he developed a febrile temperature with sweatings and loss of flesh. For some time no explanation of these conditions could be discovered, but after several weeks signs of fluid effusion at the base of the right chest were detected. An exploratory needle obtained a purulent-looking fluid, and when a rib was resected the discharge contained numerous hydatid hooklets and daughter cysts. There can be little doubt that here the original condition was a hydatid cyst of the liver, which at first caused pain, perhaps by producing a limited diaphragmatic pleurisy or a localised perihepatitis. So inconspicuous was this cyst, presumably on account of its small size and its situation on the upper surface of the liver, that it escaped the observation of the surgeon at the exploratory operation. Subsequently the diaphragm was perforated and a suppurative pleurisy was established. The patient made an excellent recovery. Not only may hydatid disease of the liver exist without distinctive symptoms and the condition fail to be recognised until extension to the chest has occurred, but an equal condition of quiescence may obtain in hydatid disease of the lung. This is probably very exceptional, but it occurred in a case reported by Dr. F. J. Smith.² The patient was a boy in whom there were no physical signs and no symptoms worth mentioning, yet he is described as having coughed up the whole of a hydatid cyst in fragments. All these cases illustrate the necessity of bearing in mind the possibility of hydatid disease in cases of more or less obscure disease within the thorax.

¹ Brit. Med. Jour., July 23, 1904. ² Lancet, February 9, 1901.

TREATMENT OF PUERPERAL INFECTION.

CABANES¹ records the results of treating puerperal infection with iodised gauze. He prepares the dressing by steeping gauze in a solution of sterile water and potassium iodide in which 4 per cent. of iodine has been dissolved. The uterus is first douched with an antiseptic solution, and, if necessary, curetted with a blunt instrument. The uterus is then loosely plugged with the prepared gauze, and the vagina is douched out and iodoform gauze is placed in contact with the cervix to absorb leakage of iodine and prevent its injuring the vagina. This dressing is changed every 12 hours.

¹ Medical Press, July 13, 1904.

THE MENTAL EFFECTS OF ALCOHOL.¹

THE mental effects of alcohol differ according as they are the result of a single large dose or repeated smaller doses. The latter may have been kept well within the bounds of "moderation" and yet under the stress of shock or illness they may be responsible for evidences of mental disturbance. A tendency to delusions of persecution is very common in chronic alcoholics. Visual illusions, or delusions based upon them; delusions of the grandiose, boastful, or vain-glorious order; and those of a suspicious and persecutory character are almost invariably caused directly or indirectly by alcohol. Alcoholic insanity may be hallucinatory or delusional in type, both varieties tending to terminate in dementia, which

in some instances may be the primary form. The most characteristic symptom of alcoholic insanity is paramnesia—a failure of memory for recent events, a loss of the quality of nerve cells by which images of past sensations are retained and consequently a defect of the power of associating ideas. This condition—with its resulting confusion of memory—is largely responsible for the deliberate and shameless lying which usually distinguishes these patients. There is also a mental restlessness and wandering, the patient being confused as to time and place. Another peculiarity of chronic drinkers is the impulsiveness of all their reactions when these become excited. Hence such patients exhibit violent temper and unrestrained licence in action and speech. In one class the moral nature is much perverted but there still remains the knowledge of right and wrong and the capacity, under a sufficiently powerful stimulus, to abstain from alcohol.

¹ Dr. Robert Jones, British Jour. of Inebriety, July 1904.

SURGICAL OR TRAUMATIC RHEUMATISM.

THIS term is applied by Dr. Jas. Weir¹ to a condition characterised by aching pain and stiffness in a joint, muscle, or tendon, influenced as a rule by atmospheric conditions, and following, it may be after a considerable interval, some form of local violence. Dr. Weir's argument is that whilst in some of these cases a constitutional cause may have to be recognised and treated, the most important therapeutic measure is the use of Corrigan's button. He has met with numerous examples of this condition in which, though a long course of internal medication had proved of no avail, the cautery gave prompt relief. He has had a similar experience in cases of lumbago which had been unsuccessfully treated by high frequency currents.

¹ Glasgow Med. Jour., July 1904.

AN EXAMINATION OF THE APPARATUS PROPOSED FOR THE QUANTITATIVE ADMINISTRATION OF CHLOROFORM.

DR. WALLER and Mr. Wells¹ have conducted an inquiry into the efficiency of three forms of apparatus designed for graduated administration of chloroform for anæsthetic purposes. First, the Dubois pump, which, it is claimed, delivers continuously, at any convenient rate between 4 and 20 litres per minute, air charged with chloroform vapour at the nominal percentage of 1.2, 1.6, and 2, was found to work easily and well, and the chloroform percentage remained below 2 while the pump was working. A loose face piece should be used and the anæsthetic mixture supplied freely. The drawbacks are the cost (£20), and the fact that the instrument is rather complicated and heavy. The surplus chloroform may be inconvenient to anæsthetist and operator but escaping as it does into the air of the theatre, the inconvenience, owing to the considerable dilution, is trifling.

