℞ Tinct. Digital.
Tinct. Nux Vom.
Flext. Cascara aa ʒ ii
Tinct. Cinch. Co.
Tinct. Gentian Co.
Essent. Pepsin aa ʒ iv
Mist Rhei et Sod. ʒ ii
Elix. I. Q. & S. q. s. ad ʒ vi

Verily polypharmacal! This 6-ounce mixture contains 8 preparations or 26 single ingredients. Surely if one of these fails to help, one of the many others may do some good. This prescription contains at least two chief incompatibilities, besides a number of less important ones.

1. The iron citrochloride in the elixir will form black iron tannate (ink) with the tannin containing tinctures and rhubarb and soda mixture. Be it remembered that the tannin in compound tincture of gentian is not due to the gentian but to the bitter orange peel and cardamom seed.

2. The acid fluidextract, tinctures, elixir, and quite especially the acid essence of pepsin cause a lively evolution of CO_2 with the sodium bicarbonate in the rhubarb and soda mixture. This must be allowed to escape. As a further precaution it is advisable to dispense this 6-ounce mixture in an 8-ounce bottle, so as to allow room for the evolved gas.

Is there any method or manipulation whereby these incompatibilities can be avoided without altering the therapeutic action of the medicine? In my opinion there is none. I had occasion to compound this prescription about 25 times, being renewed that often, but found it was immaterial how the ingredients were mixed together. The result was always the same, namely, iron tannate and CO_2.

Of course it is understood that such a "Mixtum Compositum" is to be dispensed with a "Shake Well" label. The student or somewhat inexperienced pharmacist need not worry about such incompatibilities.

Fortunately, very fortunately, such polypharmacal and incompatible prescriptions are gradually disappearing in the up-to-date medical practice.

THE USE OF AN INDICATOR IN THE COMPOUNDING OF A POWDER PRESCRIPTION.

BY CHARLES A. GREENSTONE.

Does there seem any good reason why an indicator should not be used in the compounding of a prescription containing all white powders? Does there seem any good reason why an indicator, under these circumstances, should not be made use of just as one is used in a chemical analysis? Does the thought seem worthy of consideration? If so, let me briefly report on the results of some of my investigations.

Powders may be prescribed in the form of chartulae, capsules, or in bulk. The indicator used in chemistry shows when the solution has been titrated sufficiently, whereas the one used in pharmacy demonstrates when the powders have been intimately mixed. In either case, the indicator is a "means to an end" and as such is indispensable.

The indicator which I have been using and to my complete satisfaction, I may add, is *pulvis aromaticus*, U. S. P. The color of this powder, brown, makes this preparation a very good indicator, and it will show distinctly just when the powders in a prescription are thoroughly mixed, this point being—in the compounding of a powder prescription—when no white streaks appear in the mixture.

In order to be able to carry on my experimentation with practical examples, I obtained the permission of several physicians to use the aforementioned indicator, explaining that it is very difficult to note when white powders are intimately mixed.

Aromatic powder U. S. P. is a carminative and therefore would hardly interfere with the action of the other ingredients of a prescription. This fact was confirmed by the physicians and, when once convinced, they readily gave their consent to my continued experiments. In any event, the amount of indicator used was seldom more than three (3) grains per drachm of powder and its action was thus rendered practically negligible.

The following prescriptions drawn from my files will serve as a general illustration of the use, as well as the usefulness, of an indicator:

℞ Example No. 1.

Santonin		
Hydrarg. chlor. mit.	of each	1 grain
Sach. lact.		30 grains
Pulv. aromat.		2 grains
for 6 powders		
Directions		

℞ Example No. 2.

Arsen. triox.		
Strych. sulph.	of each	1 grain
Quin. sulph.		10 grains
Sach. lact.		2 drachms
Pulv. aromat.		6 grains
for 30 capsules		

℞ Example No. 3.

Mag. oxid.		5 drachms
Ccrii. oxal.		1 drachm
Sod. bicarb.		
Bism. subcarb.	of each	4 drachms
Pulv. aromat.		14 grains
A powder.	The dose directed—one-half teaspoonful	

In Example No. 3, I found one (1) grain per drachm of powder to be sufficient for an indicator for practical purposes and, still, not too much to interfere with the action of the other ingredients of the prescription.

In Examples Nos. 1 and 2, we find the presence of some potent ingredients. Just such prescriptions as these prompted me to carry on my experimentation. These are the kind which should be carefully triturated in order to obtain the proper amount per dose prescribed.

There are other indicators which could be used in place of *pulvis aromaticus*, U. S. P., such as powdered licorice, powdered rhubarb, powdered fennel, etc. The fact to bear in mind, however, is to choose an indicator which will not materially interfere with the action of the medicine.

In conclusion, I wish to state that the use of an indicator in the compounding of a powder prescription should be brought to the attention of all physicians. It might be deemed advisable to refer the paper to the U. S. P. Revision Committee.