latter well brushed, rinsing the hands in a weak solution of carbolic acid or Condy's fluid, especially after attending a case of infectious disease; and, whenever convenient, the hands and nails should be attended to before examining a labour case. It is a matter for some consideration whether too much has not been expected from individual remedies; possibly, when the nature of fever poison becomes more clearly demonstrated, as also the several actions of the various disinfectants, by a happy combination of them in the same way that we should prescribe a full purge, corroborative evidence would abundantly spring up, and convert the process of disinfection into a science, instead of theory and speculation, and were it for no other reason than simply to promote cleanliness, strict observance of the patient, also the comfort of those in attendance, especially the amount of confidence and justifiable feeling of security felt by surrounding relations and friends. Even as faith will often save a patient's life, it will produce a less susceptibility to the poison, and thus ensure a greater immunity from danger by removing that fear which is so disastrous to both sick and healthy.

CASE OF AORTIC EMBOLISM.

By JAMES REID, M.A., M.B.

THE following case is interesting, as well from its comparative rarity as from the complete demonstration afforded by a *post mortem* examination of the way in which death was caused.

At one o'clock one morning, I was called in haste to see an old man who had been suddenly taken ill. On reaching the house, I found him dead. Up to an hour and a-half before his death, he was apparently in his usual health; and he was sitting up in bed reading, when he was suddenly seized with excruciating pain in the region of the heart. He repeatedly said to his friends that he felt he was dying, and kept moaning very much. He was covered with perspiration, felt chilly, and complained of the pain getting more violent till he fell down in bed dead, consciousness being retained to the end. Such was the account given by his relatives.

The patient had been under no regular attendance by a medical man, though one day, about a week before, he attended at the Paddington Dispensary as an out-patient. His symptoms at that time were somewhat obscure; and, though the medical officer suspected heart mischief, still nothing definite was made out.

The cause of death could be determined only by a *post mortem* examination, which accordingly was made on the third day after death. On the chest being opened, the lungs were found to be comparatively healthy, though slightly congested. The pericardium was adherent throughout; and the adhesions, though pretty firm, could be broken down by the fingers, except at one point on the surface of the left ventricle, where they had to be cut through. The heart was considerably enlarged; its substance extremely fatty, and very friable and soft. Both sides contained a little blood, but neither was gorged. In the left wall of the left ventricle, at a point corresponding to where the pericardium was so adherent outside, was a small cavity. Its surface was smooth, though unequal; and it was formed at the expense of the muscular tissue of the ventricle, which had here almost entirely disappeared, and become transformed into, or been replaced by a tough fibroid substance so thin that a slight opening had been made through it in cutting the adhesion of the pericardium outside. Loose in the left ventricle, and lying at the aortic orifice, was found a fibrinous concretion of a semicartilaginous consistency, and evidently of some standing. Its shape was irregularly oval, with one side cut off longitudinally; the surface, though studded with irregularities, was smooth, except the flattened side, which was more roughened.

On this body being compared with the cavity in the wall of the left ventricle, the two were found to correspond closely, the one fitting accurately into the other, and leaving the flat side free. The valvular apparatus of the heart was healthy, with the exception of the aortic valves, where there were slight traces of ossification; one of the semilunar flaps being also partially adherent to the lining membrane of the aorta. The liver was large and fatty, and the kidneys were slightly lobulated and granular. The other abdominal organs seemed quite healthy, and there were no traces of any noxious substance in the stomach. The brain was found to be in a normal condition. There was little congestion, and no trace of blood-clots. The quantity of serum in the ventricles was rather in excess.

The cause of death was evidently more or less complete occlusion of the aortic orifice by the fibrinous embolon found there.

This body (which has been preserved) weighs fifty-five grains, and measures one inch and one-fifth in its longest diameter, four-fifths of an inch transversely, and half an inch in depth. On being cut transversely,

it shows a laminar arrangement, having been evidently formed by successive deposition.

The accompanying rude drawing (actual size) will give an idea of its appearance.

The most striking feature in the examination was the close cor-

respondence of the embolus with the shape of the cavity in the wall of the ventricle, the fitting being so accurate as to leave no doubt that the one had been formed in the other, and for some time been lodged there.

It seems more than probable that some time ago the fibres of the left ventricular wall had partially given way under some sudden action of the heart, being unable from their extremely softened and fatty condition to resist the strain put upon them. More or less subacute inflammation had thus been set up, leading to the appearances described, the part where the fibres gave way forming a cardiac aneurism. The outer wall of the aneurism had become of a fibroid nature, fused with the pericardium at that point as stated, and interposed a very thin barrier between the blood in the heart and the left pleural cavity. In the aneurismal sac fibrin had been gradually deposited from the blood, forming, as it were, a complete cast of the cavity, and remaining for a time *in situ*, till, at last becoming dislodged, it was carried by the current up to the aortic orifice. Being unable to pass through, it blocked up the opening; and thus cut off, more or less completely, the supply of arterial blood to the whole system.

