

assayed strengths are very few and while these standards are a good thing they do not actually insure a standard extract at all times. An extract may have added alkaloid to bring it up to standard and be very deficient in other extractive which is not assayable but which is, nevertheless, an active part of the drug.

Probably the most important factor in the production of uniform powdered extracts is the menstruum used. Some manufacturers will decide on a selling price for an extract and then make the menstruum fit this figure. It is only fair, however, to state that very few manufacturers of this type exist and can be usually picked out by their uniformly low price lists, many of the prices being evidence in themselves that either the product is not up to standard or that the manufacturer is selling at a loss. The latter is not usually the case.

The product produced by different menstrooms acts very differently in the process of granulating a tablet mixture and consequently plays havoc with established working formulas.

The writer does not believe that all powdered extracts should be made official but manufacturers should specify on their labels:

1. Drug strength (assayed strength if possible).
2. Menstruum used.
3. Diluent used.
4. Fineness of powder.

DURET'S SOLUTION IN HOSPITAL PRACTICE.*

BY CARL F. DYNA.

I have been requested to write a paper of interest to the Section on Practical Pharmacy and Dispensing, more particularly, I suppose, to Hospital Pharmacists. But, inasmuch as the time remaining is rather short, I will content myself by calling your attention to a hypochlorite solution used in the Southern California State Hospital. This institution cares for some 2500 unfortunates, including the average percentage of chronics, and bed patients with their attendant troubles such as bed sores, gangrenous ulcers, skin abrasions, etc. A few years ago, when the papers were full of articles reporting the wonderful results obtained with the use of chlorine solutions of various kinds in the treatment of infected wounds and lacerations, I came across a formula in a number of our JOURNAL (A. PH. A.), a modification of the usual procedure, suggested by a French physician, Dr. Duret, in which he replaced the sodium salt used with magnesium, this doing away entirely with any chance of the irritating caustic action which would happen (and did in the early days) owing to the presence of free NaOH in the preparation when made in a hurry and not properly neutralized. The formula appealed to me and was tried out here with the result that we have used no other solution since, whenever chlorine irrigation has been indicated. Here is his modification:

Chlorinated lime (30% Cl).....	112 grams
Magnesium sulphate.....	72.8 grams
Water.....	4 liters

* Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., Cleveland meeting, 1922.

Triturate the chlorinated lime to a smooth mixture with the water and add the $MgSO_4$ crystals to this. Allow the interaction to take place at ordinary temperature, with frequent stirring. When the reaction is completed, usually in five or six hours, filter. In actual practice I have been in the habit of using three times the amount of solids. After complete precipitation and filtration, ascertain the amount of available chlorine present by the U. S. P. method and standardize the solution to contain 0.5% of nascent Cl and it is ready for use.

When you consider the simplicity of the whole process and the good results obtained (equal to any produced by the Carrel-Dakin Solution), the positive absence of any irritant, as any $Mg(OH)_2$ which might remain in the preparation has a mild stimulating effect of its own on the epithelial cells, I trust that you will agree with me that it has been well worth while calling your attention to *Duret's* Solution again.

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THE GREAT NEED FOR COMMERCIAL TRAINING.*

BY H. S. NOEL.

A learned professor in an eastern school of pharmacy remarked to his class in microscopy not so many years ago that it behooved each individual taking the course to pay strict attention to this subject because, after graduation, when the dream of the future came into realization and it became necessary to use the microscope to identify starches in crude drugs, his teachings would prove their value. Those of us who had spent some five or ten years in the drug business before going to school doubted the sincerity of the worthy professor. Those who had little or no experience took his remarks seriously.

It is interesting to note that there is constantly being heard, whenever pharmacists gather together, an undercurrent of discussion about the time when pharmacy will again come into its own. Only a month or so ago a prominent member of the American Pharmaceutical Association read a paper at a state meeting in which the whole trend of thought was bent strongly to the near future when professional recognition would be given to pharmacy. One hears on every hand talk of raising prerequisites, increasing the years of study, granting of higher degrees and classifying places of business, until the writer confesses that he is beginning to feel very much like the Irish woman who, on seeing her boy marching out of step down the street in a military parade, remarked: "And everybody's out of step but me own boy Danny."

The merchandising expert of one of our great metropolitan newspapers recently made the remark that the grocery business was in a sadly demoralized state, due to the fact that there are more stores than needed, in some cities as high as one to each twenty-two families. It is his impression that conditions will be better at some future time and standards will be raised because the chain groceries are training men to become merchandisers and managers with the idea of opening new stores and having skilled men to run them. Instead of staying with the chain store,

* An address before the Section on Commercial Interests, A. Ph. A., Cleveland meeting, 1922.