share to the advance of knowledge than our countrymen engaged in investigating other branches of science.

Fear exists in the minds of many that the new views resulting from new observations will tend to make us bad practitioners, and will lead to the hasty introduction of new plans of treatment before the principles upon which they are supposed to rest have been firmly established by experience, and verified by repeated observation.

But if such results are to be apprehended, they will not be brought about by those who prosecute investigation with earnestness and conscientious care. Every one who has really attempted thoroughly to investigate any one point soon discovers how very difficult it is to convince himself that the conclusions at which he has arrived are true. He requires proof beyond proof before he can feel satisfied that his views are correct. Such a training must teach caution, and is far more likely to correct than to encourage that habit of careless and impatient observation and generalisation which lead a practitioner hastily to put in practice a new plan of treatment, or hastily to reject as useless a system which has been practically carried out and found efficient by his predecessors. A habit of accurate and minute observation will necessarily lead the practitioner to employ few remedies the action of which is well known and has been established by experience. The effects of these he would study as carefully as possible. In fact, the spirit of scientific research is thoroughly opposed to the alteration of any received views of practice, except upon the most conclusive evidence. Modern research must not be held responsible for the modern tendency to undervalue or to ignore recognised modes of treating disease. Those who prosecute scientific work in connexion with medicine are not responsible for the numerous preparations which are being perpetually forced into use, and shamelessly vaunted as valuable remedies for this or that disease. In many instances, there never has been at any time the slightest ground for supposing that many of these substances, the virtues of which are so extolled, possessed the properties they were reputed to have, and their uselessness is soon proved by experience; but as fast as one series is discarded, another takes its place. The scepticism of *all* treatment which is necessarily engendered by this very useless and capricious system has been by some wrongly attributed to the spirit of minute investigation which has so greatly increased during the last few years. True research would, on the other hand, necessarily create in the mind an anxiety to study closely and for a length of time the action of simple substances which are in ordinary use—for example, the action of acids or alkalies, and such simple bodies, in health and in various diseases.

I have ventured, sir, to allude to the relation of minute research to the progress of practical medicine, and have advocated the further prosecution of scientific inquiry by physicians, because I believe that the opinion which has been acted upon by many distinguished men, and which is still entertained, is strictly true; viz., that all progress in medicine really depends upon the prosecution of scientific research in connexion with disease. It seems to me that the increased facilities for investigation should call forth more work on our part.

The great activity now prevailing on the continent should excite in us a desire to bear our share of the labour. Medicine, like every other branch of natural knowledge, is continually progressing; and its true interests demand that we should maintain constant efforts to advance it. I have urged this as strongly as I can, because I believe that, unless we keep in view the importance of scientific investigation as well as the practical treatment of disease, we cease to follow the examples which have been set us by Harvey and Hunter, and other distinguished men, of whom we are so justly proud; and, unless the system of scientific inquiry so earnestly prosecuted by them be closely followed up by us, British medicine will no longer continue to occupy the high position to which our predecessors have raised it.

Original Communications.

RARE CASES IN MIDWIFERY.

By EDWARD COPEMAN, M.D., Physician to the Norfolk and Norwich Hospital.

[Continued from page 133.]

CASE X. *Repeated Difficulties and Narrow Escapes in Successive Confinements.* Mrs. — was confined on the 6th of December, 1854; and, with the exception of a little threatening of puerperal disturbance on the third or fourth day, had been going on quite well until the 23rd, when she was attacked with pain in the right lumbar and iliac regions without rigor, and difficulty in getting the bowels relieved. In the course of the day, the pain became worse, and she had enemata, calomel, and opium, etc., with but little benefit. After a while, however, she had a very large fecal evacuation; and the abdominal pain was relieved, in a measure, by turpentine stupes. But, on the evening of the 24th, there was still some tenderness in the body, not uterine, and the pulse became more frequent, from 84 to above 100; and early on the morning of the 25th, she had a fainting fit. The lochia had ceased before the present attack, and there seemed to be no uterine complication of any moment. At 10 A.M., on the 25th, I saw her, and found her with a pulse at 120, small, but not wiry; tongue furred and indented; no headache or delirium. There had been no vomiting. She had no abdominal pain when quite still, but a good deal of tenderness on pressure, both in the situation of the ascending and descending colon; scarcely any in the uterine region. The colon in its whole course was distended and tympanitic, so that its outline could be seen through the integuments. There was inability to pass urine; but a sufficient quantity was secreted, and of a good quality. Pulse 120. The countenance was good. The bowels were unwilling to act. The surface of abdomen was vesicated by the turpentine. She was ordered to take three drachms of castor-oil and two drachms of spirit of turpentine; to have a turpentine enema at the end of three hours; to have an anodyne fomentation constantly applied; and to have good meat broth. The catheter was used.

