solidation were present. Emaciation was extreme. The patient gradually relapsed into the "typhoid state," and died on October 26th, 1881. He was under the care at first of Mr. Spencer Watson, and subsequently of Dr. Cholmeley, to whom I am indebted for permission to publish the foregoing and following details.

I made the post-mortem examination thirty hours after death. The body was exceedingly wasted, but showed no marks of external injury, except one small bedsore. On opening the abdomen, the attenuated omentum was found to be adherent to the anterior abdominal wall by easily separated adhesions. These being gently torn away, the following appearances presented themselves:—The small intestines lay in the middle and to the left side of the abdomen, matted lightly together by a recent plastic peritonitis, and enclosed by the web of the omentum. A few coils thus matted projected a little into the pelvic cavity on the left side, and in that situation were covered by a thick layer of inflammatory material, except at one point, where, through a rounded opening the size of a shilling, there projected a small mass of fæcal matter. The whole cavity of the pelvis was lined by a similar layer of semi-organised inflammatory material, and presented the appearance of a large abscess, being half filled with matter, partly purulent and partly fæcal. A track deeply stained by fæcal matter appeared to lead upwards on the right side behind the coils of large intestine. This track, formed through layers of adherent peritoneum, was found to lead up to the lower margin of the right lobe of the liver and to disappear behind it. On removing the anterior chest wall, there appeared a second cavity containing similar fluid, lying between the upper surface of the right lobe of the liver and what appeared to be the diaphragm, greatly pushed up into the cavity of the thorax, on the right side. The walls of this cavity were composed of thick layers of partially organised lymph. The upper wall—i.e., the right side of the diaphragm—was inseparably adherent to the base of the right lung, which again was collapsed and airless. Beyond the limits of this abscess the diaphragm was found to be normal, and the left lobe of the liver unaffected. Within the abscess cavity were two irregular-shaped masses of spongy tissue, loosely adherent by shreddy lymph and covered on their surfaces by a layer of similar material. These two masses were found to be portions of lung. They contained air, floated freely on water when washed, and both to the naked eye and the microscope presented all the characters of recently separated lung tissue. The pleural cavity on the right side was found for the most part closed by adhesions, and contained no pus, nor could any communication be found connecting the tissue or tubes of the compressed right lung with the abscess cavity; on the other hand, the track from the abscess in the pelvis opened directly into it. The upper part of the right lung showed signs of broncho-pneumonia, and there were one or two small patches of extravasation into the lung tissue. In the left pleura there was no sign of inflammation, but the lung showed signs of broncho-pneumonia like its fellow. Further details having but little bearing on the case need not be described. Putting aside, then, the condition of perforated intestine, which was evidently recent and the immediate cause of death, the simple fact remained, that two amputated portions of this man's right lung lay in his abdomen. How did they get there? Can a hernia of the lung take place through a diaphragm ruptured by an abdominal squeeze?

