states that often the beneficial effects of remedies are much more marked after the operation. Flint is decidedly in favour of the operation, and says the views held heretofore are erroneous. "Tapping effects promptly without perturbation, and without impairing the vital powers, the object for which diuretics and cathartics are employed, the latter being generally ineffectual, disturbing the digestive functions, and enfeebling the powers of life." He has reported twenty cases in which the operation was performed once in eleven cases, and the remaining nine cases repeated from three to thirty times. Roberts recommends paracentesis, and states that in cirrhosis it may not uncommonly be performed as a curative measure, and "also that the fluid may be taken away again and again." In the cases I report the operation always gave great relief at the time, and in two has apparently been curative; not so in the others, although they seem to have been benefited and life prolonged. In no case, as far as I can judge, has death been accelerated; the patient never seemed exhausted, and no symptoms of peritonitis were ever shown. An ordinary hydrocele trocar was used in all but one case, and as much fluid drawn off as possible.

CASE 1.—Robert M—, aged forty-four, heavy drinker, had gone out to Australia in 1881, and, returning, ascites developed on homeward voyage. The ship's surgeon wished to tap him, but this was refused. He was seen by two eminent physicians in London, both of whom pronounced it a case of cirrhosis, one saying it would be a case of tapping to the end. No heart or renal disease. Tapped with a Southey's trocar and fluid drained slowly. On May 11th, 1881, 20 quarts were drawn off in six hours; June 4th, 15½ quarts; June 23rd, 15 quarts; July 16th, 7 quarts (tube blocked by small piece of fibrine); July 23rd, 17 quarts; Aug. 11th, 20 quarts; Aug. 28th, 16½ quarts; Sept. 13th, 14 quarts; Sept. 30th, 11 quarts. At the same time he was purged, took diuretics, and green iodide of mercury was given among other remedies. Between the tapplings of Sept. 13th and 30th he went to Matlock, where a pack was put over the region of the liver, which brought out a fine crop of papules. He also took Turkish baths. He was tapped nine times, and is now quite well.

CASE 2.—Robert D—, farmer, aged thirty-three. Heavy drinker. Cirrhosis of liver and ascites. Tapped 1883: July 28th, Aug. 10th, Aug. 24th, Sept. 4th, Sept. 20th, Oct. 5th, Oct. 15th, Oct. 27th, Nov. 9th, Nov. 21st, Dec. 9th, Dec. 30th. 1884: Feb. 1st, March 17th, April 21st, May 10th, May 24th, June 13th, July 2nd, July 26th. Tapped altogether twenty times. Death preceded by hæmatemesis. The quantities of fluid removed each time I cannot state, although they were large. He continued his drinking habits to the last.

CASE 3.—Henry H—, parish clerk, aged sixty-six. Ascites. Has been a temperate man. No pain in the abdomen; no heart or renal disease. Sallow complexion. Tapped 1886: May 10th, June 2nd, July 1st, July 24th, Aug. 13th, Sept. 11th, Sept. 30th, Oct. 15th, Oct. 29th, Nov. 17th, Nov. 30th. 1887: Jan. 13th, March 13th. Tapped altogether thirteen times. The ascites then left the abdomen, but as the legs were very œdematous they were punctured and sloughed in places, allowing a large discharge, which continued till his death, on Aug. 2nd, 1887. To the best of my belief no ascites returned in the abdomen. The usual quantity taken away each time was a fair-sized pailful.

CASE 4.—Susan L—, aged sixty-three, washerwoman. Ascites; no heart or renal mischief. I confess I cannot say certainly the cause of the ascites. The patient was jaundiced slightly at first, but afterwards deeply. No pain. No tumour to be felt in abdomen. Tapped 1887: Jan. 12th, March 7th, April 6th, May 24th, June 11th, July 13th, Aug. 5th, Sept. 9th, Sept. 29th, Nov. 19th, Dec. 28th. 1888: Feb. 14th, Feb. 19th. In all thirteen times. Once during the time she left the neighbourhood and saw some herbalist, but the dropsy increasing, he ordered her to see a doctor at once, as "the water was rising and would drown her heart"; and the poor old lady was in a great state of fright; but a tapping soon relieved her. Here again the amount of fluid was not measured, but often a pailful was drawn off. Shortly before death she left the neighbourhood, and I know she lived but a few weeks after the last tapping.