The date at which the rupture took place was probably recent. Assuming the pericardial adhesions to have been the result of it, the fact that they could, in the main, be easily broken down by the fingers pointed to a recent origin, as also did the fact that the fatty condition of the heart was probably thoroughly established before it took place.

On questioning the man's friends, I was informed that a short time before, while walking along the street, he was suddenly seized with extreme pain in the region of the heart, accompanied by excessive faintness. After a little, he revived, and was conveyed home. I am inclined to think that this must have been the occasion when the lesion in the ventricular wall took place. Ever since then, he had been complaining of uneasiness about the heart; but, beyond this and the breathlessness from which he had for long been suffering, there were no symptoms sufficiently urgent to make him seek medical advice. During this time the fibrin had been getting deposited in the aneurism, but without causing any marked symptoms, till it was detached an hour and a half before his death, when he was seized in the manner already described. The reason why death was not immediate may have been that the closure was not complete, or that the embolus was carried about in the cavity of the ventricle for some little time before it was finally impacted at the aortic opening.

ON THE MISCHIEFS ACCRUING TO INFANTS FROM CRANIAL PRESSURE DURING LABOUR.

By THOMAS RADFORD, M.D., etc.,

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THE injuries sustained by the infant, in consequence of long continued or violent pressure which the head very frequently sustains in its passage through the pelvis, during a tedious or difficult labour, or by the use of the forceps, has engaged my attention and consideration for a very long period of time (see Essays on various subjects connected with Midwifery; also Observations on the Cæsarean section, etc.); but I have never been acquainted with the very serious and grave consequences stated by Dr. M. Duncan, in a paper read before the Obstetric Medicine Section, at the Annual Meeting of the British Medical Association in London, August 1873, and now printed in the JOURNAL, page 456. That the delicate brain of the infant may sustain irreparable damage from compression it has to endure, even to the extent mentioned by this eminent obstetrician, such as "paralysis, epilepsy, imbecility, insanity." He says this mischief may happen "from the compression and shearing it undergoes, in what would be called a common moderately severe labour which terminates spontaneously; and there can be no doubt that more definite physical injury by instruments is still more likely to have such baneful consequences." The above statement may, on first

view, appear startling, but that such evils do happen I really believe. Already, I have over and over again commented on the physical injuries inflicted on the brain of infants by the use of the long forceps. I have endeavoured, not only to point out the evils which are produced by this instrument, constructed with long handles which enable the practitioner to use a most unjustifiable amount of compression, but I have recommended the use of an instrument with handles so short that it is utterly impossible to produce more pressure on the infant's head than is quite compatible with its safety. (See Essays.) The long forceps ought mainly to be used as a tractor.

The case related by Dr. M. Duncan, upon which he has made his valuable comments, was one in which he applied digital pressure upon the left parietal bone for the rectification of the position of the head, and which was so great as to indent the said bone. The late Dr. D. Davis contrived two pairs of forceps with blades obliquely placed in relation to each other, for the rectification of mal-positions of the head, by the aid of which pressure must be made on opposite sides of the head, although not on opposite points. I think, however, this is an unnecessary multiplication of instruments, and manual assistance may be so applied as not to allow the entire mechanical force to be expended on one point of the head, viz., by placing the thumb anteriorly on one side, and the fingers more posteriorly on the opposite side of the infant's head, thereby dividing the amount of pressure made.

In considering the degree of tolerance of the head of an infant to pressure, in passing through the pelvis during a tedious or difficult labour, it may not be uninteresting or unimportant to call the attention of obstetricians to the consideration of the question of the comparative safety and danger of delivering the infant by the long forceps, or by turning in cases of labour in which there exists pelvic distortion.

When the late Professor Simpson first published his opinion as to the advantages of turning, in cases of which slight distortion of the pelvis exists, over those of the delivery of the infant by the long forceps, I ventured to differ in opinion from him (see *Provincial Medical and Surgical Journal*, vol. ii, p. 3), and I still maintain the same opinion I then expressed, viz., that turning cannot ever become an alternative operation for the use of the long forceps in cases of labour protracted by slight distortion of the pelvis.

The brain of an infant brought through a distorted pelvis by the long forceps or by turning, is not successively and relatively subject in all its parts to the same degree of pressure. When dragged through the pelvis by the long forceps, the pressure is first made upon the superior parts of the hemispheres of the brain, which must inevitably force this organ towards the base of the skull; whereas, when the infant is pulled through the pelvis after turning, the brain is forced upwards from the base towards the vaulted portion of the cranium. Now a question naturally arises—Will the brain of an unborn infant bear the pressure which it may sustain in being forcibly brought through the aperture of the same dimensions by each of these operations, as safely in one as in the other? Is there not a greater chance of organic mischief being produced by turning in such a case, as the pressure is first made just above the base of the skull, where the most important parts of the brain and nerves are likely to be forcibly lifted up from this portion of the cranium? The question can only be settled by a strict investigation. It is a subject worthy the attention of Dr. M. Duncan, who possesses such high qualifications for strict and truthful inquiry.

