practical medicine, is certainly inferior to several others which we possess, and that it is not likely to supersede the use of them. That it possesses decided anæsthetic properties, is certain; which indeed, if the first proposition in the essay before referred to be true, as I fully believe it to have, by the experiments there related in detail, been proved to be, we should *a priori* anticipate; but it would appear, even in this respect, to be inferior to the three other fluids which I have named: chloroform, the chloride of olefant gas, and the bromide of ethyl; while it is much less manageable than any of them, and far more dangerous, particularly than the two latter substances; for, if an animal be not fully under the influence of it, the creature is not rendered unconscious, nor insensible to pain; while, if it be so, it is very likely never to recover them. The boundary between insensibility and death appears to be so narrow and ill defined as in practice not to be capable of regulation. When once the dose of any of these agents is such that the heart ceases to beat or air to be inspired, I believe death to be imminent. Beyond exciting a continuation of these two functions (and whatever will do this is valuable), I have no faith in anything which has been suggested. In my opinion, we have no antidote for an overdose of any anæsthetic, and no remedy, except the exhalation of it from the blood as this is brought into contact with the atmospheric air.

Hence the importance of choosing that substance which is the most manageable, the least inimical to the peripheral terminations of the nerves, and is the most rapidly removed from the blood. For that this class of substances act rather locally upon the terminal nerve-fibres, than, as many good physiologists assert, solely upon the central nervous mass is, in addition to the fact of their acting solely upon the part of a living animal to which they may be directly applied, strongly confirmed by the increased heat which is felt in the most distant parts of the body, as in the rabbit's ears, and the much freer flow of blood which the capillaries then give out when the fluid has been absorbed by blood and thus carried to them. No change appears to be effected in the blood itself by the inhalation of these agents. So far as I am able to judge, it is the mere carrier of them.

I perhaps may state that I think it probable the tetrachloride of carbon will be found useful, when the diluted vapour is cautiously inhaled, in certain cases of relaxed bronchial membrane, which often are the sequela of more acute attacks, and which so persistently remain in changeable weather. When I inhaled it, I was annoyed by this condition, every morning expectorating three or four lumps of carbonaceous mucus, and some during the day. Since the inhalation, this has altogether disappeared, and the little irritation of the membrane has also gone.

THE MATER MISERICORDIÆ HOSPITAL in Dublin, was established by the Irish Sisters of Mercy in 1861. The idea of its creation originated with the Sisters, who were so willing to undertake the task of nursing the sick that they gave £10,000 towards its expenses, and then set themselves to work to raise more money for the same purpose by begging, and succeeded in collecting £17,000. Their own living does not cost the hospital a single shilling, and we learn, on the authority of the Government Inspector of Hospitals, that it is kept scrupulously clean; that its ventilation and all other internal arrangements seem admirable; the patients are admitted without any recommendation other than the fitness of the case for admission, and that the hospital promises, when completed, to be one of the finest in Europe.—*London Review*.

CASES OF DUODENAL PERFORATION.*

By ANDREW CLARK, M.D., F.R.C.P.,

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CASE II. On the evening of June 18th, a lad, aged 19, was admitted into the hospital in a state of partial collapse, and alleged to be suffering from retention of urine. This is the substance of his history. On the 16th, he joined in a cricket match, and in the evening, after his return home, felt sick, feverish, and otherwise uncomfortable. On Sunday, he was better; attended to some school duties during the afternoon, and after supper took a short walk without fatigue. During the night he was very restless and slept little. On Monday, he became quite ill, vomited frequently, and was seen by a doctor. It was then found that he had passed no urine since the previous day. He was, therefore, put into a warm bath; but as it brought no relief, and as the lad seemed to be getting worse, he was in the evening sent to the hospital and admitted.

The patient's only complaints on admission, were sickness, with occasional vomiting, pain in the right side of the abdomen, and shortness of breath. The face was shrunk, dusky, and anxious, the pulse very quick and just perceptible; the skin cold, and covered at parts with a clammy sweat. Pressure made in the right hypochondrium increased the abdominal pain; the bowels had been moved rather freely before admission. By means of a catheter, easily introduced, the bladder was found empty. By order of the assistant on duty, some brandy-mixture was administered to the patient, and he was placed in a warm bath. Whilst immersed in the water, he expressed himself much relieved. After fifteen minutes he was removed from the bath, and, whilst being dried by the porter, suddenly fainted and died.