CASE 5.—Jane C—, aged forty-five. Case of peritonitis, probably tubercular. Tapped 1888: Jan. 9th, Feb. 3rd, Feb. 26th, March 19th—in all four times. Post

mortem the bowels were all matted together. The tapping gave great relief to breathing and general symptoms, and in my opinion did not accelerate death.

CASE 6.—Wm. M—, aged fifty-five, seaman; served abroad twenty-seven years in all climates. Has suffered badly from dysentery. Keeper of wine stores in an asylum latterly. Has drunk freely. Morbus cordis; ascites. Tapped 1888: April 21st, 19 pints; May 15th, 16 pints. He was given pil. hydrarg., 1 gr.; pulv. scillæ, 1 gr.; pulv. digitalis, 1 gr., three times a day, and also opium, for relief of pain at times. At present time is very well, has gained flesh, can walk a mile. Still takes the opium occasionally. No return of ascites.

CASE 7.—Wm. T—, aged fifty-three, merchant; a heavy drinker; cirrhosis of liver with ascites. Tapped Aug. 16th, 1887. Freely purged with sulphate of soda and all stimulants knocked off. After a time, however, ascites returned and he was tapped in 1888, July 2nd, July 18th, Aug. 7th, Sept. 5th, Oct. 3rd, and died Oct. 16th, 1888. He was tapped six times, but more than a year elapsed between the first and last tapping. Continued his drinking habits.

Sutton, Surrey.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

TRANSFUSION OF SALINE SOLUTION FOR HÆMORRAGE IN A CASE OF CUT-THROAT; RECOVERY.

BY P. TYTLER, M.D. ABERD.,
SENIOR SURGEON, ANCOATS HOSPITAL, MANCHESTER.

M. K—, aged thirty-two, was admitted to the hospital on Aug. 31st, in a very collapsed condition; clothes saturated with blood. An incised wound was found in the neck, extending from just below the angle of the jaw on one side to a corresponding point on the other, and passing between the hyoid and thyroid cartilages, the wound being deepest in the middle. On separating the edges of the wound a hole about the size of a sixpence was seen in the thyro-hyoid membrane, through which air was passing. The sheath of the carotid artery was laid bare, but not opened, on the right side. Arterial hæmorrhage had ceased, but venous hæmorrhage and general oozing still took place. All bleeding was arrested, the wound well washed with antiseptic lotion, and the opening in the thyro-hyoid membrane closed with catgut sutures. The wound was dressed with iodoform gauze and wood wool tissue; the head, well flexed on the chest, was kept in this position by a triangular bandage, the two ends of which were passed in front of the shoulders and tied at the back. The patient was in a very collapsed condition; appeared almost bloodless; lips and conjunctivæ pallid; pulse very quick, feeble, and fluttering, and could best be felt at the wrist. An attack of syncope came on; but the patient rallied on injecting ether. In about ten minutes another attack came on, and her condition became so bad that transfusion was decided upon. A small cannula from an aspirating case was attached to about two feet of narrow indiarubber tubing with a small funnel at the other end. A solution of common salt (about eighty grains to the pint of water previously boiled) was put into a jug, and kept at about 99° F. The median basilic vein was now cut down upon, a double ligature passed under it, and the vein opened between the ligatures. Air was now excluded from the apparatus by filling it with saline solution poured from the jug into the funnel, and the cannula then introduced into the vein. The funnel was kept about half full, and thus about fourteen ounces of the solution were allowed to run into the vein; this occupied about half an hour. At the end of this time her condition had considerably improved; lips and conjunctivæ slightly coloured; pulse stronger and fuller, being readily felt at the wrist. She whispered she felt much better, and was quite comfortable. The cannula was removed, the two ligatures tied, and the skin united by a few horsehair sutures. In half