9 P.M. She had had two liquid stools since the morning, of a light brown colour. She had also passed urine once without the catheter. She kept the medicine down; but vomited some arrowroot taken a little while ago. The abdomen was less tender; and she had some quiet sleep; but the pulse was very feeble, and rather more frequent. She was ordered to take a drachm of spirit of turpentine every four hours.

Dec. 26th, 9 A.M. She had a tolerably quiet night, but, although inclined to sleep, was disturbed frequently.

by griping pains in the abdomen, which she attributed to the medicine, thinking she could distinguish it from the other pain she had suffered. The abdomen was less tender everywhere, except in the situation of the descending colon and above the left groin. The transverse colon was prominent, and she felt pain when air passed along the bowels; but she had no sensation as if the bowels wanted to act, or that an action would give her relief. The tongue was cleaner; the skin moist; the pulse still rapid and indistinct, but not so frequent as on the last night. She had taken three draughts, broth, and coffee and milk, all of which had kept down. She had no relief from the bowels in the night. She complained of the weight of the fomentations, and was ordered to have lint sprinkled with laudanum applied to the tender part instead. There was no headache. There was slight reappearance of lochia. About a pint of healthy urine was drawn off this morning, none having been passed in the night. There was no chill. Respiration was a little hurried; but full inspiration did not now cause pain. The countenance was good. She was ordered to have an enema of castor-oil and soap, to be followed by an opiate enema, and to continue the turpentine.

9 P.M. She had a good relief from the bowels after the injection, and was rendered very sleepy and drowsy by the subsequent opiate enema. The skin was moist; the abdomen was less tender apparently; but she was so much under the influence of the opiate, as to be with some difficulty roused.

Dec. 27th, 9 A.M. She remained under the influence of the opiate until early in the morning, when she awoke feeling more comfortable; but had pain in the left side of the abdomen when air passed along the bowels. There was no motion. Pulse 108. Tongue furred. She had no sickness. Turpentine was again applied externally to the painful part of the abdomen. A soap enema was given; and the turpentine draught was continued. In the middle of the day, she was alarmed at a sudden increase in the size of the abdomen, accompanied with pain, and her attendants thought she was dying; but she soon had a plentiful relief from the bowels containing some scybala, and was better.

At 9 P.M., her general condition was improved; nourishment had been repeatedly taken; the abdomen was vesicated by the turpentine. Pulse 108. Tongue moist. She had taken no draught since the morning; but was directed to take them again now, and to have another opiate enema if restless. Wine, with arrowroot occasionally, was ordered.

Dec. 28th, 9 A.M. She had a quiet night without the opiate. The abdomen was still conical, and very tender on the left side towards the left groin, but not elsewhere. Pulse 108. She was ordered to have another soap enema, and to continue the turpentine draughts.

9 P.M. She had a plentiful motion in the afternoon, and an immense escape of wind, followed by a diminution of abdominal pain and distension. She took the turpentine draughts without inconvenience. There was now a considerable movement of air in the bowels, creating pain when passing through the colon. She was ordered to have an opiate enema if required.

Dec. 29, 9 A.M. The patient had a good night without the opiate. A plentiful fluid motion passed at 2 A.M., attended with immense discharge of air, and another about an hour ago; both were healthy, and not containing scybala. Tongue cleaner. Pulse 100. The abdomen was much less tympanitic, and nowhere tender, except in the situation of the sigmoid flexure, to which turpentine was to be again applied.