Necropsy. Abdomen flat; a small quantity of grumous fluid in the peritoneal cavity; visceral and parietal peritoneum intensely red from capillary injection and extravasation; a portion of the small end of the stomach and of the first part of the duodenum were glued to the under surface of the liver by a mass of lymph. On carefully examining this adhesion, a minute opening was found, which led into the cavity of the duodenum; and, when the bowel was laid open, a small ulcer was seen, in the base of which perforation had occurred. The ulcer, situated about an inch and a half from the pylorus, was about the size of a sixpence, had thick red rounded margins, and a whitish granular base. The whole mucous membrane of the duodenum was intensely vascular. Brunner's glands were enlarged, and a few of them, stuffed with a cheesy looking compound, were ulcerated at their most projecting parts.

With the exception of a few flakes of lymph on the under surface of the liver, and the presence of an ascaris in the stomach, no other disease was discovered in the abdominal organs; no ascaris was noticed in the peritoneal sac.

The right cavities of the heart were gorged with blood; the left empty. A nearly decolorised tough laminated clot lay in the pulmonary artery, and extended for a considerable distance along its branches, but farther on the right than on the left side; the valves and orifices were healthy.

The apex of the right lung adhered firmly to the walls of the chest. Near the summit was found a mass of softening yellow tubercle, about the size of a filbert;

* Continued from page 662 of JOURNAL for June 8th.

around it were scattered five or six other masses of about the size of peas, yellow, dry, dense, and friable, like bits of scrofulous glands; between these tubercles the lung was intensely vascular and the terminal bronchi were stuffed with the vitreous mucous or cheesy like pus. A few calcareous masses were found in the upper part of left lung, which, on the pleural surface corresponding to them, was deeply puckered and thickened.

Small capillary extravasations in considerable numbers were noticed in the heart, lungs, bowels, and peritoneum.

The problem which this case offers for solution is beset with difficulties, and one could scarcely have wondered if it had been mistaken for cholera. To me the order of events seems to have been as follows: out of general ill-health there arose in the first place follicular disease followed by ulceration of the duodenum; and in the second, the tubercular deposits, most probably of an embolic origin, in the lungs; perforation—how caused is not clear—appears to have taken place on the 18th, and before the peritoneal inflammation which it induced had reached the stage of effusion, the patient sank into a state of collapse. In this condition there probably began in the pulmonary arteries the formation of those fibrinous clots, which proved one of the immediate conditions of death.

This is one of the few cases of adults in whose lungs I have found primitive yellow tubercles, unaccompanied by "grey granulation." In children, the occurrence is common enough. In this case, also, the tubercles were found to be of embolic origin, and specimens of them are preserved in my collection.

CASE III. On the evening of August 27th, I was summoned by Mr. W. Dingley, of Argyle Square, to confer with him about a case of great urgency at King's Cross. Mr. Dingley (to whom I am indebted for an admirable account of the case of which the following abstract is all that can here be given) told me that the patient was a man about 20 years of age, a watchmaker, and possessed of fair health until a very recent period. About the 20th, he had begun to complain of being bilious, and of having pain, nausea, and headache after food; but he continued to go to his work until Saturday, the 25th. On the morning of that day he was seized with sickness and slight pain in the right side of the belly. He then left his work, and on his way home vomited in the street. Entering the shop of a druggist, he took an ounce of castor-oil, which, notwithstanding frequent retching, he managed to retain. The patient continuing to get worse after his return home, Mr. Dingley was summoned to his aid, and saw him for the first time at eight o'clock. The patient was lying on his back in bed with a flushed face, a hot, moist skin, a tongue coated with creamy fur, and a tolerably good pulse of 94, complaining of severe pain of belly, described as resembling a twisting cramp. The pain was pretty generally diffused and constant, but it was not increased by pressure; the bowels had been copiously relieved just before the time of Mr. Dingley's visit, and the fæces, though liquid, were healthy. Early on Sunday morning the patient had become worse; the tongue was dry, and thirst urgent; there was incessant vomiting of a dark green bilious looking fluid. The pain in the belly was now confined to the right side, and extended from the edge of the liver four or five inches downwards. It was much more intense, and aggravated into an agony by pressure; the knees were drawn up; the breathing hurried; the pulse 120, and irregular. Turpentine stupes were applied to the abdomen. Ice was taken at short intervals, and opium

