correction. These pupils are not Argyll Robertson; they are simply contracted pupils in which responses to both light and distance are greatly diminished. Dr. Moleen speaks of nystagmus. It seems to me that there is no true nystagmus in these cases. The wavering motions that exist are due to muscle weakness, and are a pseudonystagmus and not a true one. As to prognosis in paralytic cases: Mine were severe cases. The patients have not done well, and all of them have some sequel. Of the myoclonus patients, some have died and others have severe mental and physical sequels, except the two mentioned. In regard to the difficulties in diagnosis, I found some trouble in differentiating between brain tumor and encephalitis, especially tuberculous meningitis and encephalitis. In most cases it should be fairly easy to make an accurate diagnosis. A final suggestion in connection with the association between encephalitis and various psychoses may be of interest. Most of my patients were in poor health when they developed encephalitis. They were subnormal, and, in view of my belief that the psychotic cases occurred in psychopaths, it seems to me that subnormal persons are more predisposed to the disease than normal persons.

Clinical Notes, Suggestions, and New Instruments

DEAFNESS FROM PRESENCE OF INSECT IN EAR

PAUL A. HIGBEE, M.D., MINNEAPOLIS

A man, aged 36, stumbled and fell, Feb. 18, 1922, striking on his chin. He was unconscious for a few seconds and, on recovering, experienced a sharp pain in his right ear. After the chin wound was dressed he was referred to me for examination of the ear. The external canal was blocked. A large amount of debris was removed, disclosing tightly packed cerumen, which was removed with difficulty. Following this came the remains of a dead cockroach, 18 mm. in length and perfectly preserved in every detail.

The patient in April, 1908, while preparing for a bath, felt a sudden pain and buzzing in the right ear, which drove him almost frantic. While his wife was telephoning for a physician, he put his head under the water in the tub, and the pain soon ceased. Later, on the advice of his physician, the ear was syringed, but nothing was washed out of the ear, and it was supposed that the trouble was due to a small mite which had been lost in the washing. The patient gradually became deaf in this ear, but never consulted a physician, believing that some irreparable damage had been done to the ear by the insect. After removal of the insect and cleansing of the canal, hearing was fully normal, and the only evidence of injury was a slight abrasion of the drum.

It seems probable that, following the original injury in 1908, the canal became gradually filled with wax, thus entombing the insect in an air-tight space and preserving it in toto for nearly fourteen years.

221 Meyers Arcade.

MODIFIED EINHORN THREAD TEST

EDWARD STEINFELD, M.D., PHILADELPHIA

The equivocal results in the use of Einhorn's thread test in the diagnosis of gastric ulcer and malignancy have been due in part to the difficulty in the recognition of the stains as blood. Though other objections have been advanced from time to time by various observers, it has appeared that modifications tending to render the test more sensitive would be of material aid in increasing the usefulness of the procedure. The outlining, by chemical methods, of the areas on the thread impregnated with blood, renders the identification of faint or doubtful blood stains less difficult. A method utilizing this principle has been used recently, and the results are sufficiently encouraging to warrant its trial as a source of

added information in suspected lesions of the stomach and duodenum. The entire procedure is as follows:

The patient abstains from meat on the day the test is done, or for a longer preceding interval if symptoms of pyloric obstruction are present. A "pearl" button (from 7 to 8 mm. in its greatest width) attached to a thread of braided silk is swallowed by the patient at 9 p. m. and washed down by a glass or two of water. A knot at 75 cm. marks the limit to which the thread is allowed to travel. The next morning a mark is made at the part in contact with the teeth, and the thread and button are removed before any food has been given. Successive strips of 10 cm. each, starting from the external dental mark, are tested in a small porcelain dish with the benzidin and hydrogen peroxid mixture which is commonly used for occult blood tests. Stains due to blood assume a green color, and the proximal stain, counting from the mouth end, may be taken as the probable distance of a bleeding area. However, it is not advisable to regard the calculation of this possible site as being positively established. A sensitive benzidin is of value, and a hydrogen peroxid solution not containing acetanilid is preferable. It is possible to make a preliminary trial, using a two or three hour interval only; in some cases this is sufficient to give enough blood impregnation to react definitely. In case of doubt, however, the longer time given above is the method of choice. Oxidations of the benzidin due to the presence of oxydases have not been noted in this technic.

2035 Chestnut Street.

A NEW SEPTAL CHISEL*

CREIGHTON BARKER, M.D., NEW HAVEN, CONN.

This instrument is designed for the removal of the base of the nasal septum and septal ridges. It has been used by a number of rhinologists with gratifying results. Essentially, the instrument is a Freer chisel to which tiny rounded knobs have been added to protect the sharp corners of the blade. The advantage of this protection are clear—it is practically impossible to injure with it the overlying mucous membrane. The projections at the sides of the blades also make it easier

Septal chisel.

to hold the cutting edge against a narrow projection without slipping, and its use with the blade vertical, as in severing a spur, is facilitated thereby.