an hour after the operation she had a slight rigor, and vomited a little fluid containing a few blood-clots. Temperature 101.6°. — Sept. 1st: The patient passed a good night, had slept well; had taken brandy, beef-tea, milk, and Benger's food at intervals; no pain on swallowing. Temperature 100.2°; face still very blanched; wound dressed. In the evening she became noisy and delirious; temperature 99°. — 2nd: Slept fairly well, delirious when awake; had taken large quantities of liquid nourishment; temperature 99°. Wound dressed; fair amount of discharge. Temperature in evening 100.2°. It was now found that on admission the patient was suckling an infant, and on examination the condition of her right breast might account for some of her symptoms. This yielded to treatment, and on Sept. 4th the temperature became normal; no delirium; general condition much improved; pulse good; no pain; wound dressed; discharge not excessive, and granulation taking place; wound in arm quite healed. — 12th: Improvement uninterrupted; wound healed except in middle, which still discharges a little, the edges of the skin being in almost perfect apposition. Is now taking fish diet. — 26th: Wound quite healed, leaving linear cicatrix. She is taking common diet, gets up daily, and says she feels quite well; has no pain on swallowing. She will be discharged in a few days. For the notes of the case I am indebted to Mr. J. Simcock, senior house surgeon.

Ancoats.

CARBOLIC ACID POISONING; RECOVERY.

BY JAMES A. RIGBY M.D. LOND., &c.,

PHYSICIAN TO THE PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.

CASES of poisoning by carbolic acid are not very uncommon, and, owing to the increasing use of the acid, may possibly become more numerous; therefore, the following notes should prove interesting.

A few minutes before 1 A.M. on a Thursday I was hurriedly summoned to Ellen C—, domestic servant, aged nineteen, residing a few yards from my house. On arrival, I found her in an attic bedroom, unconscious, pale, and breathing with great difficulty; the mouth, lips, and about the chin presented whitish shrunken patches. A strong smell of carbolic acid pervaded the room and stairs; pupils were much contracted, and insensitive to light; transparent tenacious mucus dribbled away from her mouth and ran down her chin. Pulse distinctly perceptible, but somewhat irregular. About ten minutes prior to my arrival she had intentionally swallowed a quantity of crude carbolic acid—over an ounce, afterwards ascertained. A mustard emetic had already been given, and had caused slight vomiting. With considerable difficulty I immediately administered by the mouth from six to eight ounces of olive oil, the greater part of which was retained. Shortly afterwards I gave two ounces of ipecacuanha wine, as the handiest emetic I had; this, however, produced no emesis. The patient's condition now appeared very critical; the pulse became very feeble, irregular, and jerky; the breathing shallow, rapid, and noisy; the pupils very much contracted, and the conjunctivæ totally insensible. There was also tonic spasm of the muscles, more particularly in the arms and about the mouth, so that considerable force was required to straighten the arms, which were flexed, or to open the jaws. No opisthotonos or episthotonos. About 2 A.M., her condition continuing much the same, as there had been no vomiting, titillation of the fauces was resorted to, but without effect. Owing to her insensible condition, the rigidity of the mouth, and a swollen state of the passages, a gentle attempt to introduce the stomach pump failed. A stimulating enema of milk, eggs, and whisky improved matters somewhat. This was repeated every three hours. The patient continued in about the same condition until 9 A.M., when she vomited twice; the ejected matters had a strong odour of carbolic acid. She still continued insensible, but there was a manifest improvement in both pulse and general appearance. Shortly before 2 P.M. she had an involuntary motion, and immediately afterwards recovered consciousness. She now complained of soreness of the mouth and throat, with difficulty and pain on swallowing, and a short hacking cough. The treatment now was for her to sip milk beaten up with white of egg and to suck pieces of ice. On Friday the urine emitted a very foul odour, but not of car-

