

the first three days, but was dressed every day subsequent to the operation.

CASE 3. *Ovarian disease; ovariectomy; ice applied to abdomen; temperature normal; recovery.*—Jane L—, aged thirty-three, was admitted on Oct. 7th, 1878. Her mother's sister had ovarian disease, and was operated on, but died on the fifth day after the operation. Two sisters died from cancer of the breast. The patient's previous history was good; had had four children. The catamenia were quite regular till the summer of 1877, when they became very profuse, occurring once a fortnight. This continued till March, 1878, after which the flow became irregular and scanty. In January, 1876, she was seized with violent pain in the left side, accompanied by sickness. Her medical attendant called in Dr. Barnes, who considered it necessary to induce premature labour. This was accordingly done, and she was delivered of a seven months' child, still living and healthy. After delivery everything appeared to go on well with the exception of some swelling in the abdomen which remained. This swelling slowly increased, and was said to be due to disease of left ovary.

In March, 1878, she had another violent attack of pain (not so bad as the first, and not accompanied by sickness), but this time in the right side, which lasted for three weeks. After this the abdominal swelling rapidly increased in size; patient had never been tapped.

On admission she was thin and rather delicate-looking. The abdomen was very much enlarged, and was occupied by a cyst with thin walls, but at the lower part there appeared to be a more solid portion. Measurements: 41 inches round at umbilicus, 8½ in. from xiphoid cartilage to umbilicus, 11½ in. from umbilicus to pubes.

Dr. Galabin examined the case, and reported as follows: "Lower segment of tumour can just be reached in front of cervix; uterus posterior in a slightly retroflexed position; sound passed three inches, and uterus is fairly movable by its means. Tumour appears to be a polycystic ovarian with a large cyst towards the upper part. I should consider it favourable for operation, and expect that there are no adhesions of consequence."

On Oct. 8th the woman was removed to a private room, and ovariectomy was done on the following day. The tumour was polycystic. The cyst contained eighteen pints of thick brownish fluid. There were one or two adhesions to the omentum. Bleeding very slight. There was no fluid in the peritoneal cavity. Morphia suppository was given, and ice-bags were applied to abdomen. She slept a little in the evening. Had no sickness or retching. A suppository given, and the urine was drawn off. She passed a quiet night, in a doze all the time. Sick a little about two o'clock in the morning, and again at nine, retching three times. At 11 A.M. (10th) she had slight pain in back; skin moist, tongue a little dry.

On the 11th, 10.30 A.M., tongue moist, no sickness or pain. Morphia suppository given. Slept nearly all night. Temperature 97.8°; pulse 108.

On the 12th there was some sanious discharge from vagina. Temperature 98°.

From this date there was very little trouble except some incontinence of urine. The bladder was washed out daily for four or five days with warm water and a weak solution of quinine. A little mucus came away at each washing, and on the 15th the fluid that returned was tinged with blood. The incontinence passed off on the 17th. On the 14th the sutures were removed; primary union had occurred down to the pedicle. The clamp came away on the 21st. On Nov. 16th she left the hospital well.

LEEDS GENERAL INFIRMARY.

A CASE OF OPIUM-POISONING TREATED BY THE SUBCUTANEOUS INJECTION OF ATROPINE; RECOVERY.

(Under the care of Dr. EDDISON.)

FOR the following notes we are indebted to Mr. W. H. Brown, house-surgeon.

M. D—, aged thirty-five, who was admitted at 9 P.M. on Feb. 13th, was said to have taken about six drachms of tincture of opium an hour before. On admission he was able to answer questions, but manner irritable; pupils contracted. He refused to allow the stomach-pump to be applied. Twenty grains of sulphate of zinc were administered at once.—9.40 P.M.: No sign of vomiting; patient drowsy,

and unable to stand without assistance. Stomach-pump used, and about twelve ounces of brownish fluid withdrawn. Strong coffee was injected into the stomach, and the patient was "walked" about the corridors between two assistants. 11.20 P.M.: Patient worse; more sleepy; could only be roused by violent shaking and the application of a wet towel. Pulse 120; respiration 15; pupils almost pin-point. One-tenth of a grain of sulphate of atropine injected, and patient allowed to lie down. Immediately the condition slightly improved, and continued up to 12.20 A.M. on the 14th, when he became utterly unconscious, and incapable of being roused even by the most violent means (wet towels, faradism, &c.) Pupils still contracted; pulse feeble and rapid; respiration 12, and falling. A quarter of a grain of sulphate of atropine was injected subcutaneously at 12.20.—12.40 P.M.: Patient somewhat better. Pulse about 130; respiration 18; pupils dilating. No return of consciousness; extremities cold; sleep more natural.—1.10 P.M.: Respiration suddenly sank to 12, but rose again to 20 after artificial respiration had been kept up for about ten minutes. Pulse good; surface of the body warmer. From this time up to 8 A.M. the patient slept, and though attempts were made at intervals to rouse him, they were met with only partial success. At 8 o'clock he awoke, was able to answer questions put to him, took some breakfast, and from that time had no further trouble, and continued quite well up to the date of his discharge from the hospital (Feb. 25th).

