

### Does Pill Making Pay?

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The art of pill making is a source of revenue too much neglected by the pharmacist of to-day. There are those who say that it does not pay; but experience teaches that it is one of the most profitable and satisfactory branches of pharmacy. While, of course, there are certain pills which the apothecary cannot manufacture with profit or satisfaction to himself, such as those of ichthyol, creosote, the oils and oleoresins; yet, aside from these there are numberless other pills in constant use which he can manufacture, and which hold out opportunities for profit. It is the small things that the druggist does for his patrons which make him popular with them. When they learn that he is careful in small matters they become wonderfully attached to him, and will walk a dozen blocks, and pass as many pharmacies to patronize him.

As an illustration of this, a single instance will suffice. A certain apothecary decided to manufacture compound cathartic pills, because those on the market were not uniform, and too often of little value. He made the first lot from the ordinary stock, but these did not prove very satisfactory, and he resolved in the future to use only tested standard drugs. After some experimenting he adopted the expedient of preparing compound extract of colocynth, and the extract of jalap, so as to have them strong and pure. As is well known, colocynth varies in strength from 5 to 50 per cent., and the best quality can be had at the same price as the poorer grades. There is also much difference in the virtue of the jalap and scammony found in the market. This apothecary purchased the best crude drugs, ground them, and made extracts to his own satisfaction. He then obtained the best quality of gamboge and mild chloride of mercury, and from these drugs he made a second lot of pills which were so highly satisfactory that they have made for him a most enviable reputation. He has continued in the policy thus inaugurated, and the superiority of the product is responsible for many a valuable customer that he has since gained.

This instance shows that with a little skill and a practical mind, the apothecary can draw to his shop patrons who have not hitherto been customers. People soon find out when the apothecary neglects them, and conversely, when he makes a constant, progressive effort to please, they soon discover the fact.

Another instance in evidence: A certain physician, making a specialty of nervous disorders, found it difficult to obtain a uniform and reliable pill of the valerianates of zinc, iron, and quinine. He spoke of this one day to a certain apothecary who was clever enough to see an opportunity for profit in just such predicaments, and the latter promptly offered to make the desired preparation, pro-

vided the physician would give the pills a fair trial. He did so, and it is needless to add that he now has the full confidence of the physician, and thus he profits by the prescriptions and all other patronage controlled by the physician. Moreover, the physician would never think of dispensing his own drugs, because he knows that the apothecary is clever and can be relied upon to keep only pure and first-class stock.

It is seldom that one finds a physician who has not a special formula, or number of formulae, which he loved to prescribe on former occasions. The observant apothecary soon notices this, and, if he is shrewd, will coin such observation into many an honest dollar. Nothing pleases the physician more than when the pharmacist caters to his fancies, and thus the doctor's special pill may be made the basis of a combination between the pharmacist and the physician, which may last through many years.

It is easy to make pills, and coated pills at that. Thousands of apothecaries are doing it to day without the slightest inconvenience, and it is only because they have not taken the pains to investigate the subject that the balance are not doing so. Pill making is easy, doubly profitable, and highly satisfactory in its every detail. It requires the outlay of very little extra capital, and gives a shop the appearance of being independent of manufacturing firms.

#### PRACTICAL HINTS.

**Excipients.**—As in other details, judgment is necessary in choosing an excipient for a pill mass. When the ingredients are sufficiently adhesive to be developed by it, water is the proper excipient; but when they are not, it is necessary to use syrup, glucose, glycerin, glycerite of starch, tragacanth, or syrup of acacia. Pure glucose is probably the best adhesive excipient known. It has few incompatibilities, is colorless, very adhesive, practically non-volatile, and only a very small quantity of it is necessary to make a mass that is easily worked, and, best of all, not spongy.

Glycerin is of great value as an excipient, even when used in combination with glucose; but only a very small quantity of it dare be used, for it is hygroscopic, and often gives a pill mass a permanent softness which is to be avoided.

The great objection to syrup, acacia, tragacanth and the glycerite of starch is that they often produce a spongy and unmanageable mass, which dries slowly, and becomes too hard when dry. Glucose has none of these undesirable features, and seems to be the ideal adhesive pill excipient. However, the same excipient cannot be used with all pills, and judgment in each instance in selecting the excipient is a prime requisite of a satisfactory pill mass.

**Coating.**—Gelatin is undoubtedly to be preferred as a coating. Coating with it is more quickly accomplished than with

sugar, and has the advantage of being soluble in both the liquid and peptic parts of the normal gastric juice, while sugar is soluble only in the liquid. Pills can be gelatin-coated and dispensed in fifteen minutes, while sugar coating requires a much longer time.

"Beading" is one of the discouraging features in coating pills with gelatin. It can easily be avoided, however, by the addition of one grain of calcined magnesia to the mass of every fifty pills. This hardens the pill, and most effectually prevents "beading."

It is not well to heat the same gelatin too often. A molecular change occurs in gelatin after being heated several times, which renders it comparatively insoluble, and therefore useless as a coating.

Success in gelatin coating depends largely upon the temperature at which pills are dipped. It should not be boiling, but should be about the consistency of syrup, and just hot enough to drop freely. Practical experience is the best teacher as to this, however, and those who contemplate manufacturing coated pills will find full directions for procedure with any coating apparatus they may purchase.

**The Ideal Pill.**—The ideal pill is small, round, and easily soluble. It must be freshly prepared, from only the purest drugs, and should leave no hint of its ingredients upon the tongue. When all druggists manufacture their own pills as indicated above, the pharmaceutical millennium will be at hand.—*National Druggist*.

#### Best Forms of Quinine.

The Societe de Therapeutique recently appointed MM. Adrian, Berhoz, and Boymond, a committee to report on the above question. They conclude that the best salt is the hydrochlorate, it being the richest in alkalioid, sufficiently soluble, and less irritating to the stomach than the sulphate. The hydrobromate should be used only in cases rebellious to the hydrochlorate. As to the pharmaceutical form in which the hydrochlorate should be administered, compressed preparations are condemned, and pills made up with a soluble excipient or soft elastic gelatin capsules are recommended. Pills or capsules, containing each fifteen centigrammes of the hydrochlorate, and given one in the morning and one at night, or else before meals, suffice to keep the system under the influence of quinine so as to ward off attacks of malarial fever.—*The Lancet*.

**EXTEMPORANEOUS PERFORATED FUNNEL.**—For filtering viscous fluids, A. M. Edwards (*Chem. News*) constructs a funnel by perforating a sheet of celluloid with numerous holes and bending it into funnel shape, supporting it in a retort-stand ring. After cleaning, it may be unrolled and put away flat.