch to the point of the bougie which touched the patient's lips during the exploration. Mr. Walton then passed a hooked probang, and caught hold of something that appeared to have a sharp edge. He then withdrew the object slowly and carefully to avoid lacerating the œsophagus. When, however, it had been brought to the upper part of the pharynx, the patient made a sudden gulp, and swallowed it again. Mr. Walton then seized a pair of long, curved forceps, and, introducing them into the œsophagus, grasped the artificial teeth, and recovered both them and the plate. No loss of blood ensued, and there was only a slight reddish tint in the mucus which the patient spat out.

Although the metallic plate had been out of order for a long time previous to the accident, the patient had never taken the precaution of removing it at night. It held

three teeth on one half of its irregular convex edge. Its entire length was 1½ in., and the greatest breadth 1 in.

As the operation produced pain, and there must have been more or less tearing of the œsophageal surface, Mr. Walton deemed it advisable that the patient should, for a time, take no food by the mouth. For the first four days she therefore received enemata of six ounces of beef-tea; for three days more these were increased to eight ounces, and administered every five hours. They were all retained. She then began to take liquid food, and shortly afterwards was placed upon full diet. She left the hospital quite well, and without having shown any appreciable loss of strength or flesh.

ROYAL OPHTHALMIC HOSPITAL, MOORFIELDS.

NÆVUS OF THE ORBIT, PROTRUSION OF THE EYE, AND
SUPPURATION OF THE CORNEA; EXCISION OF THE
GLOBE AND REMOVAL OF THE NÆVOID
TUMOUR; RECOVERY.

(Under the care of Mr. GEORGE LAWSON.)

THE following very interesting and exceptional case occurred in the practice of Mr. Lawson at the Ophthalmic Hospital, Moorfields.

On Nov. 8th, 1870, a little child, aged three years and two months, was brought to the hospital with a great protrusion of the left eye, and evidently suffering considerable pain. The eye was bulged fully half an inch beyond the boundary of the orbit, but the child was still able to close the lids over it. The globe was projected directly forwards, and no tumour could be felt with the finger around any portion of the circumference of the orbit. The cornea was perfectly clear, and the eye otherwise healthy. The mother stated that the eye had begun to protrude about six months previously, but that the bulging had remained almost stationary until ten or twelve days before her application to the hospital, when, without any apparent cause, the protrusion of the eye became rapidly greater, and had since increased daily.

As it was difficult to decide on the nature of the tumour, the child was kept under observation, and ordered to attend regularly as an out-patient.

On November 18th the child was admitted with the mother into the hospital, as the severity of the symptoms had greatly increased. The eye was much more bulged from the orbit, it had lost the protection of the lids, which could no longer be closed over it, and, from the consequent exposure, the cornea was beginning to suppurate, the lower half of it was semi-opaque, and the conjunctiva of the globe was chemosed. The child was evidently in great pain, constantly moaning, and unable to sleep except in short snatches. To relieve the sufferings of the child, and also to obtain a correct knowledge of the growth behind the globe, Mr. Lawson decided to remove the eye. On dividing the optic nerve with the scissors, a copious stream of blood followed, and the tumour within the orbit at once collapsed to nearly one-half its former size.

On examination, a vascular growth, composed of large veins, with a cellular matrix, was found to occupy the orbit. Drawing the nœvoid tissue out of the orbit with a pair of forceps, so as to keep it on the stretch, Mr. Lawson excised the greater portion of it, leaving only a small part of the tumour at the apex of the orbit. The cavity was then plugged with a small piece of sponge soaked in the liquor ferri perchloridi, and a compress to arrest further hæmorrhage was applied over the closed lids with a flannel bandage.

The sudden diminution in the size of the tumour on the division of the optic nerve was due to the tumour having been cut into with the scissors, and the immediate escape of a large quantity of blood which had accumulated in a cavity in the centre of the growth. One of the large veins of which the nœvoid tissue was composed had evidently given way, and blood had been effused into the substance of the tumour. This also explains the sudden increase in the size of the growth, which was one of the remarkable symptoms in the history of the case.

The child recovered without a bad symptom, and has since continued well.