CLINICAL MEMORANDA.

LIMIT OF PROPHYLAXIS BY VACCINATION.

To check the poison of small-pox, I with others have hitherto maintained that vaccination, to be effective, must have reached the third or ninth day of its progress; or, in other words, that it must be in, or have passed, the areolar stage. The following case appears, however, to throw some doubt upon this opinion.

A creole was admitted on Monday, August 4th, 1873, as a supposed case of small-pox. The rash was of that *quasi* character which would have scarcely justified its refusal, not only on account of its doubtful appearance, but from the fact that the man had been brought from on board ship; that he had been conveyed by the ordinary small-pox ambulance; and also from the immense responsibility that attaches itself in setting free a case which *might* turn out to be one of true variola. Immediately upon his reception, he was vaccinated in four places with lymph (in tube) obtained from the Privy Council Office. On the third day, slight elevations were noticed; on the sixth day, they had become perfect vesicles; and on the eighth (the day week the operation had been performed), the vesicles were everything to be desired, and having a well marked areola, with considerable swelling of the sur-

rounding tissue. From this time until the 15th, the man enjoyed good health; and some difficulty was experienced to retain him in the hospital, as he was most anxious to rejoin in his ship. At this time, however, he complained of backache and sickness, and took to his bed. Three days later, he was suffering from confluent small-pox, and from which at one time he appeared likely to succumb. Since then, he has had slight ulceration of the left cornea, and is even now still unfit to be discharged.

The lesson to be derived from this case is obvious: viz., that although vaccination is in advance of small-pox by five or six days, the protection of the individual cannot always be considered absolutely certain.

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THUMB-SUCKING.

I HAVE observed that a peculiar and rather common deformity of the chest is caused by the habit of sucking the thumb in infancy and early childhood. The weight of the arm on the thorax of the child during sleep produces depression of the ribs in the line occupied by the arm when the thumb is placed in the mouth. As this is a very important effect of "thumb-sucking" never hitherto pointed out, I think it desirable to place this note on record for the benefit of other observers.

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THERAPEUTIC MEMORANDA.

PHOSPHORUS IN NEURALGIA.

IN the *JOURNAL* of the 18th October I observe a note from Mr. S. M. Bradley, headed "Phosphorus in Neuralgia". He there says: "Since October of last year . . . I have prescribed it (phosphorus) in various neuroses—in melancholia, in impotence, in mercurial tremor, in locomotor ataxy, etc.—but have come to the conclusion that its value is most conspicuously and constantly seen in cases of nerve-pain . . . while it has appeared to me quite inert in most of the separate diseases I have mentioned above," etc.

By publishing a series of forty-one cases of neuralgia treated with phosphorus,* I have shown that there may be reason to confer the title of "specific" upon it as a remedy for that disease. It is, therefore, desirable that the therapeutic action of this drug should be investigated in England as it has been, and is yet being investigated by many observers on the continent. But the utility of a mere expression of opinion, though by a surgeon of Mr. Bradley's eminence, may very easily be mis-estimated; and when it is perfectly well known to every reader of continental literature that Professor Gubler's† opinion (which Mr. Bradley endorses and adopts) is in some respects opposed to the results of practice, as noted by Beaumetz,‡ De Mussy of Lyons,§ and by Delpech,|| it might perhaps be not uninteresting to have the opportunity of perusing Mr. Bradley's noted cases, and of studying his reasons for the opinion he holds.

I trust Mr. Bradley may be persuaded to afford us these opportunities, of which the London members of the Association at all events will be anxious to take advantage, apart from the special question of the value of phosphorus. Melancholia, mercurial tremor, and locomotor ataxy, though not exactly rare diseases, are yet, I opine, too uncommon here to allow of the occurrence of many of each kind in a single year of individual practice. Mr. Bradley has, no doubt, had a considerable number of cases from which he feels justified in forming an opinion of the value of a certain remedy in them; and so close and accurate an observer must also have much to communicate on the general aspect of these diseases, which will be gratefully received by less favoured practitioners.

I may remark by the way, that the discovery that phosphorus is not a remedy for impotence, was made by the first physician who systematically investigated the therapeutic powers of the drug—Alphonse Leroi. In 1798,¶ he writes that although phosphorus will temporarily remove this functional disorder, without subsequent continence "*la rechute sera funeste*". I have had the misfortune to prove this in one of two cases of impotence I hastily published as cured.

J. ASHBURTON THOMPSON.

* *Practitioner*, July and October, 1873.

† *Bulletin Générale de Thérapeutique*, vol. i, 1873, p. 385, et seq.

‡ *Bulletin Générale de Thérapeutique*, Jan., Feb., and March, 1863.

§ *Gazette Médicale de Lyons*, July 1868; *Gazette des Hôpitaux*, Nos. 48-50, 1868.

|| *BRITISH MEDICAL JOURNAL*, vol. i, 1868, p. 228.

¶ *Mémoires de la Société Médicale d'Emulation de Paris*, première année, page 170.