in full doses was prescribed every two hours. These remedies were followed by considerable relief. In the evening, arrow-root and beef-tea were taken and retained. Vomiting had almost subsided. At eleven, the patient had half a drachm of Battley's liquor opii. He passed a tolerable night. On awaking in the morning somewhat refreshed, he turned upon his right side to relieve the tedium of long restraint in one position; and then, immediately, as a curious coincidence, as a consequence of the change of posture, or as a result of the introduction of food into the stomach, the pain returned with all its former severity, whilst the vomiting and all the other symptoms quickly followed in its train; during the day the patient became steadily worse; no remedy afforded the slightest relief to the patient's sufferings, and late at night, Mr. Dingley and I saw him together in consultation. He was then lying on his back in bed with the knees drawn up; the features were pinched, the eyeballs sunk, and the face dusky, like that of a choleraic in collapse. The patient's manner was restless; his expression betokened intense anxiety, and loud groans broke frequently from his lips; the skin was cold, dark, and covered with a clammy sweat; the breathing hurried; the pulse extremely rapid, thready, and irregular. The patient's intellect was quite clear, and he replied to questions put to him collectedly though in broken words. His only complaint was pain, agonising pain, in the right side of the abdomen, shooting through to the back; the whole belly, however, was swollen and tympanitic; and the slightest pressure at any part was followed by intolerable pain. We could come to no other conclusion than that the case before us was one of duodenal perforation, followed by peritonitis; that death was nigh at hand, and that the only thing left us to do was to make free from suffering the few remaining hours of life; but even in this after many trials we failed, and it was not till after seven more hours of terrible suffering, that our patient died. A *post mortem* examination was refused; and though our confidence in the accuracy of our diagnosis is unshaken, the only quite satisfactory proof of it is unhappily wanting.

At the conclusion of his report on the above case, Mr. Dingley tells me of another almost exactly similar to it, which occurred in his practice eight years before. A *post mortem* examination was made, and the cause of death found to have been perforation of the duodenum, followed by peritonitis.

The following case was admitted into the cholera wards of the London Hospital, but was not seen by me. The case was reported by Mr. Heckford, from whose notes I make the following abstract.

CASE IV. "G. S., aged 60, a large robust man, was brought to the hospital on October 6th, about 9 p.m. He had been at work as a carman till about an hour before admission, when he was suddenly seized with severe pain in (the right side of) the abdomen. When first seen, he had, in addition to this, a feeble pulse, cold extremities, anxious countenance, and vomiting. This condition, however, did not by any means resemble the state of collapse usually present in cases of perforation. A draught of camphor, ether, and opium, was given him for the night. In the morning, as the vomiting was persistent, an effervescing mixture, with hydrocyanic acid and ammonia, was ordered, and also castor-oil to relieve the confined bowels.

"During the first twenty-four hours, the case was supposed to be one of colic; for, although he vomited frequently, nothing very urgent was noticed in the symptoms. On October 8th, peritonitis was evidently present; but even then there was an absence of the characteristic drawing up of the knees.

The patient died exhausted on the morning of the 9th."

Among the *post mortem* appearances, it is noted that "the abdominal cavity contained a large quantity of a thick yellow fluid, on the surface of which was a fatty looking matter. The visceral layer of the peritoneum was everywhere vascular and opaque—the parietal layer being coated with soft yellow lymph. In the duodenum, about three lines from the pylorus, was an opening of about the size of a four-penny-piece, having a thin well-defined margin, and surrounded by a circle of thickened tissue. The gastro-intestinal mucous membrane was otherwise healthy. Extensive granular degeneration of both kidneys was present.

"The patient's wife was certain that, up to the time of seizure, he had not made any complaint excepting that for a few weeks he had had a sense of weight after taking food." (*Lancet*, November 24th, 1866, page 577.)

[To be continued.]

ON

ALCOHOLIC NARCOTISM.

