production costs made possible lower selling prices. The crux of the situation was in getting sufficient orders for the standard numbers to make this possible.

The customer was perfectly willing to have his vanity gratified in special designs and markings as long as manufacturers of glassware were willing to do it for him at little or no extra cost. But, when he learned that, under the new order of things, such little foibles would make his glassware cost two or three times as much as the standard numbers made to do the same service would cost, he quickly lost his enthusiasm for special designs. Remember that these standard numbers were no haphazard choice. They were the result of the scientific selection of the numbers which, from the experience of years past, had proved most in demand. In effect, the druggists themselves had selected the numbers that the manufacturers should make for them by machine methods.

Under the old hand methods, manufacturers had to produce in small quantities as the orders were received. The druggists themselves, of course, had to wait, because there could be no advance manufacturing of their requirements. This meant wide seasonal variations in production, a disorganized employment situation in manufacturers' plants, and high production costs resulting from this seasonal manufacturing. Slow deliveries meant slower turnover for the manufacturers and for the retail druggists as well. Now manufacturers are able, in most instances, to fill any order for standard machine glassware from warehouses and distributing depots on the day it is received. The advantages to all concerned are apparent.

Seasonal variations in demand still remain, but with a standardized production it is now possible to manufacture the year round in anticipation of these demands. This means inevitably a better product at a lower price, a fact that customers appreciated sooner than was expected.

After all, glass bottles are used chiefly as containers. The quality or attractiveness of what is contained in them is not enhanced or depreciated in the slightest by unimportant and capricious variations in the design of the container. It is not like asking a group of men to wear suits of the same fabric and cut. Standardization simply has eliminated the unnecessary variations in a useful article with profit to the manufacturer, the retail druggist and the ultimate consumer.

THREE UNUSUAL PRESCRIPTION FORMULAS.*

BY RALPH E. TERRY.

During the last few weeks the following formulas have been submitted for consideration. All are relatively simple in explanation, yet are rather unusual in their combination.

I.

Tincture of Guaiac	℥ ss
Solution of Potassium Hydroxide	℥ ss
Alcohol	℥ ss
Cinnamon Water, to make	ƒ℥ ij

Signa: One-half teaspoonful in a half-glass of water for a gargle.

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* Section on Practical Pharmacy and Dispensing, A. PH. A., 1928.

It is evidently the intention of the prescriber to use the potassium hydroxide to form water-soluble "soaps" of the resins present in the tincture. Then to further help matters, he included the alcohol. If the orthodox method of handling this mixture is employed, *i. e.*, mixing the alcohol with the tincture and then adding the solution of potassium hydroxide, a clear solution will result at this stage. Now as the cinnamon water is added, a sticky mass of resinous material is thrown out of solution and floats on the top of the mixture. Since the tincture has been diluted by the addition of the alcohol the potassium hydroxide has not been able to exert its saponifying action, so that on the addition of the water the alcoholic concentration is reduced to such a low point that the resins do not remain in solution.

If, on the other hand, the solution of potassium hydroxide and the tincture are mixed, then the cinnamon water added and, lastly, the alcohol, no difficulty is experienced.

The following formula is of a different type and seemingly of a very simple character.

II.

Sodium Bromide	ʒ vij
Sodium Citrate	ʒ vij
Peppermint Water to make	ƒʒ iij

Signa: One teaspoonful three times a day.

Since both the salts are water-soluble, no difficulty would be expected with such a formula. On actual compounding, however, it was found that the ordinary procedure of placing the salts into a bottle and filling up with water could not be followed. Nor could one salt be first dissolved in part of the water and the second salt added to this solution; in the latter procedure the second salt lumped rather badly and failed to go into solution within a reasonable length of time; this may be explained—since the first solution is nearly saturated, the second salt is not nearly as soluble in that solution as in water.

The ordinary technic under such conditions is, of course, to dissolve one salt in half the peppermint water, and the second in the other half, and then mix the two solutions; then no further difficulty is experienced.

Lesser amounts of the salts were found to cause no trouble, so the factor involved is the quantity of materials rather than a very complex reaction.

III.

Phenolphthalein	gr. xxiv
Magnesium Oxide	ʒ iij
Liquid Petrolatum	
Acacia	
Water, aa q.s.	ƒʒ xij

Signa: dr. i 1 A.M. and P.M.

An emulsion of the liquid petrolatum was first prepared so as to contain 50% of the liquid petrolatum; then the light magnesium oxide and the phenolphthalein was added and the mixture triturated to a smooth paste. Considerable difficulty was experienced in making a homogeneous mixture, since the quantity of magnesium oxide is rather bulky. After standing, the reaction between the phenolphthalein and magnesium hydroxide resulted in the formation of a deep pink color.

Another change was noted in the preparation. When first made, it was of a "smooth" character but, after an hour or so, the mixture assumed the appearance of cottage cheese, becoming quite curdy. It is thought that this change is due to the magnesium oxide depriving the emulsion of water, with the production of magnesium hydroxide. The finished product is paste-like, much too thick to be dispensed in the usual way. It was suggested that the mixture be dispensed in an ointment jar, and the patient informed of the reason for doing so.

A more presentable mixture may be made by first hydrating the magnesium oxide, but a rather large increase in volume results, since an ounce of magnesium oxide requires about two ounces of water to produce a stiff paste; this means an increase in volume to at least sixteen ounces, or more. On standing, the mixture became solid, but not of the cheesy appearance of the first product. By further increasing the amount of water, a more presentable mixture may be obtained.

It is suggested that to dispense this mixture extemporaneously, milk of magnesia would overcome the difficulty of hydrating the magnesium oxide. This change will not permit of the administration of equivalent amounts of magnesium oxide, since approximately sixty-one ounces of the magma are necessary to replace the magnesium oxide. On the other hand, as an antacid the milk of magnesia would be as effective as the large amount of magnesium oxide, and the finished product is of a consistency better adapted to dispensing and administration. This last method of preparation resulted in a permanent product.

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SOME SUGGESTIONS FOR SIMPLIFICATION OF SELTZER'S PROCEDURE IN PRESCRIPTION PRICING.*

BY LEONARD A. SELTZER.

"When the funny man in the daily newspaper runs short of subjects he can always fall back on the joke about druggists' prices."

This opening sentence in a leading editorial in a recent issue of the *Druggists Circular* reflects a state of public mind which has, unfortunately, altogether too much ground for justification. It is owing to the effect of the facts on which this conviction of the public rests—an effect not only on our cash receipts but on our moral reputation—our reputation for holding ourselves subject to principles of common honesty that we have given the question of prescription prices such careful study and have appeared before this section for three consecutive meetings with papers on this problem.

Last year we submitted what we have found to be a workable and helpful procedure—an algebraic formula for computing prescription prices. The three factors in this formula were: Compounding fee, service charge and selling price of material represented in the formula by the symbols C, S and M. Now, whatever difference of opinion there may be on the value of the first two factors or even whether or not they should be included at all, the cost of material is one, at least, that can hardly be ignored. If any attempt at correct prices is to be undertaken provision must be made for computing the charge necessary for material supplied, *tuto cito et jucunde.*

* Presented before Section on Commercial Interests, A. PH. A., Portland meeting, 1928.