Experiment 2.—The largest of the three ordinary fiddle-shaped bags was connected with the apparatus, as in Experiment 1. The highest pressure reached was when the bag still retained its regularity of form; it was a little above 22 lbs. on the square inch. When the bag was further distended by the injection of more water, it lost its form, bulged out at parts, and the pressure decreased. The highest steady pressure with the apparatus at rest was about 18 lbs.

Experiment 3.—The middle-sized bag behaved very nearly as the largest.

Experiment 4.—The smallest bag behaved very nearly as the others.

DESCRIPTION OF INSTRUMENT USED FOR TALIPES EQUINO-VARUS AND VALGUS.

By RICHARD DAVY, F.R.C.S.,
Surgeon to the Surgical Aid Society.

SURGEONS treating the various forms of talipes amongst out-patients, have been much disappointed at results obtained by the use of the ordinary Scarpa's shoes. I find the screw movements irregular, and especially useless at the very time when most required—viz., at the later periods of treatment, because the screws have reached their maximum range of action. The straps used to confine the foot and heel to the sole are complicated, galling, and ineffectual; with infants, quite inoperative, for these little kicking ones cast their shoes as annoyingly as hunters, and frequently ere leaving the surgeon's consulting-room. The sole of the shoe (when retained) wears out speedily by the friction on ground, and so one of the most natural processes of cure is interfered with.

Before entering into detail, I must thank Mr. Annandale, surgeon to the Royal Infirmary, Edinburgh, for his courtesy in allowing me to see his great ingenuity in mechanisms for talipes; and his arrangements for confining the foot have been essentially copied. I must also express my obligations to Mr. Arnold of Smithfield for his great attention to detail in manufacturing these instruments, which he will show to any surgeon interested in such appliances. Fig. 1 shews the instrument applied to the foot and leg. Fig. 2 shews the boot when removed.

The double irons up the leg, and foot-piece joined to them by hinges

Fig. 1.

at the ankle, are as generally made. These irons are fastened by strap in young children below the knee, but in infants above the knee, in order that a better purchase may be gained. The circular joint at the sole of the foot corresponds to the situation of the astragalo-scapoid and calcaneo-cuboid articulations. Two screws (as shown in the plate) cause (1) the dorsum of the foot to be drawn upwards towards the leg; (2) the anterior part of the foot to be everted or inverted at pleasure. By placing these screws on the inner or the outer aspect of the leg, talipes valgus or varus may be respectively treated. Both screws are worked by a triangular notched key. The boot consists of four flaps: one passes directly over the toes, the dorsum of the foot, and the instep, and effectually confines the heel to the special heel-plate; a second and third, on each side of the anterior portion of the foot, and a fourth the heel, overlap the centre one, and are secured by stout lace passing over special hooks. The sole of the boot is firmly riveted to the iron foot-plates; and these rivets, passing through the sole to the earth's surface, protect the leather and circular hinge from friction during progression.

Fig. 2.

A high compliment was paid to this form of shoe by a first-rate instrument-maker, who said that it was old-fashioned, and that the

movements were by no means so complicated as many that he could show me. Old-fashioned and simple though it may be, it is now in constant use, doing its required work well, and not liable to get out of order by fair usage.

RARE CASES OF SYPHILIS.*

By CHARLES R. DRYSDALE, M.D.,

Physician to the Metropolitan Free Hospital, and to the North London Hospital for Consumption and Diseases of the Chest.

Syphilitic Infection from Smoking a Cigar.—There are now but few to be found who deny that secondary syphilis may be communicated by such means as kissing, or using a drinking-glass; but every case that proves this clearly is useful.

Isaac S., aged 74, came to the Farringdon General Dispensary on July 8th, 1872. The patient had a copper-coloured eruption on the forehead, and spots of syphilitic roseola and psoriasis on the right forearm, hands, etc. A portion of the mucous membrane of the right angle of the mouth was denuded of its epithelium, red, and covered with false membrane; the whole greatly like what is seen in so-called "mucous tubercles" of the fauces. A small patch of similar appearance was seen on the mucous membrane of the left upper lip. There were indurated glands below the right jaw. The patient said that five weeks before being seen, he had first noticed a spot at the right angle of the mouth. This commenced with a kind of blister, and lumps came below the jaw, which still continued hard. A fortnight or three weeks before he noticed the sore at the edge of the mouth, he had picked up a lighted stump of a cigar, just thrown away by a gentleman, and smoked it. A careful examination of the genitalia of the patient, as well as the inguinal region, gave only negative results. The patient's age, 74, the enlargement and induration of the submental glands, and the history of the sore at the side of the mouth, being the first lesion, pointed to the diagnosis made by me; i.e., chancre of the lower lip, caused by smoking a cigar thrown away by a patient in all probability suffering from syphilis.

Syphilitic Roseola, Hemiplegia, and Aphasia.—Patrick W., aged 36, married, by occupation a horse-hair curler, was admitted into the Metropolitan Free Hospital under Dr. Drysdale. He had been of pretty temperate habits, taking two pints of beer a day. Three years ago he had a sore on his penis, followed by a "red rash" over his body, which lasted some weeks. The present attack came on three months ago, ten weeks after he had a sore on his penis. He went one morning quite well to his work; but, after being there an hour, he fell on his side unconscious. He did not know how long he was in that state; but, when he recovered consciousness, he had lost the power of speech, also the use of his right leg and arm. He was laid up three months, and had never recovered, but was better than at first.

When admitted, on April 30th, 1872, he seemed a strong healthy man in other respects. There was complete loss of power in the right forearm; he could not flex or extend his fingers or hand on the forearm. He could flex and extend his forearm or the arm with a little difficulty, but could not pronate or supinate it. On lying down, he could raise his leg in bed, but could not flex the leg or thigh, or the foot on the leg. He could stand on the left leg, but not on his right. The tongue was protruded straight; the pupils were equal; he could close his eyelids tightly. He could blow his cheeks out without air escaping. The right angle of the mouth was a little higher than the left. He had no pain. His speech was very defective; he used words which he did not intend, in the place of others. He could say "Yes" and "No" very well; but could not pronounce his own name, but said "Pots." He could not pronounce the following letters: B, C, D, E, H, J, K, Q, U, V, W, X, Y, L, using the letter T chiefly for most of them; but the remainder of the letters he could pronounce very fairly. His sight was good, and there was no loss of memory. The urine was normal. There was no wasting of the muscles of the leg or arm. He was ordered ten grains of the iodide of potassium three times a day; and to have the different groups of muscles of the right forearm and right leg galvanised daily with the interrupted current of Stöhrer's battery; also the muscles connected with the right angle of the mouth, and the muscles of the tongue.

May 7th.—He could flex his forearm on the arm, but extension, pronation, and supination were not good. He had not much use of the wrist, and the fingers were a good deal contracted. He could move his toes a little. He could pronounce the letters of the alphabet better.

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Birmingham, August 1872.