

served must have been some condition of the blood which would have led to erysipelas, but that she had not sufficient vital power to develop the disease. No visceral disease was found at the autopsy.

PROLAPSE OF THE RECTUM.

ONE would suppose this affection to be common enough, but in reality it is comparatively rare, so much so that a sketch was taken of the gut in this condition in a patient of Mr. Fergusson's at King's College Hospital on the 30th May, who was an old woman, the subject of prolapsus ani as well as of the rectum for some years. The best method of treatment, Mr. Fergusson thought, was to cut away little portions of skin from the margins of the anus, and in the course of cicatrization the prolapsus gets cured. No other method, he observed, would cure it. We have seen M. Guerseant treat this affection in children at the Hôpital des Enfants Malades in Paris, over and over again, by applying the actual cautery to the margins of the anus, and with the best results, although not invariably so. This affection is recognised in two forms, one with prolapsus of all the coats of the rectum, and the other of the mucous membrane only. Mr. Ashton, in his recent work on the Rectum, says, in the large majority of instances, where the eversion does not take place to a great extent, it is the mucous and sub-mucous areolar tissue only that descends. It is the experience of every one to find this affection much more common in children than in adults, from a variety of causes, which we need not here mention. In old adult cases, not amenable to medical treatment, Mr. Ashton treats them by the operation recommended by the late Mr. Copeland, which consists in pinching up one or more folds of the mucous membrane with forceps, and including them in a firm ligature to produce strangulation; the bowel is then returned, and in a few days the ulcers caused by the ligatures heal up, and a perfect cure is effected. Mr. Curling recommends in some cases excision of portions of mucous membrane and of skin from the margins of the anus—an operation which he considers also applicable for the cure of prolapsus in women from a weakness of the parts consequent on child-bearing. Mr. Curling speaks of the use of escharotics, such as the mineral acids or the potassa fusa, to effect contraction at the junction of the skin and mucous membrane, so as to form sloughs of greater or less extent. He has not, however, tried them himself, and we think they are not likely to be resorted to in preference to the other methods employed. Nor are we disposed to recommend the actual cautery, from the painful sores we have seen produced, which sometimes heal up with difficulty, although a cure is accomplished in children.

OPERATION FOR RUPTURED PERINÆUM THROUGH THE SPHINCTER.

ON the 3rd June, a woman, aged twenty-three, was brought into the theatre of University College Hospital, with a laceration of the perinæum and recto-vaginal septum, consequent upon a difficult labour four months ago with her first child. The laceration was considerable, and extended partly through the sphincter. The operation was performed by Mr. Erichsen, who made the usual horse-shoe denudation, extending on either side of the rupture, and bringing the surfaces together by means of the quilled and interrupted sutures; and finally dividing the sphincter on either side of the coccyx, to remove tension. The woman was then put under the influence of opium for a few days, and a catheter kept in the bladder. This is the first time this operation has been witnessed in the theatre of this hospital, and it attracted much attention from those present.

AMYLENE AND CHLOROFORM.

FROM what we see of the employment of amylene we are strongly impressed with its advantages over chloroform in some instances. Lately its use has been resumed at King's College Hospital, by Dr. Snow. On the 30th of May, he gave the vapour in three cases—one of hare-lip, in an infant; one of amputation of the toe, in a young man; and one of excision of the knee-joint. All were quickly placed under its influence, say in from two to three minutes, and it was easily kept up. We observe, also, that the smell is not so pungent as it was; it is not liked by some persons, but it is by no means disagreeable. In a case of partially-contracted knee, in a young man under Mr. Partridge's care, the chloroform was given in preference to the amylene, on the 30th of May, so as to relax the muscles in the effort made to forcibly straighten the limb. We saw a very striking instance of this wonderful property of

chloroform, a few weeks back, at St. Bartholomew's, in a case of strangulated inguinal hernia, under Mr. Lloyd's care; it had resisted ice, the taxis and other applications, but was reduced without much trouble, simply under the use of chloroform, which not only produced relaxation of the muscles, but seemed in some way or other to render the seat of structure less tense. Now, in the cases of amylene inhalation, it is the rapid restoration of consciousness immediately on the cessation of inhalation, which gives it a very unmistakably decided advantage over its sister chloroform, which cannot be lost sight of altogether. We have seen Dr. Snow use the amylene in several instances since the 30th May.