The Junker apparatus (Krohne and Sesemann) consists of a face piece, freely open to the air, from which the patient inspires definite volumes of chloroform by means of a small accessory pump that drives measured amounts of air through a bottle containing

liquid chloroform. The idea is to deliver a just sufficient proportion of chloroform vapour at the commencement of inspiration, which is practically a very difficult matter to realise, especially as the volume of inspiration varies. The tax on the attention of the administrator is very heavy, and he is liable frequently to fail in securing the exact synchronism between inspiration and chloroform delivery which is essential to complete success with this form of apparatus.

The Harcourt inhaler (Messrs. Griffin and Co) consists of a bottle, tap, and, tightly-fitting face piece. The patient's inspirations draw air through chloroform in the bottle. This is theoretically an unsound principle, because the mask must fit the face perfectly; the bottle must not be shaken in the least; the patient must be motionless, and the respirations absolutely even if the nominal percentage of chloroform is to be uniformly respired. A single shake of the bottle momentarily raises the percentage to more than double its nominal value. With weakening respiration and slower air draft through the chloroform bottle, the percentage of chloroform inspired is also raised. The instrument is portable and cheap. As a result of his researches Dr. Waller makes the following statements:—

(1) Chloroform is not an uncertain agent. The effects it produces are proportional to the mass in which it acts. (2) For ordinary anaesthesia of the

human subject the chloroform inspired should be between the limits of 1 and 2 per cent. (3) Death by chloroform is, in the great majority of cases, death by simple overdose. (4) In the three forms of apparatus professing to deliver graduated amounts of chloroform, the delivery under laboratory conditions is practically what it professes to be. The choice of apparatus is a matter of clinical convenience.

Mr. Legge Symes² investigated the concentration of chloroform vapour in air drawn from beneath a Skinner's mask. Chloroform was applied to the mask by continuous dropping or a single douche, and the air aspirated by means of bellows and sampled in a densimeter bulb.

With moderate and approximately equal quantities of chloroform under ordinary conditions, the mask yields vapour between the desirable limits, but reaching as high as 3 or 4 per cent. when chloroform is copiously applied.

The more open the fabric of which the mask is made, the higher the concentration of the vapour. By the continuous drop method the desired concentration is more uniformly sustained. Changes in respiration produce variation in concentration, and fall in frequency and depth of respiration may lead to inhalation of dangerously concentrated vapour, even when the amount of chloroform is apparently not excessive.

¹ Lancet, July 9, 1904. ² Ibid.

PROGRESS IN MEDICINE AND SURGERY.

CEREBRAL SURGERY.

(Continued from page 297.)

Head Injuries.—In the Hunterian lectures L. B. Rawling⁶ treats exhaustively of fractures of the skull. He shows that the base perforated by numerous foramina and hollowed out to form air sinuses is the weakest part and so most liable to fracture. The lines of force applied to the vault are all conducted to the base which is frequently fractured without any fracture of the vault itself. From the data arrived at in his investigations he works out a table of the different positions and directions of forces applied to the vault and deducts therefrom the variety of basic fracture which will probably result. He finds that fractures of the base may be classified into different varieties, and that the same injury to the vault will generally produce one particular variety of basic fracture. In 215 cases of fracture of the base the mortality was 41·5 per cent. The general mortality of vault fractures is 20 to 25 per cent. Profuse and continuous hæmorrhage from the ear is in nearly every case diagnostic of an extradural hæmorrhage; in such cases there is, much more frequently than is generally supposed, hæmorrhage from the middle meningeal artery; he considers that trephining over the meningeal artery is indicated in some of these cases, and cites two instances in which the ear was plugged and bandaged for profuse hæmorrhage with resulting pressure symptoms, which were relieved by removing the plug. In his experience the escape of cerebro-spinal fluid from ear and nose is not by any means as frequent as is generally

believed. Clear fluid may escape in considerable quantity without any fracture of the base, being derived from the membranous labyrinth or from the mucous membrane of the ear or nose as a result of great vaso-motor dilatation. The chemical examination will not always settle the question; cerebro-spinal fluid contains little or no albumen, but as the fluid which escapes as a result of a fracture of the skull is generally mixed with blood there will be albumen present. The fluid is nearly certainly cerebro-spinal (1) if the discharge begins within 24 hours of the accident; (2) if the discharge is colourless and profuse; and (3) if the discharge continues for several days.

The reducing substance present in cerebro-spinal fluid is only to be found at first, for if the discharge be profuse, it soon becomes merely a serous exudate. The discharge of cerebro-spinal fluid does not materially influence the prognosis. Of nerve injuries, involvement of the 7th and 8th nerves is most common; the 3rd, 4th, and 6th are sometimes, the 1st, 2nd, 3rd, 9th, 10th, 11th, and 12th are very rarely if ever injured. He describes two varieties of injury to the facial and auditory nerves: in (1) there is early and partial paralysis of the 7th with a variable degree of deafness; in (2) early and complete facial paralysis and complete deafness. In (1) the fracture passes in front of the facial nerve, which escapes injury except at the genu, where it may be temporarily compressed by clot, the membrana tympani is frequently torn, and the ossicles may be dislocated. In (2) the fracture generally results from a blow on the occipital region, the line