Remarks by Dr. EDDISON.—In this case, as in so many others of the kind, it is impossible to say how much opium was actually absorbed; and it is equally impossible to say positively that the man would have died if the atropine had not been used. The case may, however, be taken for what it is worth, as a contribution to the disputed question whether we ought to administer atropine in cases of opium-poisoning. The time when the opium was taken is known; the symptoms gradually increased in severity; they were unaffected by one-tenth of a grain of sulphate of atropine; and all the usual means were adopted without any apparent prospect of saving the patient's life. Then, about four hours after the opium had been taken, and when the symptoms of poisoning were worse than they had been, and when the patient was absolutely unconscious, and could not be roused, one-fourth of a grain of sulphate of atropine was injected. Within twenty minutes the respiration went up from 12 to 18, and the pupils began to dilate, and, except that respiration failed for a short time, the effect of the opium gradually passed away, and in seven hours more the patient awoke, and took some food. With the exception of a slight bronchial catarrh, he remained perfectly well until his discharge. It may be said that he would have recovered without the atropine; it remains, however, that the change for the better took place almost immediately after the atropine was injected, and just when the evidence of its action on the pupils became manifest. Without making too much of a single case, it may be fairly said of this one that it in no way supports Dr. John Harley's opinion as to the effect of doses larger than 1-96th of a grain; nor, indeed, does it support his views as to the use of belladonna in opium-poisoning at all, for it seems evident that, whether the tenth of a grain did any good or not, the quarter of a grain injected an hour after certainly did no harm. It should be remembered that faradism, local stimulation, heat, forcible dragging about, as well as frequently-renewed artificial respiration, were all fully tried, apparently without any permanent good results, and there really appears to be every reason for concluding that the atropine had a great deal to do with the patient's recovery. In speaking of the use of atropine sulphate in opium poisoning, Dr. John Harley says distinctly: "If larger doses [than one ninety-sixth of a grain] be given, or if smaller doses be too often repeated, the beneficial effects of belladonna will be converted into a depressant and narcotising influence." The solution used in this instance was prepared at the time by the house-surgeon, Mr. Brown, who conducted the treatment, and there is no reason for supposing that it was not of usual strength. Yet in face of so clearly-stated an opinion given by Dr. Harley as the result of many observations, it is not surprising that many men still use only the ordinary means in cases of opium-poisoning, and prefer to avoid the risk of being accused of increasing the poisonous action of the opium. In most cases of this kind we can only guess at the amount of opium that has been absorbed, and rules stating that such and such an amount of atropine will neutralise such and such an

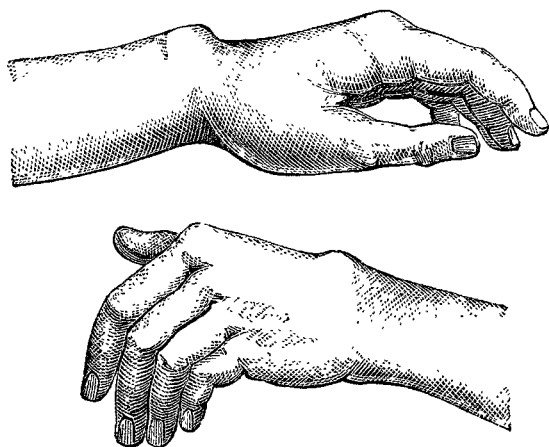
amount of opium are, unfortunately, not of much practical value. We require to know how much atropine should be given in the presence of symptoms which can at best only be described in a more or less definite way. The dose in this case seems to have been exactly appropriate, and it certainly cannot be said that the atropine did any harm or in any way increased the depression of the narcotism.

WARRINGTON INFIRMARY & DISPENSARY.

INTERCARPAL DISLOCATION.

(Under the care of Mr. C. E. RICHMOND.)

DENNIS S—, aged forty-seven, miner, a muscular subject, with well-defined anatomical "points," was admitted March 14th, 1879. He was working at a thrashing-machine, when the strap of the fly-wheel caught his arm and dragged him up to the top of the wheel (the height of which was stated to be about nine or ten feet), from whence he fell on his hand. He could not state whether he fell on the back or palm of the hand. There were several skin lacerations (done by the strap) midway up the forearm, but no fracture of the radius and ulna was discoverable. There was, however, marked deformity at the left wrist. The length of the hand from the wrist to the knuckles was very noticeably shortened. There was a prominent transverse ridge on the dorsal aspect of the wrist beneath the ends of the radius and ulna; and below this ridge there was a marked depression. On the palmar aspect the base of the hand was unduly prominent, the general direction of the metacarpal bones being quite altered by their bases being pushed forwards towards the palm. The diameter of the wrist, both laterally and antero-posteriorly, was much increased. There was not very much bruising or swelling of the soft tissues themselves, though the circumference of the wrist, taken round the extremities of the radius and ulna, was one inch and a quarter more on the injured than on the sound hand, and below this point the difference was even more marked. He was unable either to flex or to extend his hand himself.