PARTIAL DISLOCATION OF BOTH KNEES.

AS an addendum to the case of complete dislocation of the knee-joint, which we gave in our "Records" at page 553, we may mention the case of a young woman, aged twenty-two, who is a patient in St. Bartholomew's Hospital, under Mr. Coote's care. She had a partial lateral dislocation of the left knee seven years ago, which arose without any known cause, but most probably depended upon some faulty condition of the muscular system. The joint and thigh are somewhat attenuated. About three weeks ago the right knee became partially dislocated in a lateral direction, being twisted outwards, and partly obliquely in an opposite direction. There is some swelling of the joint depending upon this. Believing there is more depending upon constitutional defects than any other cause for these partial dislocations, Mr. Coote is, very properly, we think, administering steel and tonics, and leaving the joint quiet, without bandaging of any kind. The patient has large, prominent, and clear eyes, and may be strumous. Considering that no violence has been encountered in the present instance, excepting the twist spoken of, the case is one of some interest in connexion with hysteria. The hamstrings of the left leg are rigid. The lateral dislocations are the most common, as a rule, with the knee, and surgical writers of authority tell us they are always incomplete and usually accompanied with a certain degree of rotation of the limb in an outward direction. Reduction is of course very easy, and may sometimes be effected either by the unaided efforts of the patient, or by a bystander. Dislocation of the knee is more serious than that of any other joint of the body, and yet we have given two instances where bad effects so far have not resulted.

HÔPITAL DE LA CHARITÉ.

SOFTENING OF THE ANTERIOR PORTION OF THE LEFT FEMORAL HEMISPHERE; LOSS OF THE FACULTY OF EXPRESSING WORDS AND PHRASES; CONSERVATION OF THE INTELLIGENCE; DEATH; AUTOPSY.

(Under the care of M. PIORRY.)

(Reported by EDMUND OLDFIELD, Esq.)

A MAN, aged thirty-two, of a robust constitution, exercising the profession of "commis-marchand," entered the Salle St. Charles of this hospital three months ago. His replies to questions addressed to him announced from the first a very remarkable trouble and disorder, with the almost complete loss of the faculty of expressing his thoughts verbally. The intelligence was not in the least affected, for the patient comprehended perfectly that which was addressed to him by the professor and students; but he experienced such a difficulty in rendering verbally his ideas that he manifested impatience, and attempted to reply by gestures. He was told to execute movements, and to place his hand upon various parts of his body, all which he performed perfectly. In fact, he was still able to pronounce one or two very short words, but he was unable to associate and arrange his expressions so as to form an entire phrase. Here is, for example, the commencement of the clinical interrogation to which he was submitted upon his arrival:

D. Où avez-vous mal?—R. Huit heures.

D. Depuis quand êtes-vous malade?—R. Com—mis mar—chand.

D. Quelle est votre profession?—R. Hôpi—tal.

These few words were pronounced with great hesitation, and only after a very painful effort.

The complete absence of this patient's history left "le chef de clinique" in absolute ignorance of all which had passed previously. A minute examination of the thoracic and abdominal organs offered no appreciable anatomical lesions. The superior and inferior members of the right side presented a very marked

exaggeration of sensibility. The diagnosis at the visit of M. Piorry on the 5th of February was as follows:—

1st. Lesion of the left cerebral hemisphere.

2nd. After the disturbance of the faculty of forming and assembling the words, this lesion ought to occupy the anterior irradiations of the striated bodies.