66 Trumbull Street.

A FILTERING ADAPTER FOR THE ADMINISTRATION OF NEO-ARSPHENAMIN

JAY F. SCHAMBERG, M.D., PHILADELPHIA

During the World War, the practice became common abroad of administering neo-arsphenamin in concentrated solutions in a small Luer syringe. This practice has likewise been adopted by many physicians in this country. It possesses the advantage of simplicity of administration and of time economy, factors which are important when large numbers of patients in clinics are treated.

When concentrated solutions are used with a Luer syringe, and even when larger quantities of water are employed, it is quite possible for minute fragments of glass dust, dust in the water or undissolved particles of the drug to be carried through the needle. Such particles, while not large enough to be readily visible to the eye, may still be of sufficient size to cause an embolism in the minute capillaries of the lungs or possibly other organs. It is probable that the nitritoid and similar immediate reactions which follow the administrations of arsphenamin are due to embolic processes. It is now common knowledge that solutions of neo-arsphenamin

* From the Ear, Nose and Throat Service, Grace Hospital.

which are turbid or cloudy will produce immediate symptoms, characterized often by flushing followed by weakness and sometimes collapse. It is known that acid solutions of arsphenamin produce emboli in the vessels of the lungs, a fact which may be definitely demonstrated in experimental animals. The monosodium salt of arsphenamin injected in the strength of 0.4 gm. in 20 c.c. of water has been followed by the development of embolic bronchopneumonia. The use of the disodium salt, which is produced by neutralizing with excess of alkali, appears to lessen the liability of embolism by reason of the fact that the blood serum is less likely to be precipitated in the presence of the increased amount of alkali. These considerations lend some support to the thought that occasional nitritoid and immediate reactions after injections of neo-arsphenamin may be due to the presence of unsuspected small particles of the character described, which might be readily removed by filtration.

While some physicians filter solutions of neo-arsphenamin, the practice is generally not carried out. If it could be performed without any undue exposure of the neo-arsphenamin to contact with air and increased liability to oxidation, it would be an advantage. The filtering adapter which has been made up for us by the Becton-Dickinson Company gives us an opportunity to secure filtration without increased exposure to air. The adapter consists of a small glass tip about 30 mm. in length which snugly fits the tip of the syringe. Inside the lumen is placed a small pledget of absorbent cotton. When the solution of neo-arsphenamin is poured into the barrel of the syringe, it is readily filtered by

Filtering adapter, indicated by arrow, for administration of neo-arsphenamin.

passing through this pledget of cotton. After filtering in this way, if one removes the pledget of cotton and examines it with strong magnifying lenses, one may often note the presence of minute particles of solid material representing particulate matter of one kind or another, which would otherwise have gone through the syringe from the needle into the vein. One may readily insert the cotton and sterilize the tip in a sterilizer at the same time that the syringe is rendered sterile. The filtering adapter likewise answers the purpose of a safety device, insuring the presence of the needle in the vein when injecting dark solutions of any kind, for the solution remains in the syringe, and the blood may be seen mounting through the filtering adapter.

1922 Spruce Street.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED AS CONFORMING TO THE RULES OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR ADMISSION TO NEW AND NONOFFICIAL REMEDIES. A COPY OF THE RULES ON WHICH THE COUNCIL BASES ITS ACTION WILL BE SENT ON APPLICATION.

W. A. PUCKNER, SECRETARY.

EPINEPHRINE (See New and Nonofficial Remedies, 1922, p. 108).

Epinephrin-G. W. C. Co.—A brand of epinephrine-N. N. R. Manufactured by the G. W. Carrick Co., New York. No U. S. patent or trademark.

Epinephrin-G. W. C. Co.: Vials containing epinephrin-G. W. C. Co. (base), 1 grain.

Epinephrin Chloride Solution-G. W. C. Co.: A solution containing epinephrine hydrochloride, equivalent to 1 part of epinephrine in 1,000 parts of physiologic solution of sodium chloride and preserved with hydrochloric acid (equivalent to HCl, 0.02 per cent.).

PITUITARY EXTRACT-LEDERLE (OBSTETRICAL).—An extract of the posterior lobe of the pituitary body of cattle, approximately two and one-half times the strength of

solution of hypophysis, U. S. P., preserved by the addition of chlorbutanol, 0.5 per cent. It is standardized according to the method of G. B. Roth, as modified by R. A. Spaeth (Bull. 115, U. S. Hygienic Laboratory).

Actions and Uses.—See general article, Pituitary Gland (New and Nonofficial Remedies, 1922, p. 213).