By W. F. WADE, B.A., M.B.,

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THE narcotic effects of alcohol, though less met with than the stimulant ones, are yet well known. An admixture of the two classes of effects is very common. Even with a history of drinking, and evidence of probable intoxication, it becomes often a matter of difficulty to determine in a given case whether a patient is suffering from alcoholic or other poisoning, or from some disease of the brain, or injury to the head. And cases of the latter class are, conversely, mistaken for intoxication. In the reports of police courts and coroners' inquests, we often read that a medical man has got discredit and sometimes censure for a mistake, which probably under the circumstances was quite excusable, if not unavoidable, but which, it must be admitted, has sometimes been due to haste, inattention, or ignorance.

But when we see a case without history, when we have no reason to suppose that a person has been drinking, and most especially when we have no evidence of any previous stage of excitement, and when there is no smell of alcohol escaping either from the skin or lungs, then I think we may very probably fail to understand the nature of the case.

At all events, I have to admit that certain cases were quite familiar to me clinically, which to my mind, as at present informed, were cases of alcoholic narcotism, but which were quite unrecognised by me as such, till accident furnished the key to them. Whilst living at the General Hospital as House-Physician, I became familiar with a class of cases of which both the history and the phenomena presented a most singular uniformity.

A young girl, between 15 and 20, would be brought into the hospital in a state of insensibility, the surface of the trunk, and of the extremities, of normal temperature, as tested manually, expression of the countenance perfectly placid and natural, no lividity, no frowning, no twitching of the eyelids, no contraction of the mouth, nor any trace of convulsion. The respiration quite tranquil, entire absence of stertor, no peculiarity about the pulse or breath-rate. The pupils in one sense natural, in another not quite so:

that is the pupils larger than they would have been in ordinary sleep, but not more dilated than they would have been had the patient been awake. This is an important point, because poisonous doses of alcohol produce dilatation of the pupils, and this want of correspondence between the size of the pupil, and the apparent naturalness of the sleep, is no doubt owing to slight alcoholic dilatation. The only other peculiarity about the girl would be her complete insensibility; no amount of shaking, shouting, or pinching would in the slightest degree seem to arouse her; possibly, during the shaking, a slight smile would play about the mouth for a moment, caused, I presume, by a dream, but which, on one or two occasions, raised for the moment a suspicion in my mind that she was shamming. There has been as much uniformity in the history given by the friends of such patients, as there has been in the symptoms presented by the patients themselves.

The girl has been either actually a domestic servant, or has been, if living at her own home, acting as a domestic. The statement has always been that on the previous evening (for the admission into hospital has almost always been before mid-day) there had been a great quarrel, sometimes amounting to, or terminating in, a fight between some of the other inmates of the house, the father and mother, master or mistress, or between one of these and a lodger, but that the patient herself had taken no active part in this, and had not received any blow, fall, or injury; that, either late at night, when the disturbance had ceased, or else the next morning, she had been found insensible, generally not undressed, just in the condition in which she had been brought to the hospital, and which I have already described.

I was in the habit of calling this coma a form of hysteria, for want of a better name, and concluded that the agitation or fright, caused by witnessing the fray, had been the determining cause of this presumed hysterical attack.

In one case I remember the coma lasted for nearly, if not quite, twenty-four hours after admission, that is to say, in all for about thirty-six hours; but, generally speaking, I found that the administration of a foetid enema, with some castor-oil, emptied the lower bowel, and that soon afterwards the patient awoke.

I never observed any hysterical symptom of any kind whatsoever, nor anything else of an unnatural character, after the patient had once been thoroughly awakened. The awakening was most commonly abrupt, not gradual.

I had no suspicion whatever that the symptoms in question had any connexion with alcohol, till a case occurred in my own house in a young servant girl, who had not previously manifested any hysterical symptoms. There had been no disturbance or quarrel to overthrow her mental or moral equilibrium; nothing had been noticed strange about her before she went to bed, but, instead of falling quietly asleep as usual, she began shortly after getting into bed to toss about, and to talk in a rather wild manner like a person talking in a delirious sleep. After sometime she became quiet, and in the morning, when a fellow-servant, sleeping in the same room, tried to rouse her, she found it impossible to do so. I saw her soon afterwards. I was familiar enough with the condition in which she was, but certainly more puzzled than ever to explain it, because there was an entire absence of the slender elements upon which I had based my previous theory. However, I afterwards discovered that shortly before going to bed she had drunk off about six to eight ounces of port wine, and then I formed the opinion that it was an instance of alcoholic coma.