

On Excipients for Pills.*

BY T. H. HUSTWICK.

After reading Mr. Savage's paper on this subject, I must say I was rather astonished at his novel suggestion for making creasote pills, and it occurred to me, that a patient taking these wax pills might find it necessary to take a dose of turpentine as well, to ensure their solution in the stomach,—neither a very pleasant nor practicable idea. It has fallen to my lot to have had considerable experience in the making of creasote pills, and I have no hesitation in saying, that Mr. Savage's plan is not the best; which assertion, I think, will be fully borne out by my statements.

I have carefully prepared the formulae marked A. C. E. F. M. Nos. 4 and 5, they being the principal ones and dissimilar. I will now start with the fact before me that crumb of bread is the best excipient for these pills, excepting in such cases as the formula F, they requiring a different treatment. Liquorice powder is about the last thing I should have thought of using as an absorbent of creasote or moisture generally, there being several others very superior,—about the best of all being lycopodium.

A.—Creasoti.....	gtt. i.
Pil. Sapon. Co.....	gr. iiss.
Micc Panis.....	gr. iss.
Lycopod.....	gr. i.
Ft. Pil. i.....	m vj.

Instead of being 6 to 7 grains, and no doubt difficult to roll, I have here six very nice pills of the ordinary 5-grain size, rolled out beautifully, and retaining every particle of creasote.

C.—Creasoti.....	gtt. iij.
Micc Panis.....	gr. iij.
Lycopod.....	gr. i.
Pastæ Tragac.....	q. s.
Ft. Pil. i.....	m vj.

Make up very nicely: 3 grains of bread quite sufficient, and tragacanth paste enough to make the oil and bread thoroughly homogeneous; this being too soft to roll, lycopodium was added, they then rolled out tolerably well, and are very little larger than the ordinary 5-grain size, with all the creasote retained.

E.—Creasoti.....	gtt. ij.
Saponis.....	gr. i.
Micc Panis.....	gr. iij.
P. Tragac. Co.....	gr. iss.
Ft. Pil. i.....	m vj.

Being much too soft after mixing the three first, pulv. tragac. co. was added with the best effect; they rolled out well, are a very clean pill, but larger than any of the others, being the size of a large 5-grain pill. Creasote completely retained.

F.—Creasoti.....	gtt. iij.
Pil. Sapon. Co.....	gr. v.
Lycopod.....	gr. i.
Pulv. Tragac. Co.....	gr. i.
Ft. Pil. ij.....	m vj.

The two first making a semi-fluid mass, and lycopodium being not absorbent enough, I added pulv. tragac. co. again with good effect, as it made a good mass, rolled out well, and the two pills are of the usual $4\frac{1}{2}$ grain size, against those of Mr. S. 7 $\frac{1}{2}$ grains each. Creasote completely retained.

M.—Ferri Sulph.....	gr. i.
Pil. Gall. Co.....	gr. iiss.
Ol. Menthæ.....	gtt. i.
Lycopod.....	gr. i.
Ft. Pil. i.....	m vj.

The first three made a mass too soft to roll; the lycopodium being added, it was then in a fit state to roll; makes ordinary-sized pills.

No. 4.—Ol. Croton.....	gtt. i.
Pil. Sapon. Co.....	gr. ij.
Micc Panis.....	gr. i.
Ft. Pil. i.....	m vj.

Made up very easily into small-sized pills.

No. 5.—Ol. Croton.....	gtt. i.
Pulv. Opii.....	gr. ss.
Micc Panis.....	gr. iss.
Pastæ Tragac.....	q. s.
Ft. Pil. i.....	m vj.

Made rather soft pills, but as they have kept their shape there is no reason to alter the formula.

"If it is necessary to give creasote in pills at all," why use liquorice powder, which is objectionable on account of its bulk, and wax, which is equally so because of its insolubility, when such simple aids as bread, tragacanth paste, and lycopodium, are to be found in every druggist's shop? The rationale of the process is as follows:—The bread gives stamina and bulk to the pills, while the paste gives adhesiveness, but as this is sometimes gained at the expense of consistency, it is then necessary to add an absorbent, as lycopodium, and this is a better absorbent than tragacanth powder, by reason of its not causing the pill to get very hard as the latter does. In my opinion, the compound tragacanth powder is to be preferred before the simple.