Dosage.—From 0.5 to 1.0 Cc. (7 to 15 minims).

Lederle Antitoxin Laboratories, New York. No U. S. patent or trademark.

Ampules Pituitary Extract-Lederle (Obstetrical) 0.5 Cc.

Ampules Pituitary Extract-Lederle (Obstetrical) 1 Cc.

PITUITARY EXTRACT-LEDERLE (SURGICAL).—An extract of the posterior lobe of the pituitary body of cattle, approximately five times the strength of solution of hypophysis, U. S. P., preserved by the addition of chlorbutanol, 0.5 per cent. It is standardized by the method of G. B. Roth, as modified by R. A. Spaeth (Bull. 115, U. S. Hygienic Laboratory).

Actions and Uses.—See general article, Pituitary Gland (New and Nonofficial Remedies, 1922, p. 213).

Dosage.—Usually 1 Cc. (15 minims).

Lederle Antitoxin Laboratories, New York. No U. S. patent or trademark.

Pituitary Extract-Lederle (Surgical) 5 Cc. vial.

TYPHOID VACCINE (See New and Nonofficial Remedies, 1922, p. 310).

Parke, Davis & Company, Detroit.

Typhoid Vaccine (Prophylactic).—Marketed in packages of three ampules (*Bio. 427*), one containing 500 million, and two, 1,000 million, killed bacteria each; also in packages of three syringes (*Bio. 426*), one containing 500 million and two, 1,000 million, killed bacteria each.

GONOCOCCUS VACCINE (See New and Nonofficial Remedies, 1922, p. 301).

Parke, Davis & Company, Detroit.

Gonococcus Vaccine.—Marketed in packages of four 1 cubic centimeter bulbs (*Bio. 271*), each containing 1,000 million killed bacteria; in packages of four 1 cubic centimeter syringes (*Bio. 273*), each containing 1,000 million killed bacteria; also in 5 cubic centimeter (*Bio. 274*), and 20 cubic centimeter (*Bio. 275*), bulbs, containing 1,000 million killed bacteria per cubic centimeter.

STAPHYLOCOCCUS VACCINE (See New and Nonofficial Remedies, 1922, p. 306).

Parke, Davis & Company, Detroit.

Furunculosis Vaccine.—Marketed in packages of four 1 cubic centimeter bulbs (*Bio. 255*), each containing 2,000 million killed *Staphylococcus aureus* obtained from furuncular lesions; in four 1 cubic centimeter syringes (*Bio. 257*), each containing 2,000 million killed staphylococci; also in 5 cubic centimeter (*Bio. 258*) and 20 cubic centimeter (*Bio. 259*) bulbs, each containing 2,000 million killed staphylococci per cubic centimeter.

Staphylococcus Vaccine (Combined).—Marketed in packages of four 1 cubic centimeter bulbs (*Bio. 376*), each containing 1,000 million killed *Staphylococcus albus* and 1,000 million killed *Staphylococcus aureus*; in four 1 cubic centimeter syringes (*Bio. 378*), each containing 1,000 million killed *Staphylococcus albus* and 1,000 million killed *Staphylococcus aureus*; also in 5 cubic centimeter (*Bio. 390*) and 20 cubic centimeter (*Bio. 391*) bulbs, each containing 1,000 million killed *Staphylococcus albus* and 1,000 million killed *Staphylococcus aureus* per cubic centimeter.

VACCINE VIRUS (See New and Nonofficial Remedies, 1922, p. 290).

Parke, Davis & Company, Detroit.

Vaccine Virus.—Marketed in packages containing one capillary tube (*Bio. 560*) for one vaccination with a rubber bulb for ejecting the vaccine and a needle for scarifying, and in packages containing five capillary tubes (*Bio. 561*) for five vaccinations, with a rubber bulb for ejecting the vaccine and a needle for scarifying.

ERYSIPELAS AND PRODIGIOSUS TOXINS (COLEY) (See New and Nonofficial Remedies, 1922, p. 316).

Parke, Davis & Company, Detroit.

Erysipelas and Prodigiosus Toxins (Coley).—Marketed in packages containing five 1 cubic centimeter bulbs (*Bio. 451*) and in 15 cubic centimeter bulbs (*Bio. 455*).

First Practical Clinical Instruction.—Prof. C. Fedeli of Pisa has found records which establish that an Italian physician named Da Monte opened at Padua in 1543 in the Franciscan Hospital a school for practical instruction in clinical medicine. This, he says, was the pioneer institution of the kind. Boerhaave founded a similar one in Leiden in 1714, and Van Swieten at Vienna in 1745. Then came Prague, 1781; Göttingen, 1786; Jena, with Hufeland, 1793; Edinburgh, 1741; Oxford, 1780, and Paris, 1795.