Dec. 30. She was restless during the first part of the night, and had the opiate enema; after which she slept comfortably. At noon, she had a soap enema. She took the turpentine draughts every five hours, and broth, coffee, milk, and jelly.

From this time to the 4th of January, the patient was going on favourably; and I had no occasion to see her again.

On March 7th, 1856, this lady was again confined. This, her second labour, was easy and natural, but three weeks short of full term, and followed an attack of remittent fever of six weeks duration. Her surgeon remained with her two hours after delivery, and left all right; but was soon afterwards summoned, and found her in a state of extreme exhaustion and danger. There was hæmorrhage enough to exhaust her in her weak state, but not much actually in quantity. The uterus was contracting and dilating. I introduced my hand into the uterus, and removed a portion of chorion; but I kept it there more than an hour before any satisfactory contraction took place; and she remained for many hours afterwards in an extremely critical and dangerous state. There was no more hæmorrhage; next day she was better; and on the 17th, I heard she was doing quite well.

On May 25th, 1858, she was attacked with rather severe hæmorrhage about the period of mid-pregnancy, and threatened with abortion; but no uterine pain followed, and pregnancy was not interrupted. On Oct. 6th in the same year, she gave birth to a fine living girl, after a short and easy labour. The placenta followed naturally; but, some hæmorrhage occurring soon after, Mr. — introduced his hand, and removed some retained membrane, and the hæmorrhage for a time ceased. It soon, however, recurred, and my assistance was requested. I arrived at 5 A.M., about an hour after the birth of the child. Hæmorrhage was still going on, the uterus alternately contracting and relaxing, and the patient was in a dangerous state of exhaustion, without a pulse, and occasionally hysterical. A good deal of brandy had been given, and she had been sick. She had also taken ergot and laudanum; and cold had been freely applied. Presently the symptoms became so alarming, that I introduced my hand into the uterus to ascertain the cause of the hæmorrhage, and put a stop to it if possible. The uterus was large and perfectly flabby, not contracted nor contracting in the least, and containing a few clots and some membranous debris, which I got into the palm of my hand; but I kept my hand in the uterus, and compressed the aorta, for more than an hour, in the vain hope of inducing contraction. These measures had the effect of restraining the loss during the time, though not of entirely stopping it. I, therefore, then injected equal parts of brandy and water into the uterus several times without withdrawing my hand; and, after some considerable time, I felt the uterus gradually coming more into contact with my hand, *falling upon it rather than contracting*, and I thought I might withdraw it with the coagula it contained. This I did; and, as the uterus was still very flabby, I introduced ice to induce contraction; for it was very evident she could not survive any return of hæmorrhage. When I introduced the ice, I came into contact immediately with the internal surface of the uterus, which, in its flabby passive condition had followed my hand, when I withdrew it, almost to the os externum; indeed, if she had coughed or vomited just after I had taken away the coagula, the uterus might have been completely inverted, and even protruded externally. I replaced it without difficulty, carrying my hand gently upwards until I reached the fundus, and put several pieces of ice into its cavity. Hæmorrhage did not recur after this; but she remained several hours in such a state of depression, and almost without a pulse, that we could hardly say, from one five minutes to another, whether she would live or die. The only satisfactory feature in the case was, that she never lost her warmth; but her stomach was so irritable that we could give her scarcely anything that was not almost immediately rejected. Her nervous system was also in a very agitated state, and sleep was

almost impossible. In the evening, she had rallied a little, and was able to take lime-water and milk; and we gave her an opiate at night. During the day, she had taken several doses of Battley's liquor opii, a good deal of brandy before I arrived, and afterwards some champagne; but the stomach rejected them all, and they failed to produce any distinctness of pulse.

Oct. 7th. She passed a better night than might have been expected, and was more collected; but she had no recollection of anything that occurred during several hours of the previous day. She had a little uterine pain in the night, and complained of great soreness all over her, as if every part of her had been bruised. The lochia were natural; there had been no return of hæmorrhage; she passed urine freely; and took lime-water and milk without being sick.