3rd. From the unparalysed condition of the extremities and the manner in which the symptoms are circumscribed, we should be inclined to affirm that the lesion is very limited—limited to the space indicated, and that it does not include a space larger than a nut.

4th. The absence of paralysis leads us also to believe that it is rather a cerebral softening, or "malexie," than a cerebral hæmorrhage or "cephalorrhémie."

5th. The rapidity of the accident leads us to consider the malady as acute or inflammatory.

6th. Perhaps an abnormal production, as tubercle, cancer, or an hydatid cyst may constitute the lesion which occasions the symptoms observed.

Feb. 10th.—The patient died.

On the 12th the post-mortem examination was made, and the brain examined before the students in the Amphitheatre. The only part of this organ which was altered was the anterior region of the left hemisphere. The posterior limit of the lesion corresponded to the distance (two centimetres) behind the fissure of Sylvius, and the disease extended anteriorly in the anterior and left portion of the left hemisphere in such a manner that the total volume of the mass affected was about three centimetres in all its diameters. The aspect of the diseased part was of a reddish-grey, with the consistence of thick milk or pap; it did not present the slightest trace of fibres, nor of the primitive cerebral organization. It was so soft that a current of water removed it, leaving to view an unequal surface, whiter, slashed, and which, distinctly separated from the softened points, was nothing else but the cerebral substance intact limiting the softened points. A great fault was committed in neglecting to examine the arteries and veins supplying the part diseased.

[This fact is not extremely rare, and M. Piorry has frequently observed cases in which he has encountered an analogous relation between the existence of a lesion of the anterior irradiations of the one or the other of the cerebral hemispheres and the presence of remarkable disorder in the function of memory and the faculty of forming words and phrases. He has seen cysts following cerebral hæmorrhages occupying the anterior portion of one of the striated bodies, and which coincided with the inability to articulate or remember words. Recent "*hyperémies*," occupying the same site, have been equally accompanied by loss of the power of speech. We know that the relation between the seat of these lesions and the aptitude to form words and phrases, admitted by M. Boulland, has been denied, or at least rejected as doubtful. The preceding facts go a great way towards leading us to admit its reality. It is in adopting its truth that M. Piorry has, as it were, localized the seat of the disease. The kind of alteration and the extent of cavity were masked by the march of the disease and the conjunction of the symptoms. In anatomical pathology applied to morbid physiology, we must not hastily deny a positive fact on the occasion of a negative fact, and this, above all, in the symptoms depending upon an affection of the nervous system; it is here always advisable to abstain from repudiating as doubtful authentic facts, because the lesions of the nervous system are sometimes so slight, and yet they may destroy the action of the organ, in a fashion so pronounced, that in truth one is exposed to fail to recognise such and such alteration of texture which might exist, and determine the functional troubles observed.]

CHILD POISONING CASE IN LIVERPOOL.—An adjourned inquest was held recently before the borough coroner of Liverpool, regarding the death of a child of Mr. Sillar, of Shaw-street, under circumstances involving a charge of gross negligence, if not one of a more serious nature, against an assistant to a chemist and druggist, in introducing morphia into a prescription instead of powdered sugar, from the effects of which the child died. At the former inquest the assistant admitted that he made up the prescription in question, and the morphia must have been inserted by mistake, which was probably the case, as a party had been purchasing some previously at the counter, and the two glass bottles had likely got misplaced. Morphia and powdered sugar were very much alike, as far as appearance went. The jury, after a lengthened inquiry, found a verdict of "Chance Medley" against the assistant, Paul Strange. The verdict does not involve any prosecution.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, MAY 26TH, 1857.

SIR C. LOCOCK, BART., PRESIDENT, IN THE CHAIR.

DR. EDWARD SMITH read a paper

ON THE INFLUENCE OF THE LABOUR OF THE TREADWHEEL
OVER RESPIRATION AND PULSATION,
AND ITS RELATION TO THE WASTE OF THE SYSTEM, AND
THE DIETARY OF THE PRISONERS.