bolic acid; it was of a dirty blackish colour, neutral reaction, sp. gr. 1042, no sediment; on boiling there was a precipitate of phosphates which was soluble in acetic acid. On adding cold nitric acid a dense crystalline precipitate of nitrate of urea was thrown down; this was immediately dissolved on dilution with water. There was no albumen or sugar. The microscope revealed nothing. She had passed a good night, pupils fairly dilated and reacted to light; she was rather irritable, but answered rationally; around mouth and on neck were brownish discolorations; tongue, throat, and mouth still very sore, and voice husky. From this time she made an uninterrupted recovery.

The points of interest in this case seem to me—the recovery after such a large dose of the acid had been absorbed, evidenced by the nervous symptoms, total unconsciousness for thirteen hours, rigidity, insensibility of conjunctivæ, and evident anæsthesia of gastro-intestinal tract; and the condition of the urine, with its markedly high specific gravity and abundance of urea.

Preston.

A CASE OF PLACENTA PRÆVIA.

BY E. A. PIGGOTT, L.R.C.P. & S. EDIN., L.S.A. LOND.

ELLEN H—, aged forty-one years, wife of a gardener, was taken in labour with her fifth child about 1 A.M. on Sept. 9th, 1890. She had suffered considerably during the last two months of pregnancy from a severe pain in the side, but only once during the whole period of utero-gestation was there any appearance of hæmorrhage, and that very slight, about the termination of the fifth month, for which she did not seek medical advice. Pregnancy had advanced to within a week or so of full term when labour commenced. I was summoned to the case at 5.30 A.M., and then found that the pains, although fairly regular since 1 A.M., had not been strong enough to warrant the woman in charge (according to her idea) in sending for me, but, fortunately for the patient, advice was then sought. Upon arrival I was informed that the patient had been losing blood in large quantities since 1 o'clock. She was blanched and almost pulseless, with cold clammy perspiration, and the usual symptoms of impending death. On making a vaginal examination the os was found dilated to about the size of a crown piece. The examining finger passed through an enormous amount of blood-clot, which appeared to almost entirely fill the cavity of the lower or cervical zone of the uterus, beyond this the placenta could be plainly made out, and occupied a direct central position. It was impossible to diagnose the foetal presentation. Under such circumstances there was only one course to adopt—i.e., to perform version and deliver without further delay. After administering a stimulant some little difficulty was experienced in passing the hand past the placenta, but eventually a foot was brought down and secured by a loop of tape, the delivery then being accomplished with comparative ease. The placenta came away within a few minutes, and good uterine contraction was ensured by the administration of a full dose of the liquid extract of ergot. The patient made a good though somewhat protracted recovery.

This case is instructive as illustrating the fallacious theory that the hæmorrhage in cases of placenta prævia is most severe *during* a pain. Doubtless clots of coagulated blood are forced from the lower or cervical zone of the uterus and expelled externally during a pain; but these clots have been slowly forming from blood effused from the open uterine sinuses during the *interval* of pain, the tendency of uterine contraction in cases of placenta prævia being, as in all other cases, conducive to the arrest of uterine hæmorrhage. My thanks are due to Mr. R. W. Waring of Cavendish, who saw the patient with me in consultation, and rendered valuable aid in a most anxious case.

Clare, Suffolk.

INFECTIOUS DISEASES, DEWSBURY UNION.—The local authorities in the Dewsbury Union have resolved that a united district, comprising Batley, Heckmondwike, Mirfield, Soothill, Upper Gomersal, Thornhill, Liversedge, Ravensthorpe, and Birstal, should be formed for the purpose of providing accommodation for the treatment of infectious cases.