is a combination of amylene hydrate and chloral hydrate, while chloralose, a combination of chloral hydrate and glucose, partakes of the action of morphin and is rather expensive. Chloretone, a more recent product, is not entirely devoid of danger and is not always so certain in its action as chloral hydrate, while butyl chloral hydrate, or croton chloral hydrate, is one of the older compounds that has been found wanting and is now little used. Of the official compounds of this group we have:

Chloralamid and Paraldehyd.

CHLORALFORMAMIDUM.—U. S.—Chloralformamid. Chloralamid. This has practically the same action as therapeutic doses of chloral hydrate, the latter being formed in the body by decomposition of chloralformamid.

Average dose: 1 gm. (15 grains).

PARALDEHYDUM.—U. S.—Paraldehyd is slower in its action transparent liquid, slower in its action than chloral hydrate, but also safer. It has the disadvantage of a persistently disagreeable taste and odor. It is locally irritant and should not be used in irritable conditions of the stomach. It may be prescribed dissolved in 10 parts of water or in aromatic elixir, and is best administered cold, or followed by a cold drink.

Average dose: 2 c.c. (30 minims).

Sulphonal and Trional.

SULPHONMETHANUM.—U. S.—Sulphonmethane, Sulphonal, Diethylsulphonedimethylmethane, and

SULPHONETHYLMETHANUM.—U. S.—Sulphonethylmethane, Trional, Disulphonemethylethylmethane, may be considered together as they differ chemically only in the addition of an ethyl group in the latter.

Average dose of either: 1 gm. (15 grains).

Therapeutic Action.

The therapeutic action of these two preparations is practically identical, and the closely related tetronal might also be included in this statement. Trional is somewhat more soluble than sulphonal. While these substances are safer than hydrated chloral they are not wholly free from danger, as fatal cases of poisoning have been reported and the sulphonal or trional habit, while of more recent origin, bids fair to equal if not to excel the chloral habit in the number of its victims. These agents are usually given in powder, and owing to their slow absorption, should be given about two hours before they are expected to act. To insure more speedy action they may be given in solution, for which purpose they are dissolved, or at least suspended, in a cup of hot milk.

Urethane.

ÆTHYLIS CARBAMAS.—U. S.—Ethyl Carbamate, Urethane. This is a new official preparation which is claimed to be much safer than chloral hydrate, to which it would be distinctly superior but for the fact that its action is not so certain and because tolerance is soon acquired. It is best given in water, in which it is very soluble. The average dose is - gm. (15 grains).

THE BROMID GROUP.

The bromid group is so well known that it requires little therapeutic consideration here, but it is of considerable historic, as well as of practical interest. Potassium bromid was introduced by Balard about 1826, who supposed it to have properties analogous to those of potassium iodid. It was not until some time after 1850 that the present, sedative, uses of the bromids were accidentally discovered. During the past four decades the several alkaline bromids have received considerable attention and several of them are now official in every pharmacopeia. In our own Pharmacopeia, in addition to monobromated camphor, hydrobromic acid and the hydrobromids of a number of alkaloids, we have ammonium, potassium, lithium, calcium, sodium and strontium bromids official.

The average dose of any one of these alkaline bromids is 1 gm. (15 grains).

The abuses that have arisen in connection with substances belonging to this group are largely due to the misrepresentations that are made in connection with the efficiency or the character of the preparations containing them.

Strontium salts, particularly the bromid, were brought forward some years since, at exorbitant prices, as being infinitely

superior to the corresponding compounds of other elements. Experience has shown that, in the main, these claims were unfounded, though many, even now, claim that strontium bromid disturbs the stomach less than the corresponding sodium or potassium salt. Another claim that is frequently made by manufacturers of nostrums, like "Peacock's Bromides," is that they use "chemically pure" salts. Exactly what is meant by this claim is difficult to say, but the Pharmacopeia gives us a number of readily applied tests by which the salts themselves may be tested. The manufacturers of nostrums, on the other hand, not infrequently add the very substances that are considered contaminations.

(To be continued.)

New Instrument

A NEW NEEDLE HOLDER.

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I have for some time felt the necessity for a needle holder which would give easy access to the deeper and less accessible cavities of the body, for example, the pelvis, the cardiac portion of the stomach in certain gall bladder and other cases, more especially in subjects having much adipose and muscular tissue. At the same time I desired a strong needle holder for purposes of general utility and one in which the closed hand on the handle would not in any way obscure the operator's field of vision.

The usual holder often fails to secure the needle firmly when tissues of any degree of resistance are encountered. More particularly does this obtain should the needle be a trifle dull. Several types of holder break the needle if too firmly closed.

Bearing the above in mind, I have had a pistol grip or angular needle holder made which consists of four parts, an upper jaw branch, a lower jaw branch, which is continuous with the upper handle; a separate lower handle, which is connected with upper jaw branch by a lock, and a spring with ratchet catch. The upper jaw slides on the lower one by means of a runner dovetailed into a slot in the lower jaw. The parts holding the needle are finely serrated.

The dimensions of the instrument are as follows: From back at angle of holder to jaw, $4\frac{3}{8}$ inches; from back to bottom of handle, $4\frac{1}{4}$ inches.

This I find to be a suitable length for work in most of the deep cavities of the body. Surgically speaking, a shorter holder would be better suited for work on exterior parts of the body.

The holder can easily be taken apart or assembled. By bringing the lower handle forward it can be unlocked, and the upper jaw can then be drawn out of the slot.

The advantages are: It renders areas comparatively difficult to reach more accessible; the hand is kept out of the line of vision; the needle is held firmly without breaking it; any kind of surgical needle is held perfectly, be it long, short, curved, straight, round, Hagedorn, flat, large or small. While it is easily taken apart for cleaning and is readily assembled, this instrument will not fall apart if handled with the ratchet open, as do some others. The arrangement of fulcrum, weight and power is such that a firm grasp on the needle is obtained by comparatively slight muscular exertion on part of the hand.