A word now as to tragacanth paste, which is the ordinary gum paste used for sticking on labels in druggist's shops. As an excipient for pills it is really A 1, the most refractory masses, whether resinous, oleaginous or otherwise being rendered quite docile,—that is, of course, if not too soft in the first instance. Dr. Redwood, in his 'Practical Pharmacy,' says, "the effect in some cases of a judiciously selected excipient is quite surprising." So it appears from some of the examples I have given.

While on this subject there is one form of pill which frequently proves a puzzler. It is useless in trying to make 5 grains of powdered camphor into a pill by means of conf. roses, treacle, gum paste, etc., so as to be of a swallowable size; but a dozen of such may be made quickly and admirably by the aid of three or four drops of castor oil, and a drop of sp. v. r. if disposed to crumble. It is but a step from pills to pill pounce, and in the work of Dr. Redwood, before-quoted, it is stated that lycopodium is but little used in this country; it ought to be better known, as it deserves all the praise there awarded to it, and even more; and in my opinion, a box of pills nicely finished and rolled in lycopodium, looks much handsomer than when silvered,—the pills look like what they are, and not like silver bullets.

I may add, that creasote pills, made as here directed, take the silver leaf, and that I have frequently silvered them. I would also mention, that in the formulae here given, I have used drops instead of minims, believing that in such very small quantities the drop represents the minim near enough for all practical purposes, especially when we consider the amount that is unavoidably lost by adhering to the side of the measure.

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On a New Liquor Ergotæ.

BY EDWARD LONG, M. R. C. S.*

In some correspondence with Dr. Waring Curran, on therapeutics, principally in connection with pharmacy, he mentioned to me that he had been for a long time studying the actions and uses of ergot of rye, and had in practice experienced much inconvenience from being compelled to rely solely on the fresh powder made into infusion extemporaneously in the ordinary way, for want of any other reliable preparation of it. The same idea must have frequently occurred to every man in midwifery practice, as it must be unpleasant and undesirable for a physician to have to turn pharmacien at the patient's house, perhaps in the sick room, not to mention the delay, the more so as the female portion of the community have become quite familiar with the whole process, with the result that instead of ergot becoming thereby a popular remedy, it is quite the reverse. They don't like it any sense; it is disagreeable and nauseous to the taste, and they have a prejudice against it, from hearing that it is a very active, and it may be dangerous, drug in unskilful hands, no doubt exaggerating, after the manner of the sex, all they have heard.

It would, therefore, obviously be a great desideratum if a medical man could carry with him a condensed preparation of it, which would be neither objectionable in taste or appearance, and at the same time be perfectly reliable and keep well.

Being anxious to advance the cause of therapeutics ever so little, and at the same time gratify my friend, Dr. Waring Curran, I turned my attention to the subject, and trust the result will be satisfactory to the profession.

I believe the general feeling and experience is, that the only known reliable preparation of this substance, when its most characteristic effect on the uterus is required quickly and surely, is the extemporaneous infusion alluded to, which proves one thing, that water or an aqueous fluid is the best menstruum to extract its active principles. A spirituous tincture, also, is believed to have some virtue, and of the extract got by evaporating it the same may be said. The official Extract, (Ergotæ Liquidum,) of which much was expected, has disappointed many. The ethereal tincture and oil may be dismissed entirely—at least I infer so—as they have fallen out of use in Dublin.

This is about all that is known of it, in point of fact; the published analyses do not throw any light on its active principle, and merely show that its efficacy depends on the mode of arrangement and combination of its elements, without defining what the resultant is, as we so frequently see in the analysis of organic substances. As these analyses have been made by very able chemists, it is not likely that any further efforts in that direction will add to our stock of knowledge.

I accordingly decided to act on the information supplied by medical observation and experience, taking the infusion as the best of all. Glycerine, I thought, would extract all that is soluble in water, and from its well-known preservative properties, retain it in an active state. I therefore digested ergot, freshly powdered, in glycerine for ten days, frequently shaking it. On straining this off, it

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