On examination the ends of the radius and ulna seemed separated from each other somewhat. The transverse dorsal ridge before mentioned could be demonstrated to be the first row of carpal bones, with the semilunar rather unduly prominent. Between this ridge and the ends of the radius and ulna the movements of flexion and extension, although restricted, could be obtained with considerable ease and without any crepitus. Below the ridge the extensor tendons could be plainly felt stretching across the depression to the fingers.

The articulation between the thumb and the trapezium was not interfered with, nor had any of the articulations between the metacarpals and second row of carpals sustained any injury. On the palmar prominence before mentioned the trapezoid could be felt pushed more anteriorly than, and considerably above, the level of the trapezium, and nearer the ulnar side the head of the os magnum could be felt overlapping slightly the ends of the radius and ulna, which on the palmar surface were quite obscured; and on flexion and extension of the hand the os magnum could be felt to ride on their anterior surface. The displacement of the unciform, although distinct, was much less marked. Under no circumstances could any crepitus (other than that attribu-

table to effusion) be detected, nor was there any sign of fracture whatever.

The result of examination showed that the second row of carpal bones was dislocated from the first forwards and upwards, the displacement being most marked in the case of the trapezoid and os magnum.

Dr. Young, of Owens College, kindly made the accompanying sketches of the deformed hand, which represent an accident almost unique in surgery.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

The Movements of the Eyelids.—Ophthalmoscopic Appearances in Tubercular Meningitis.

THE ordinary meeting of this Society was held on the 10th inst., the President, Mr. J. E. Erichsen, in the chair. Four papers were read, one on the movements of the eyelids, by Dr. Gowers, another on the ophthalmoscopic appearance of tubercular meningitis by Dr. Garlick, which raised a short discussion, as also did a paper on excision of cancerous stricture of the rectum by Mr. Guy.

A paper was read on "the Movements of the Eyelids," by W. R. GOWERS, M.D., of which the following is an abstract:—Under normal conditions the lids leave the cornea approximately uncovered in all positions of the eyeball, moving with it. For these movements and for the voluntary closure and opening of the lids, there are only two muscles, the orbicularis and the levator. These will not explain all movements, and it is probable that the eyeball itself moves the lids, not by the conjunctival connexion, but by the pressure of the convexity of the sclerotic, and to a less extent of the cornea, the edges of the lids lying in or near the sclero-corneal sulcus. This effect is greatest on the upper lid, partly because the tarsal cartilages are attached at their extremities below the transverse axis of the eyeball. The eyelids are moulded on the globes, the shape of the palpebral fissure depending on the position of the eyeball, and being curiously altered in some abnormal lateral positions. In closing the eyelids gently the lower lid is raised by the palpebral orbicularis; in rotation up of the globe the lower lid is raised, not by the orbicularis, but by the pressure of the globe, and the movement is slight if the globe is very prominent. Depression of the lower lid in looking down is by pressure of the cornea. The upper lid is maintained in position by the balance of tone between the levator and the orbicularis. If the latter is paralysed, the lid is a little higher than normal. The descent of the upper lid, in looking down, is not by contraction of the orbicularis (for it is unaffected in facial palsy), but is by the pressure of the sclerotic against the tarsal cartilage. The lid is raised on upward rotation of the globe by the levator, the contraction of which, if sudden, is excessive. With this is associated a synergic action of the frontalis; the latter is sometimes habitual, and then is relaxed with the levator on looking down. The action of the levator associated with that of the superior rectus is beyond voluntary control, and, in the simulated ptosis of hysteria, necessitates a strong contraction of the orbicularis to keep the lid down, if the patient is made to look up. The associated relaxation on looking down prevents almost all voluntary contraction of the levator in that position. Gentle closure of the lids, as in sleep, is by the palpebral orbicularis; the levator being relaxed, the recti passive. Forcible closure is by the whole orbicularis, the levator being released and dissociated from the superior rectus, which contracts, rolling the globe up. Hence, probably, the centre for strong closure of the eyelids is physiologically distinct from that for their gentle closure. If the orbicularis is paralysed the associated inhibition of the levator still occurs on an attempt to close the lids. But, if the inferior rectus is paralysed, a fruitless attempt to rotate the eyeball down is not attended with inhibition of the