From examination of many recorded cases I find the following to be the ordinary causes of ruptured diaphragm and consequent hernia:—stabs, gunshot wounds, indirect violence (as by falls from a height, &c.), ulceration, gangrene, and congenital perforation, exclusive of true diaphragmatic hernia by the side of the œsophagus. But in all these recorded cases the projected viscera were abdominal. In a paper published in the Pathological Society's Transactions in 1862, Dr. Peacock reviews the literature of the subject with characteristic thoroughness, but makes no mention of pulmonary hernia through the diaphragm. Amongst the cases which he cites, and amongst those that I have inquired into, there are, however, but very few cases where the diaphragm was ruptured on the right side; in almost all, the abdominal viscera were projected into the left pleural cavity, or into the pericardium, as in a case of very great interest recorded by Mr. Morrant Baker, in the Pathological Society's Transactions, vol. xxviii., p. 63. In his remarks upon this case, Mr. Baker lays much stress upon the physical causes by which diaphragmatic herniæ are produced—viz., the constant tension within the abdomen, as proved by the readiness of the abdominal viscera to escape through any opening, and, on the other hand, what he terms the negative pressure within the chest, due to the constant tendency of the lungs to contract away from the chest walls. Notwithstanding the influence of these positive and negative forces, it may fairly be conceived that a small traumatic or congenital opening might exist on the right side of the diaphragm too small to give passage to so large an organ as the liver; but that even hernia of the liver may occur is amply proved by a few authenticated cases, notably by a case recorded by Dr. Gustav Jüdell in *Deutsche Zeitschrift für Chirurgie* in 1876, of a man, aged thirty-five, who lived for six months with a partial hernia of his liver into the right pleural cavity, the result of accident. It is well known that hernia of the lung may take place through any other of the chest walls that present from any cause a sufficiently weak spot. It is equally true, though possibly less well known, that a person may live to adult, and even old age, with a perforation of the diaphragm. Sir Astley Cooper records the case of a servant girl who died at the age of twenty-eight with a congenital perforation, and one case recorded by Cruveilhier had actually attained seventy-five years before a fatal hernia took place. Traumatic as well as congenital perforations may likewise exist for years without giving rise to symptoms, as in a case published by Sir James Alderson in 1858. Bearing these facts in mind, may it not fairly be assumed that, under ordinary conditions, a hernial projection of the lung may take place almost as easily through a hole in the floor as through a hole in the wall of the chest? In the latter case resistance is offered to the hernial protrusion by the natural elasticity of the skin and subcutaneous tissue, whilst in the former the positive pressure in all directions of the abdominal viscera must be taken into account, and of these resisting forces the latter is undoubtedly the greater, but that it is of itself sufficient to resist the protrusion of a lung expanded by a deep inspiration is doubtful. During such acts as coughing and straining, where the abdominal muscles are brought actively into play, there can be no doubt that a protrusion of lung through the diaphragm would not be possible. But, assuming that during ordinary deep respiration such a hernia may occur, it is conceivable that a sudden act of violence might so rupture or otherwise affect the diaphragm as to cause an immediate strangulation of the portion of lung projected, and if so strangulated its further separation by well-known pathological processes is easy to understand. In the present case there are no facts to lead me to determine whether any perforation of the diaphragm existed previous to the accident; but on this assumption only can I explain the singular post-mortem conditions that I have related. Of the symptoms produced by diaphragmatic hernia the most important is always the thoracic character of the respiration, and, as in this case, the occurrence of subsequent hæmoptysis and purulent expectoration would suggest that the lung itself had suffered violence. The physical signs must of necessity vary with the extent of hernial protrusion. Whether this form of pulmonary hernia admits of accurate diagnosis cannot be decided by one case alone, but it must be admitted that rapid thoracic breathing, followed by signs of injury and inflammation of the lung tissue in a previously healthy man, form a conjunction of symptoms rarely to be met with in any other condition.

A NEW PLASTIC OPERATION FOR DEFORMITY OF THE NOSE.

BY A. W. MAYO ROBSON, F.R.C.S. ENG.,
LECTURER ON PATHOLOGY, LEEDS SCHOOL OF MEDICINE.

MISS A——, aged twenty-eight, called to consult me for a nasal deformity which had been caused by a severe attack of small-pox several years previously. She said she had asked my advice not so much on account of the deformity, but because of the difficulty she had in breathing and speaking, she being unable to draw a breath without opening the mouth, and to speak without a nasal twang. The former inconvenience also rendered her liable in cold weather to bronchial attacks.

On examination I found the ordinary pittings of small-pox on the face, but on the nose they were especially numerous

and deep, so that the alæ were almost wholly composed of cicatricial tissue, and this in contracting had converted the anterior nasal apertures into mere narrow slits, the sides being in contact with the septum, and not dilating during respiration. The patient being under ether, I slit up the nostrils posteriorly, so as to make two very large anterior nasal apertures; but knowing that in healing constriction would again take place, unless I took measures to prevent it, I transplanted into these gaps two portions of skin which I had just previously dissected from the arm, fixing the grafted portions in position by means of fine silk sutures.

All the details were carried out as far as possible in the manner recommended by Dr. Wolfe in the *British Medical Journal* for March of last year, where he reports a case of ectropion for which he transplanted a piece of skin from the arm into the cheek. I was careful in having all

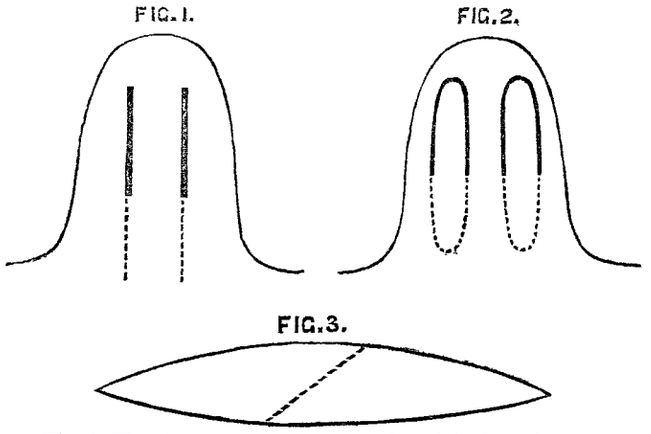

Fig. 1. The straight lines represent the original apertures; the dots show the incisions. Fig. 2. The dots represent the new flaps, and the oval spaces the anterior nasal apertures. Fig. 3. The shape and size of the flap taken from the arm; the dotted line shows where it was divided to make one for each side.

bleeding stopped before applying the new portions, and in avoiding handling the skin after removal. I also took care to dissect off all the subcutaneous tissue from the new flaps, and to retain them between layers of lint wrung out of warm water until the moment of application. The after-treatment consisted of warm-water dressing simply. The sutures were removed on the seventh day. The cuticle separated, but no other portion of the new skin suffered.

