YELLOW WAX A VALUABLE ADJUVANT IN PHARMACY.*

BY LEONARD A. SELTZER.

In times past before the lamp of scientific knowledge shone as brightly as it does at present, the practice of pharmacy depended more upon the light of experience—the knowledge of isolated facts—the behavior of individual substances—impericism. While not wishing to cast any reflection upon the value of the light of scientific knowledge, is there not some danger that we become so dazed by it as to be unable to see the value of the art of pharmacy as practiced in earlier days?

Among the substances the use of which in the past was appreciated even if not understood are the products of the beehive: honey and yellow wax. These to-day, as a result of our scientific attitude, are not so much appreciated because their properties are not explained. Honey is recognized almost solely on account of its properties as a sweetening agent, but it possesses other qualities not so clearly understood. It prevents incompatabilities when they might be expected to occur. An illustration is the effect on resinous substances in alcoholic solution which are to be mixed with aqueous diluents. If the alcoholic solution be first mixed with an equal volume of honey and then added to the aqueous diluent, the precipitation is much less likely to occur. In many other ways honey is a very present help in trouble.

So yellow wax possesses other qualities than the one generally recognized, namely, that of hardening an ointment. Take, for instance, the present formula for compound resorcin ointment. The old formula presented many difficulties which had to be solved. They were not all solved until yellow wax, with its cohesive, demulcent and emollient properties, was substituted, the use of which, acting as a sort of binding agent, removed the last obstacle to the production of a remarkably satisfactory product in every respect.

The following prescription came to the writer's notice:

Silver Nitrate	3 grains
Balsam Peru	1 drachm
Simple Ointment	2 ounces

At first trial the official ointment was used with a result not entirely satisfactory. A second attempt was made by substituting for the official ointment one prepared by using yellow wax instead of white wax. The prescription was then prepared and a perfect ointment produced. This brings out the fact that in bleaching, yellow wax undergoes some other change than simply a change in color: white wax has a different consistency, a higher melting point, is less plastic, unctuous, or cohesive; is more prone to rancidity and granulation, when used as an ingredient in an ointment; lacks certain emulsification, emollient, and demulcent qualities, and in other indefinable ways is less serviceable as an ingredient in ointments. Authorities agree on this point and the experience of those who practiced pharmacy as an art in the past testify to the fact.

Might it not be well to carefully consider the wisdom of substituting white wax for yellow wax and further to consider carefully the broader principle of appreciation of what Professor Lloyd calls "The debt we owe to empiricism?"

* Section on Practical Pharmacy and Dispensing, A. Ph. A., Asheville meeting, 1923.