

tain extent stain a light colored finish, especially white enamel, so care should be used in its application lest one might discolor adjoining woodwork.

DISCUSSION.

Mr. Raubenheimer expressed the opinion that this was a good thing, and he knew of one of the teachers in his school who used this process.

Mr. Becker called attention to the fact that a similar formula was published a few years ago by Bausch and Lomb, in the *Journal of Applied Microscopy and Laboratory Methods*, the title of the paper being "An Acid-Proof Table-Top," by Pierre A. Fish, New York State Veterinary College, Vol. VI, No. 3, March, 1903, pages 2211 and 2212.

Mr. Dunning said if the discussion of glass counters was in order he would like to say that in his establishment they had not had the most satisfactory experience with them. They were a most excellent medium for breaking glass things, as they had no elasticity. They had remodeled their main store, and put in solid mahogany, unvarnished counter-tops.

Mr. Wilbert suggested that if the pharmacist would take an ordinary pine board and saturate it with paraffin he would find it would make a fine table-top.

LIQUOR MAGNESII CITRATIS.

J. LEE BROWN, PH. G.

So much has been written about Solution of Magnesium Citrate that one would think the last word had been said on the subject, yet its preparation still continues to be a source of trouble to many pharmacists. A great many formulæ and modifications of the U. S. P. process have been proposed, so I take the liberty of presenting a method that has proven entirely satisfactory in my experience for many years, and that has made "citrate" one of our best sellers. I use the U. S. P. formula with a few modifications as follows:—

Magnesium Carbonate U. S. P.	180 gm.
Citric Acid	396 gm.
Syrup	720 cc.
Spirit of Lemon	10 cc.
Potassium Bicarb.	12—2.5 gm. Tablets
Water to make 12 bottles of solution.	

Place the magnesium carbonate in an aluminum vessel of about 4 L. capacity which contains about 2 L. of water. Now add the citric acid. Let stand till effervescence ceases and complete solution results. Place the vessel containing the solution, on an open flame and raise to the boiling point and allow to boil a few moments. Add the spirit of lemon and filter while hot through a well-wetted white filter, contained in an aluminum funnel. When the solution has all passed, wash the filter by passing about a pint of boiling water through it. Now add the syrup and divide the liquid accurately between twelve patent-stoppered citrate bottles. Fill the bottles nearly full with water, drop in each a 2.5 gm. tablet of potassium bicarbonate and stopper immediately. I have found it unnecessary to use distilled water, as the water in my locality is almost entirely free from any mineral contamination or organic impurities. The whole process can be completed in a short time, with very little attention. Filtering at

the boiling temperature, is completed in about ten minutes, while filtering cold, according to the U. S. P. method, requires two hours at least, and a perfectly clear and bright filtrate would not result as with my method. I have kept this solution, made as above, in the store at ordinary temperature for two weeks, perfectly clear and free from the slightest precipitation. I do not favor the proposition to use magnesium oxide, instead of the carbonate, as the oxide is so prone to change in ordinary keeping, absorbing CO_2 and changing to the carbonate. Solutions made from it would vary considerably in magnesium-content.

DISCUSSION.

Mr. Hynson exhibited a sample bottle of magnesium citrate as put up by his firm, and passed it around among the members. He said he used a green bottle for this purpose. For years, he said, he had tried to change the color of the wrapping-paper used in his store, but had never been able to do so, as he had never been able to impress upon his employes that anything but white was the proper color. A few years ago he had bought in the district around Baltimore, twelve bottles of magnesium citrate, expecting to find magnesium sulphate in them; but every one was correct as to contents, while each was bad as regarded pharmacy. Many druggists used their soda-water lemon syrup, but hardly one of the samples contained enough carbon dioxide to preserve the preparation and to make it pleasant. One of his customers had informed him upon a certain occasion that he had bought solution of magnesium citrate, and the bottles had turpentine in them—but this was several years ago.

Mr. Perry said he, at one time, had made citrate of magnesia in fairly good quantities, and always according to the process of the pharmacopœia. He had always sterilized the water and container. One day one of his men had suggested the idea of making a window exhibition, and this was done, with the result that his sales of citrate of magnesia increased 150 percent. He had several stores, and he "passed it around" to all of his stores.

In reply to a question by Mr. Nitardy as to whether he was accustomed to take the bottles back after the patient had used the contents, Mr. Hynson replied that he did not, as a rule, though this rule had an exception where he knew the party, and knew he had bought the citrate of magnesia from his store.

The Chairman stated that he had presented a paper on this subject at the Boston meeting, in 1911.

Mr. Becker said he would like to say, in connection with concentrated solution of magnesia, that he had found three times the U. S. P. strength to be a very convenient way of dispensing citrate of magnesia. He also found that it kept very well.

Before a man can reach the state of "knowing" he must train his mind to the best thought in his profession or business. The Present is always an improvement upon the Past. Unless you keep step with the present, you are certain to find yourself an incompetent laggard in the future. The men at the top "know" the exact forward movement in their chosen vocations. They can never find out enough about their work. To know and apply your knowledge is to succeed. To know that we know what we know, and that we do not know what we do not know, is true knowledge.—*The Pacific Druggist.*