Two months afterwards my patient called to see me, expressing herself much pleased with the result, for she could now breathe with the mouth closed, and speak without a nasal twang. The two flaps had become so far blended with the contiguous skin as to be distinguishable only on close inspection.

The above diagrams will, I hope, serve to render more clear the above remarks.

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.

GUY'S HOSPITAL.

DISEASE OF KNEE; NECROSIS OF NEARLY THE WHOLE OF THE SHAFT OF FEMUR; EXCISION, WITH REMOVAL OF SEQUESTRUM.

(Under the care of Mr. BRYANT.)

FOR the following notes we are indebted to Mr. Duckworth.

Wm. B——, aged two years and a quarter, was admitted into Lydia ward on March 26th, 1879. On admission, the patient had phlyctenular ophthalmia of both eyes, the lids of which were red. The upper lip was in an eczematous condition. The right knee was swollen and disorganised, and its outlines were lost. There were several sinuses, and one open abscess at the back of the knee, from which there was a good deal of discharge. The sinuses were dressed with terebine lint, and cod-liver oil and steel were given internally.

On April 18th, under chloroform, a length of india-rubber tube being bound round the thigh as a tourniquet, an incision was made in a transverse direction, beginning at the inner side of the knee, across the joint below the patella. The ligaments were cut through; the knee was flexed and a piece of bone was sawn off from the upper end of the tibia, removing with it the semilunar cartilages, which were found healthy. Two-thirds of the condyles of the femur were sawn off. Then a sequestrum was removed from the lower end of the medullary cavity. On removal of this the cavity was found for quite three inches to be filled with a caseous purulent material. At the other end of the cavity there was found another sequestrum, which was removed, and upon further examination three or four more sequestra at the back of the cavity were found. The lower end was enlarged by notching backwards to remove these sequestra, and to allow of a very free drainage. The cavity was washed with iodine and water. No arteries had to be tied; the wound was closed with silk sutures, and a free communication having been proved to exist through the old opening at the back of the knee, a drainage-tube was inserted that way. The wounds were dressed with terebine lint, a back splint was put on, and later in the afternoon the thigh was bound with waxed bandages.

The case continued to progress favourably, but on the 22nd May the temperature rose to 102·8°. The patient was flushed and peevish, and the knee was a good deal inflamed.—23rd: Temperature 101°.—24th: Temperature 104°.—29th: The temperature was normal; going on well again.

On July 4th a gum-and-chalk splint was applied to the knee and leg.

On Aug. 2nd the temperature was normal; the wound looked healthy. A back splint was put on, and the wound was dressed with carbolic oil.—12th: Seemed doing well, but the patient would take the splint off.

Everything went on well subsequently, and the child left the hospital in September with a perfectly good limb.

Mr. Bryant said that he had never removed so much dead bone from the femur in a case of excision as in the one reported. The sequestrum indeed involved nearly the whole shaft of the bone, and yet a good result was obtained. The case was, he added, an encouraging one.

LONDON LOCK HOSPITAL.

CASE OF SYPHILITIC ENDO-ARTERITIS WITH THROMBUS OF LEFT MIDDLE CEREBRAL ARTERY; DEATH; NECROPSY.

(Under the care of Mr. ALFRED COOPER.)

FOR the following notes we are indebted to Mr. J. Nield Cook, house-surgeon.

Robert T——, aged twenty-nine, married, but separated from his wife, was admitted into the Lock Hospital in a semi-comatose condition on Nov. 8th. He was aphasic and partially hemiplegic, the right being the side affected. He walked with assistance, dragging the right foot; he grasped when asked first with his right hand feebly, then with his left firmly; he could not protrude his tongue. There was no facial paralysis, no strabismus, and the pupils were natural. He was put upon a milk and beef-tea diet, as he could not swallow anything solid, and was ordered fifteen grains of iodide of potassium three times a day, and half an ounce of cod-liver oil twice a day.

The previous history of the case was as follows:—He came to this hospital in November, 1880, with a primary sore on the penis, which he said he had contracted six months before, amygdaloid glands in both groins, a papular syphilide of the trunk and extremities, and an ulcerated throat. He had evidently been treated with mercury, for his gums were spongy, and there was a shallow ulcer on the inside of the lower lip, probably mercurial. He was admitted to the hospital, but was discharged six days later at his own request. He then attended in the out-patient department, under Mr. Edward Milner, for six months. He showed a peculiar susceptibility to the action of mercury, such small doses as a grain and a half of mercury with chalk powder given twice producing considerable ptyalism; was always melancholy. For four months Mr. Milner treated him with small doses of perchloride of mercury; for the remaining two