Oct. 8th. There was less pain to-day, and no sickness. The lochia were healthy, and she had milk in the breasts. There was epigastric, but no uterine, pain. Her head was uncomfortable; and the pulse rapid and indistinct. Lime-water and milk and an opiate at night were ordered.

Oct. 9th. She passed a restless night, apparently from indigestion. Pulse 120.

Oct. 10th. She was very faint in the night, and much troubled with flatulence. The nervous system was exhausted; but there was no evidence of local inflammatory action. The lochia were pale, but not offensive. The abdomen was flaccid and free from tenderness. Pulse 108. Some coffee and milk were taken in the morning with a relish, and were ordered to be repeated with the addition of an egg, with occasionally beef-tea or gruel for a change. In the course of the day, the stomach rejected the coffee with egg, and it was found necessary to give some ether and compound tincture of lavender on account of distressing palpitation and sinking feeling in the epigastrium. Mustard was applied; and afterwards a liniment composed of camphor, turpentine, and laudanum. Rubbing the body and back with the hand gave her great ease, and enabled her to discharge a good deal of flatus.

Oct. 11th. There was no uterine complication, but still great weakness, and no satisfactory sleep at night. The stomach was uneasy from flatulence. She passed urine freely. The abdomen was soft and free from pain. The ether draught was ordered to be continued.

Oct. 12th. She had vomited several times, and suffered much from gastric irritation; but her head was clearer to-day than I had seen it yet, and her general manner implied a little increase of strength. Pulse feeble, 120. She was ordered to have a turpentine enema, as she had had but one relief since her confinement, and to take a drachm of tincture of calumba three or four times a day in camphor julep. Her nutriment was ordered to consist of arrowroot, gruel, milk, and brandy and soda water according to her own desire. In the afternoon, she was very uneasy; the enema had not acted; and she had a mild aperient pill. At night, she complained of great pain and sense of weight in the sigmoid flexure of the colon, and the bowels had not acted. She then had a large enema of soap and water, with an ounce of castor oil in it; and very soon she had a considerable discharge of flatus, and a large evacuation of lumpy fæces, which greatly relieved her. She had been sick several times in the course of the day. Milk and lime water suited her best as diet, some of which she now took, with a little brandy.

Oct. 13th. She had had no sleep. There had been no sickness; but she had a loose bilious relief early in the morning. Laudanum and turpentine were applied above the left groin, on account of pain in that situation. We thought sleep so necessary, and opium appeared to produce sickness, that we prescribed a drachm of tincture of henbane, to be repeated frequently until sleep was produced. In the middle of the day, she had

less pain, but was confused in her head. In the afternoon, she wandered much, but expressed happy ideas; she looked exhausted, picked at the bed-clothes, examined minutely her pocket handkerchief; and her surgeon thought so unfavourably of her, that he expressed a strong feeling that if these symptoms were not the result of the three or four doses she had taken of the henbane, she would not live twenty-four hours. When I visited her at night, she was asleep. Respiration 16; pulse 96. I felt sure her symptoms in the afternoon depended upon the gradually accumulative effect of the narcotic; and ventured to say she was better than she had been since her confinement. There was no sickness, no fever, no uterine complication. The henbane was ordered to be continued, if necessary.

Oct. 14th. She had not a good night, but slept at intervals. She had a feverish attack, and was now covered with a profuse perspiration, and complained of pain and weight in the left iliac region. The head was clear; pulse 100. There was no uterine disturbance. The urine was plentiful and pale. The pain seemed to depend upon the presence of fæces in the colon; and we gave a full soap and water enema, with castor oil. This was soon followed by the discharge of a large quantity of lumpy fæces. Milk and lime-water were continued. At night, we found her quiet and sensible, with a pulse only 84. A dose of tincture of henbane was ordered.

Oct. 15th. She took one dose of henbane last night; and, finding herself twitching and hurried as soon as she began to doze, she declined a second dose, and got but little rest during the night. She felt uneasiness in the rectum; and, after another enema, had another large lumpy evacuation. Pulse 90; tongue flabby, swelled, sore at the edges, and furred in the centre. The nervous system was still unsettled. She was ordered to continue the lime-water and milk, with a little broth in addition; and to have a pill every four hours, containing a grain of disulphate of quinine and four grains of extract of poppy. In the afternoon, she became dull and languid, and her attendants thought her not so well; but it was only the gradual effect of her medicine, and she had a very comfortable night.

