4. *Geissler Vacuum Tubes*.—For obtaining intense violet and ultra-violet rays, the author recommends special tubes exhausted only to the usual Geissler vacuum in preference to the more costly and complicated arc light installations of the Finsue type. The intensity of action of such tubes is 60 times that of the arc light.

5. *Types of Interruptors*.—In this paper the author fully describes and contrasts the merits and the faults of Foncault's mechanical interrupter, and of various varieties of the Wehnelt and the Caedwell electrolytic interrupters.

6. *Fluoroscopic Examinations*.—A description extolling the merits of a rather complicated arrangement containing a horizontally-placed plate-holder, fluorescent screen, and a mirror on pinions, all of which are borne by a vertically-adjusted framework that can be placed beneath the X-ray examination table.

7. *Electrostatic Electrode*.—A description of a static electrode bearing an adjustable spark-gap attachment upon its long, hard-rubber handle.

8. *New Arrangement for Static Machine*.—A description of a Wimshurst machine with the rotors located in the lower part of the case, while the various dischargers, jars, etc., are arranged upon the low, flat top.

R. H. CUNNINGHAM (New York).

MISCELLANY.

CONTRIBUTION TO THE TREATMENT OF SYDENHAM'S CHOREA (Gazz. degli Osped., 1901, No. 144).

Jemma reports excellent results from lumbar puncture in two severe cases of chorea minor, 25 cc. of fluid being withdrawn; the effect was instantaneous. Choreic symptoms reappeared after a time though not in the original severity, and subsided entirely after repeated puncture, a cure being effected within four weeks. The favorable influence of this measure is believed to be due to decrease in endocranial pressure.

FIELDING (New York).

TREATMENT OF HYDROCEPHALUS (Archiv. f. Kinderheilkunde, Bd. xxxii, p. 329).

Immerwol reports treatment of 10 cases of hydrocephalus in children from 3 months to 2 years. (Nine congenital hydrocephalus and 1 acquired.) Therapeutic measures used were: antisyphilitic treatment; lateral puncture of the cerebral ventricles; puncture followed by injection of tr. iodine; and lumbar puncture. The author believes repeated lumbar puncture to be indicated in all cases of acquired hydrocephalus, and advises its trial in the congenital form; never omitting, however, antiluetic treatment.

FIELDING (New York).

TREATMENT OF NERVOUS DISEASES WITH BROMALBUMINOUS PREPARATIONS (Therapeutische Monatshefte, No. 1, 1902).

Of all the bromide preparations, bromeigon and brompepton contain the smallest amount of bromide, yet their influence is not less for this. Through bromalkalies the organism is more rapidly saturated with the drug; yet, on the other hand, the effect of bromalbumen is more protracted, and after the use of brompepton even in relatively large amounts, bromism is not observed. This may be due to the fact that bromide does not readily break up from the albumen molecule. Silberstein has used brompepton most frequently in epileptic convulsions. In his hands it has also proved serviceable in irritation of the cerebral cortex after acute alcohol-intoxication,

as well as in the treatment of chorea. In infantile convulsions it is to be administered by enema. Used in this way it quiets diarrhea, and its internal administration favorably influences gastric catarrh. This remedy is valuable in insomnia due to nervous excitation, as in neurasthenia, delirium tremens, maniacal conditions, etc., and is to be preferred to other hypnotics where prolonged use is necessary. Its analgesic properties make it desirable in cases in which the origin of pain lies in the central nervous system. Brompepton is best used in 20 per cent. watery solution. For children the best method of administration is by enema or brompepton malt-extract.

FIELDING (New York).

NEW TREATMENT OF TRUE EPILEPSY. Lion (Berliner klin. Woch., No. 52, 1901).

Lion has seen rapid and marked improvement in 20 advanced cases of epilepsy through the use of cerebrinum-Poehl; while symptoms in the first stages of epilepsy decreased after the first dose, and epileptic seizures gradually disappeared entirely. In severe cases a combined treatment of cerebrin and bromide is efficacious. Cerebrin or opocerebrin is to be given in tablet 0, 2—0, 3; and 0, 4—0, 6 administered daily; it should be used at least a month, bromide 2. 0—3, 0 pro die being given at the same time.

TRIONAL IN CHOREA (Brit. Med. Jour., 1901, Nov. 2).

Meade states that trional is sedative in chorea where preparations of arsenic and bromide fail entirely of effect. It is best administered in doses of 1 gm. in the morning, and 1.5 gm. at night, in fruit-juice, immediately followed by a drink of warm water, to insure its speedy absorption by the system.

FIELDING (New York).

THE PHYSIOLOGICAL ACTION OF THE POLAR DISCHARGES OF HIGH PRESSURE INDUCED CURRENTS AND OF VARIOUS INVISIBLE RADIATORS. L. Freund, Sitzungsberichte der Akademie der Wissenschaften, Wien (cix, bd., viii hft.).

This is a voluminous experimental paper in four parts in which the author describes his methods of exposing rabbits and cultures of micro-organisms to the brush discharges and to direct spark discharges from the secondary terminals of a large induction coil and from the high potential terminal of an Ondin resonator. In a former paper in 1897 the author considered that the Röntgen rays themselves were responsible for the physiological effects, but from the results of the experiments described in this article he is led to conclude as follows: (1) Direct spark discharges either in the form of the spark discharge from the terminals of an induction coil, or in the form of a brush discharge from the D'Arsonval-Ondin apparatus can produce depilation in animals. (2) Directly-applied sparks can not only inhibit the development of, but even kill recently-planted or fully-developed cultures of *Straphylococcus pyogenes aureus*, typhoid bacilli, diphtheria bacilli, tubercle bacilli and achorion schoenleinii. (3) The effect of the directly-applied sparks is augmented by directly or indirectly grounding the culture container, by prolonging the exposure, by diminishing the distance between electrodes and container, by increasing the intensity of the primary current through the induction, and by a more rapid rate of interruption. (4) The above-mentioned action occurs under certain conditions through intervening thin layers of wood, paper, aluminum, tin foil or human skin. (5) Micro-organisms in suspension in fluids are also acted upon. (6) The physiological action of the negative spark discharge is more intense than that of the positive, although the extent of the area affected is less.