

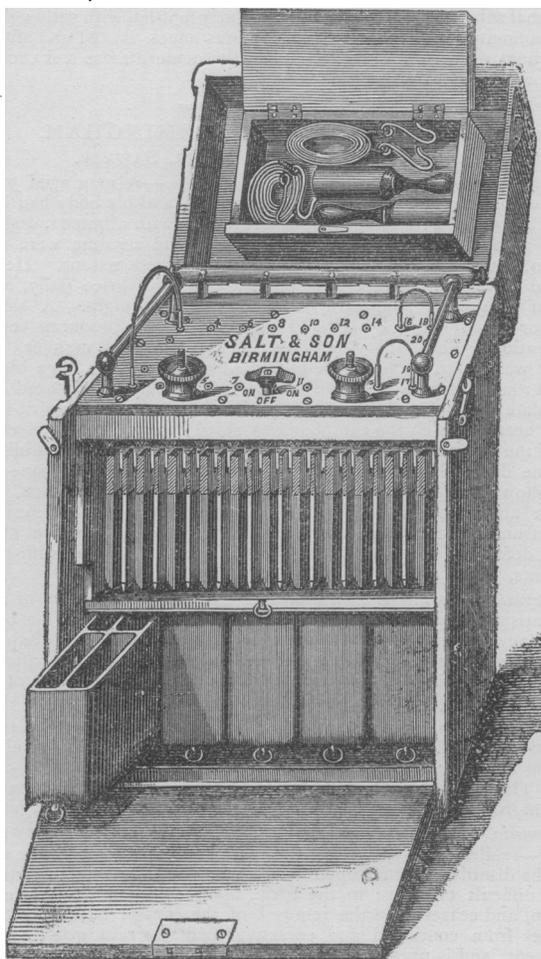
REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE
ALLIED SCIENCES.

SALT'S NEW MEDICAL BATTERY.

MESSRS. SALT AND SON of Birmingham have brought under our notice a new form of constant battery, which has many and great advantages of arrangement, especially in respect to improvements in safety and transport, in renewing the charge to the cells, and in facilitating access to all parts of the battery for the purpose of inspection or repair. Thus the front of the case, as will be seen in the drawing, falls down, completely exposing to view all the cells and parts of the battery. The cells are arranged in sets of four and can be turned out for filling, so that that process is now easily effected without risk to any part of the battery. To prevent the spilling of the fluid when the



battery is being carried about, a rubber-faced board slides between the plates and the cells, while the cells are pressed against it by a spring bottom, to which the pressure is removed as desired by pressing on a brass rod near the hinge. In all other respects, the battery combines a variety of the latest improvements for varying the number of the cells in action, and utilising different currents in the various ways required for medical purposes. The improvements in this battery are of a very practical kind, and seem to meet the requirements of ordinary practice.

REPORTS OF SOCIETIES.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, MAY 2ND, 1877.

J. MATTHEWS DUNCAN, M.D., Vice-President, in the Chair.

Excision of Clavicle for Tumour.—Mr. CHIENE showed the inner two-thirds of a clavicle removed from a young man aged 26. A sarcomatous tumour had existed in this part of the bone for about six months. The outer part of the clavicle was left, so that the coracoclavicular ligaments were intact, and the movements of the arm unimpaired. Catgut drains were used, and dropped off on the twelfth day; the patient returning home on the seventeenth day.

Hydronephrosis.—Dr. JAMES read a paper on this subject. Most cases of hydronephrosis could be explained by the occurrence of some mechanical obstruction to the entrance of the urine into the bladder. There were, however, still some cases where no evident mechanical obstruction could be found, and it was to three such cases that he wished now to direct attention. In almost all of them, there were contracted prepuce, frequent micturition, and nocturnal enuresis. In all, death occurred with uræmic symptoms. On *post mortem* examination in one case, the bladder was found contracted and rough from hypertrophy, the ureters dilated, and the kidneys hydronephrotic. By experimental investigation of the pressure under which the urine was secreted, and also of the amount of pressure necessary to prevent micturition, it was found that the former was much less than the latter. In the cases given, therefore, there had been frequent contraction of the bladder, almost becoming tonic, and therefore compressing the oblique entrance of the ureters into the bladder. In this way, he believed, the hydronephrosis in such cases was caused.—Dr. WYLLIE had been greatly pleased with Dr. James's paper. He was not, however, prepared to accede to all his conclusions. The theory given as to the low *specific gravity* of the urine was suggestive and correct, he believed; but the views on the pathogeny of hydronephrosis were doubtful. Dr. James evidently thought that, when the bladder expelled its contents, it remained contracted. It most probably, however, relaxed, and therefore opposed no obstruction to the inflow of urine. A more feasible explanation was that the obstruction was due to the thickened condition of the ureters and bladder from an inflammatory state of the mucous membrane. In the gall ducts, catarrhal inflammation obstructed the flow of the bile; while, after death, it was possible to pass a probe up that duct which was so obstructed during life. By this condition, or by a plug of mucus, the lower extremity of the ureter was narrow and oblique; and, therefore, when there was slight catarrhal inflammation, the inflow of urine was obstructed. Cases of vesical calculus favoured this view. Contrary to what Dr. James had said, the calculus probably caused no obstruction, but set up a cystitis, which passed up the ureter.—Dr. JAMES explained that he held that a vesical calculus opposed the entrance of urine only indirectly.—Dr. DUNCAN pointed out that Dr. James had not in this paper said that the bladder remained contracted after micturition.—Mr. CHIENE would refer to a point which had for some time occupied his attention, viz., unrest in the bladder causing disease. The first case to which he would allude was one of urinary fistula, where almost all the urine came the wrong way. The great difficulty was that the edges of the fistula could not be kept dry. The treatment he finally adopted was to pare the edges of the fistula, and keep a gum-elastic catheter constantly in the bladder. A piece of tubing passed from the proximal end of the catheter, and dipped under carbolic-lotion. Thus, by a syphon arrangement, the bladder was kept continually empty. The next point was as to the treatment of cystitis. The bladder was like the heart in having a systole and diastole, the former occurring normally about four times in the twenty-four hours. In cystitis, however, this systole might occur one hundred times in the same period. Now, in such case, if they kept the bladder perfectly empty by constantly draining away its contents, they would, by thus giving the bladder complete rest, cure the cystitis, unless due to putrefaction.—Dr. MATTHEWS DUNCAN pointed out that Dr. Wyllie and Dr. James were quite at one in giving an explanation of hydronephrosis as a mechanical disease. Any one who knew the history of medicine, even from the times of Borelli and Harvey, would see that the greatest progress had been made by applying the principles of mechanics to it. This, however, might go too far; as in pathology, for instance, where hypertrophy of the heart or bladder was held to be due simply to the action of these organs. This was a thesis he denied, as could be seen from a consideration of the uterus, where muscular hypertrophy did not express action alone. There were other things