Oct. 16th. She was more herself than hitherto; her countenance was cheerful; pulse quiet; skin moist; tongue cleaner. The abdomen was supple, and free from tenderness; but there was still a little pain and sense of weight in the left iliac region, for the removal of which we gave another enema, with the result of bringing away more lumpy matter. She took a grain of quinine without poppy every four hours during the day, and was ordered to have five grains of extract of poppy at bedtime.

Oct. 17th. She took a poppy pill at bedtime, and slept for two or three hours. At 2 A.M., she took a little broth and another pill; and then slept comfortably until past nine in the morning. The abdomen was flaccid and free from pain. Her appearance and manner were natural. Pulse 90. She had no sense of weight in the rectum. She had taken a little dry toast, and was ordered to have milk and lime-water, blanc mange, mutton-broth, sage, and wine, whichever she might prefer. What a comfort and relief to our minds was it to find her in such a promising condition! What an escape for her!

Oct. 19th. We found her this morning in all respects better. The extract of poppy secured excellent nights, and her appetite was returning. She was ordered to take two grains of quinine twice a day.

I now took my leave of her; and all went on well until the 3rd of November, when I was again summoned on account of a return of hæmorrhage. She had been quite free from loss since my last visit until the previous day, when she was slightly unwell, and it was thought to be a return of the monthly period. The

loss, however, soon became hæmorrhagic, taking away all her strength, and threatening serious consequences. For several days we plugged the vagina with a sponge dipped in Ruspini's styptic, and on one occasion injected an ounce of this into the uterus. She also took a dessert-spoonful of it internally every three hours, after having tried other astringents and ergot, all of which disagreed with her stomach. Her bowels also became loaded; and she had a return of the pain in the sigmoid flexure of the colon, which had troubled her so much before. For this we used enemata of soap and water and olive-oil, which brought away several times a large quantity of lumpy fecal matter. Fortunately, these means succeeded in putting a stop to the hæmorrhage after a few days; and on the 12th of November she was sufficiently recovered for me to cease my attendance, although she was then very weak, emaciated, and pallid, requiring the greatest care and attention in order to restore her strength.

On July 10th, 1860, this lady was again confined. About two months previously, when seven months gone in pregnancy, she suffered for several hours with excessive spasmodic pain in the uterus, but no hæmorrhage occurred; and, as we were afraid of opiates making her sick, as they were wont to do, we gave her twenty minims of chlorodyne, which fortunately quite removed the pain, and did not disagree. The pain did not return, and all went on well until a fortnight ago, when the liquor amnii suddenly escaped, and had been dribbling away a little almost every day since, *thus gradually lessening the size of the uterus*. At six o'clock in the morning of July 10th, labour pains came on gradually and naturally; not, as in former labours, with a rush so as to force the child into the world in a pain or two. They continued at intervals during the day; and, late in the evening, I was summoned, it having been previously arranged that I should be sent for as soon as the head was about to be born, to assist in taking every precaution against hæmorrhage afterwards. The child was born just before I entered the room; and, there being a bladder of ice in readiness, it was at once applied to the abdomen, and I grasped the half-contracted uterus with my hand. The placenta was soon expelled, and no hæmorrhage occurred; but the application of cold was steadily continued, and I still held the contracted uterus in my hand, until, about three hours afterwards, the contraction appeared to be so complete and permanent that we considered it safe to leave. During the first hour after the expulsion of the placenta, the uterus kept contracting and relaxing, as if disposed to resume its former bad behaviour. Mr. — remained with the patient all night; no hæmorrhage took place; and she was going on quite well when I visited her in the morning. I attribute her freedom from hæmorrhage this time to the previous escape of the liquor amnii, and the less sudden expulsion of the child, by which the uterus had lost much of its size from slow contraction before being emptied of its contents; as well as to the precautions taken at the time of delivery.

