Conclusions: From the foregoing it is concluded that the addition of 1% acetic acid materially decreases the amount of menstruum necessary to exhaust Nux Vomica, without injuring the quality of the products. It does not prevent the extraction of fat sufficiently to make it of value from this standpoint.

Laboratories of E. R. Squibb and Sons, Brooklyn, N. Y.

WHAT IS A MODERN DRUG STORE?*

BY F. W. E. STEDEM.

This is a question to be replied to according to the observer's point of view. It may be answered in like manner. The writer, believing that a "drug store" is a place in which such things are done as are primarily helpful to the doctor in his efforts to heal the sick, quite naturally will describe a "modern drug store" as his ideal appeals to him.

It is not the intention to criticize any one, anywhere, or for any reason, where drug stores are conducted differently than the way the writer would have you believe the "Modern Drug Store" should be conducted.

The writer has often been vastly amused by and through his experiences, in visiting drug stores in his own home city and in other cities. The sign frequently reads "Modern Drug Store," "The Up-to-Date Drug Store," "The Drug Store of The People."

During these visits, the inquiry usually resorted to on entering the drug store is for "sterile water" followed by an order for an eight-ounce bottle. The number of failures to get an encouraging response is startling. The replies to the inquiry and order ranging, from one indicating a total lack of knowledge of the article wanted, to a lame excuse for not "stocking it"—because of lack of need or orders for it.

The next procedure is the presentation of a prescription order, for two drachms of 1% solution of atropine sulphate, sterile, and in six cases out of ten, in a quest recently made, the failure to get response of an assuring nature, caused a withdrawal of the order.

Now, as clearly indicated at the outset of this writing, it is not the intention of the writer to criticize anyone, anywhere, because of his ideals, in the conduct of a drug-store business, but such experiences as these related certainly must and do cause a great deal of adverse criticism of drug stores, drug-store methods and druggists.

The writer believes that many good druggists are compelled by the exigencies of their particular cases, to carry side-lines of great variety, the merchandising of which and the resultant profit make it possible for them to remain in their chosen localities, and when the department of medicinal supplies and prescription work is properly manned and conducted, honor and respect are the reward.

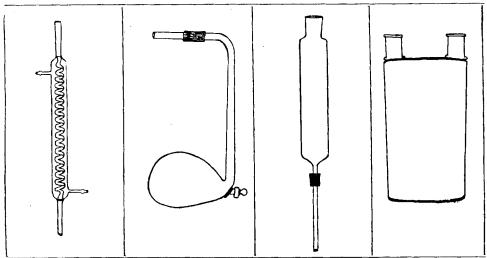
The writer has in mind individually owned as well as chain stores, where the department of sick-room supplies and prescriptions is conducted in a manner beyond reproach.

^{*} Section on Practical Pharmacy and Dispensing A. Ph. A., Buffalo meeting, 1924.

The writer also knows that a "Modern Drug Store"—one conducted with the sole purpose of aiding the physician in his efforts to heal the sick—is possible both ethically and commercially, and consequently describes his ideal "Modern Drug Store:" Therefore, my definition of a modern drug store is one equipped to supply the needs of physicians, and must have equipment of both stock and utensils to meet that condition, contemplating the advances of modern medicine, and keeping pace with all the up-to-date demands of that need.

Physically, the modern drug store is composed of the reception room, show room, prescription laboratory, laboratory for the production and storage of sterile products, and storage room with refrigerators. The refrigerator stored with biologicals and an automatically regulated temperature.

The reception room is, of course, the main store, proper, and contains in addition to necessary chairs, a display of all kinds of sick-room helps and needs.



Explanatory—As shown in the cut this simple apparatus consists of a retort, condenser, and a supply reservoir. The supply reservoir is so placed as to insure a continuous fresh supply of water to the retort, as the water is vaporized, and this because of the small size of the retort. Collection is to be made directly into the vessels in which the fresh distilled water is to be fractioned or sold—ampuls or ordinary glass-stoppered bottles, previously made sterile, stored and protected in the authorized way.—F. W. E. S.

Conveniently located, is a desk with phone and proper service, and a wrapping counter. Also some convenient nook or corner, framed off and so arranged that articles of a kind and nature not ordinarily on display could be shown customers in privacy. This room may also be used as a fitting room for trusses, abdominal bandages and like needs.

The laboratories to be equipped with all necessary utensils for the making of all kinds of prescription work and such solutions and mixtures as are wanted for intravenous, intramuscular and intradermal medication, as well as spinal injection.

This means that in addition to the ordinary collection of mortars and graduates, we need steam coils, sand coils, hot water coils, flasks of sterile distilled water, both hot and cold, an autoclave, a dry sterilizing oven and—not necessarily, but to great advantage—an automatic still for the constant production of fresh distilled water.

The apparatus herein shown for this purpose is not quite perfect, but will serve, and can be constructed at small cost.

In talking of all this, my mind goes back forty years or more to an old German druggist friend who called me in to consult with him about the sale of his store. In his laboratory was a pharmaceutical coal-burning stove, which was a miracle of completeness as to the need.

I constantly think of him—this old, long dead friend of mine, as the most modern of all my druggist acquaintances, and this thought is always fruitful of the hope that he may live again and always in his followers.

DRUG CLERKS AND BELLADONNA.*

BY DR. FRED B. KILMER, PH.M.

Something like half a century ago, there was assigned to a young clerk working in a drug store, the task of pounding belladonna in an iron mortar. The root was refractory, the day was hot. The job was not well done, but during its progress the dust from the root smeared his face and reached his eyes. The result was a pair of distended pupils and a dimmed vision.

The lad's mother, in great alarm, visited the druggist, who explained that this was the natural action of belladonna when ingested into the eye, and added the reassurance that it would pass away in a day or two, and it was so.

This lad was the writer, and that experience gave to him a life long interest in the drug.

Before, and since that time many a drug clerk has been brought vividly to a realizing sense of the power of belladonna to dilate the pupil of the eye.

More than one hundred and fifty years ago a drug clerk in the City of Hamburg, Germany, had a similar experience, the final outcome of which forms an important link in the history of the mydriatic action of belladonna.

This is the beginning of his story:

"When a novice in the Hamburg pharmacy of my uncle, Ohrtmann, Dr. Reimar desired some extract of belladonna. The fresh herb, with its flowers and fruit, having been finely comminuted, the better to boil out and extract the tincture, a bit of herb or drop of berry juice unfortunately spattered into my right eye.

"Realizing this, I attempted in vain to remove the foreign irritant from the eye with the finger. Hardly had three minutes of the hour elapsed, the irritant action having ceased meanwhile, when a mistiness arose before the eye, which increased little by little. After quarter of an hour there was present total blindness without any pain, the other eye remaining intact."

The clerk sought the counsel of Dr. Reimar, the prescriber of the drug, and by proper treatment in three weeks his eye "was restored to its pristine integrity."

Reimar informed him that it was known that the ingestion of belladonna would produce mydriasis, but he was surprised to learn that the external application of the drug would produce this result.

The discussion of the matter with Dr. Reimar resulted in the suggestion that

^{*} Section on Historical Pharmacy, A. Ph. A., Buffalo meeting, 1924.