This investigation is a part of the series of inquiries which the author has prosecuted, and which have been presented to the Royal Society. The aim is to show how great is the wear of system caused by this mode of punishment, the inequality of the punishment, and the serious defect in the quantity of respiratory food supplied to the prisoners. The inquiries were made by the author on his own person in October, 1856, at the Coldbath-fields prison, by the courtesy of Mr. Pownall and other Middlesex magistrates. He worked the wheel during periods of a quarter of an hour each, with intervening periods of rest of a quarter of an hour, in the manner prescribed for the prisoners, and made seven series of observations. The average quantity of air breathed during the labour was 2500 cubic inches per minute, at a rate of respiration of $25\frac{1}{2}$ per minute, and a depth of respiration varying from 91 $\frac{1}{2}$ c. in. to 107 $\frac{1}{2}$ c. in. The rate of pulsation varied from 150 to 172 per minute. During the intervals of rest he sat quietly, and after 13 minutes' rest the rate of respiration varied from 15 to 18 $\frac{1}{2}$ per minute, the quantity of air respired from 725 c. in. to 980 c. in., the depth from 48 c. in. to 53 c. in., and the rate of pulsation from 97 to 120 per minute. Before he entered upon the inquiry, he breathed in the standing posture about 600 c. in. per minute, at a rate of 14 per minute, and a depth of 43 c. in., and the rate of pulsation was 75 per minute. Thus, during the exertion the quantity of air inspired was increased more than fourfold, the rate of respiration was increased two-thirds, the depth of inspiration $2\frac{1}{2}$ times, and the rate of pulsation $2\frac{1}{2}$ times. The returns during the period of rest show that the effects of the labour had not passed away in a quarter of an hour. Compared with the results in the quiet sitting posture, the author stated that the effect on the respiration was $5\frac{1}{2}$ times, and on pulsation $2\frac{1}{2}$ times as great; and taking together the $3\frac{3}{4}$ hours of hard labour with a similar period of rest, he proved that the effect upon the system of the 8 hours' labour was equal to that of 24 hours of those not condemned to hard labour; and that if the whole 24 hours were taken together, the effect would probably be two-thirds greater than that of occupations not laborious. He then contrasted those results with others which he had obtained for the purposes of comparison. Thus, fast walking, at upwards of four miles per hour caused a rate of respiration of 30 per minute, a depth of 80 c. in., and a total quantity per minute of 2400 c. in. The rate of pulsation was 130 per minute. Ascending steps at the rate of speed of the tread-wheel—viz., 640 yards per hour, caused the rate of respiration to be 22 per minute, the depth 90 c. in., and total quantity per minute 1986 c. in., and a rate of pulsation of 114 per minute. Carrying 118 pounds at the rate of three miles per hour induced a rate of respiration of $24\frac{1}{2}$ times per minute, a depth of 90 c. in., and a total quantity of 2141 c. in. per minute, with a rate of pulsation of 189 per minute. Thus the labour of the tread-wheel produces greater effect upon the respiration than any of those modes of exertion, while the effect upon pulsation was greater in the last severe labour only. The total quantity of air breathed per hour upon the tread-wheel (if the labour were continuous) would be 150,000 c. in. as opposed to 27,000 c. in. in the quiet sitting posture; and the wear of the system would, upon the known principles of science, be in a somewhat similar proportion. He then proceeded to consider the effect of this exertion upon the system, and showed that the excessive exercise of the lungs and heart must ultimately lead to phthisis, asthma, emphysema, congestion of various organs, and disease of the heart, and in persons with diminished vital capacity of the lungs, and weak hearts, the effect must sooner be very serious. In reference to food, he was of opinion that the reparative (nitrogenous) food, as flesh and bread, was ample, and required revision only in the better distribution of it—as, for example, the removal of 2 oz. or 3 oz. of the 6 oz. of cooked meat, allowed at the dinner four times per week, to the break-