[To be continued.]

TREATMENT OF DELIRIUM TREMENS.

By JAMES WEAVER, L.R.C.P.Ed., Llandrinio.

SEVERAL practitioners having of late brought before the profession their treatment of delirium tremens, I am induced to add my mite to the general information, and herewith send full particulars of a case just recovered, together with a short reference to eleven other cases with which I have met in my practice during the last six years. I must, however, premise the report by stating that six of the earlier cases were treated by the usual plan, with doses of opium varying from three to five grains every four hours, not forgetting a fair allow-

ance of the habitual stimulant; and I find that the result of these cases has been, two recovered, two died, and two became insane, remaining so to this day. Five other cases were treated with large doses of opium, varying from ten to thirty grains. The last case, of which I enclose a report, was treated still more energetically, and, as will be seen from the perusal, a dose of 120 grains of powdered opium was given at once. Of these latter six cases, all and every one recovered without a bad symptom.

CASE. Feb. 26th, 1862. I was, at 5 A.M., sent for to a farmer in this neighbourhood. I found him very excited; and he told me he had not slept all night, nor for several nights previously, but had had several terrible fancies or dreams of late. I ordered him five grains of opium, with a saline aperient, every four hours; also a fair allowance of brandy and water and beer during the day. I saw him again at 6 P.M. He had had no sleep. I gave him six grains of powdered opium. At 1 o'clock, A.M., on the 27th, this dose was repeated, with fifteen grains of Dover's powder. At 6 A.M., I gave him ten grains of opium, with fifteen grains of Dover's powder. At 1 P.M., he had fourteen grains of opium, with fifteen grains of Dover's powder. At 10 P.M., he took a scruple of opium, with fifteen grains of Dover's powder. It became necessary at this time to give an aperient, so he did not get another dose of opium until 10 A.M. on the 28th, when I gave him a scruple of opium, and repeated this dose every four hours till the same hour at night. He then dropped into a doze, and slept for four hours; and, had not a mistake occurred, causing the next dose of opium to be delayed till 2 P.M. on March 1st, I have little doubt his recovery would have been from this date. However, at the latter hour he took twenty-six grains of opium; at 7 P.M., thirty grains; at 11 P.M., thirty-five grains; at 8 A.M. on the 2nd, two scruples; at 1 P.M., forty-two grains; at 4 P.M., two scruples. On the morning of the 3rd, I found him very excited. He had had no sleep. The bowels were well relieved; the urine was free. At 5 P.M., he took a scruple of powdered opium, with an ounce of laudanum. At 9 P.M. and 12 P.M., this dose was repeated. At 3 A.M. on the 4th, he took a drachm of opium, which was repeated at 6 A.M. and 10 A.M. At this date, seeing a report of some cases strongly urging the claims of digitalis, I gave him half an ounce of the tincture, and repeated this dose in four hours; the only result being, the second dose lowered the pulse from 120 to 80. He passed a very excited night; and at 8 A.M. on the 5th, I gave him a cold shower-bath and a dose of half a drachm of opium, with one grain of tartar emetic. At 12 A.M., he had two scruples of opium, with a grain of the emetic tartar; at 8 P.M., a drachm of opium, with two grains of tartar emetic. The shower-bath was repeated for two minutes. He was also dry cupped at the nape of the neck; and at 11 P.M. he took two drachms of opium, with two grains of tartar emetic. He slept after this dose for thirteen hours, awoke, took a cup of beef-tea with brandy in it, had the bowels well relieved, and went to sleep again. From this date he slept more or less for the next twenty-four hours, and at the end of that time was well. In less than a week, he was going about his usual business. His wife informs me that my patient has slept well every night since the last dose. The quantity of opium taken in this single case, during the eight days of treatment, amounts to only a few grains short of two ounces.

REMARKS. So firmly convinced am I that opium is our sheet-anchor in delirium tremens that, should I meet with another case resisting its influence, I should not have the least hesitation in pushing this remedy up to any necessary quantity.

Opium, to be of service, must be given to produce sound sleep; and, if twenty grains be not sufficient, why not give forty grains?