

I have chosen the salts of potash simply because they come first in the book most used by students, *i. e.* Mitchell Bruce's *Materia Medica*. All these preparations, when prescribed by the physician, are first triturated in the mortar for such as are in the form of crystals, and then dissolved in water, water being almost invariably the medium for holding the different drugs in solution, sometimes as in the case of quinine, a little sulphuric acid being added to assist the dissolving.

Now, if these drugs were kept in solution by physicians and pharmacists, and the strength of each so graduated that the dose of all would be the same, you have the principle of the system. For instance, we will take two or three of the above mentioned salts,

Potassic Carbonas	10--30 grs.
" Permang	1--2 "
" Iodide	2--10 "

and keep these on our shelves already dissolved, and we will have the dose for all 1 ℥. In order to do this we will make up say 40 ozs. of each solution. In 40 ozs. there are 320 drms., therefore, in 40 ozs. of solution, to have the maximum dose of

Potassic Carbonas in one drm.	there must be 320×30 or 9600 grs.
Potassic Permang in one drm.	there must be 320×2 or 640 grs.
Potassic Iodide in one drm.	there must be 320×10 or 3200 grs.

Now we see by the above, that in 320 ℥s. of the pot. Carb. solution we have 9600 grs., or in 1 ℥ of solution we have $\frac{9600}{320} = 30$ grs.: in the pot permang., in 320 ozs. we have 640 grs. *i. e.* in 1 ℥ we have $\frac{640}{320}$ or 2 grs. which is the requisite dose in each

Leaving the inorganic we next come to the organic portion of *Materia Medica*, this, like organic chemistry, has a little more system in it, for we find here the majority of the tinctures have a dose of from 1--2 drms. Still we have such discrepancies as

Tinct. opii	5--40 m.
" Camp. Co.	15--60 m.
Fluid Ext Filocarpine	10--60 m.
Tinct Tolutana	15--30 m.
Tincture opii ammoniatæ	$\frac{1}{2}$ --1 drm. m.
Liquor morphine Hydrochloratis	10--60 m.
Tinct. Filocarpine	5--20 m.
Tinct. Lobeliæ	10--30 m.

Also there are the various infusions, decoctions, wines, elixirs and every manner of fluid preparation, with doses varied for each class and the doses for any class varying among themselves.

What possessed the originators of our *Pharmacopeia* to have the doses so varied, when they might just as well and easily have had them the same, is to me incomprehensible. The same system and principle will serve here as in the previous instance, by adjusting the amount of the substances taken it would be very easy to have the dose for all $\frac{1}{2}$ --1 ℥.

In this plan there would also be much less liability to poisoning. The *modus operandi* of a poison case is as follows: A druggist receives a prescription which calls for Quinia Sulph. xxx grs.; now, Sulphate of Quinine, as well as the salts of many other alkaloids, have a great resemblance to each other in external appearance, so much so, that the druggist just looking at the contents can easily mistake Morphine for Quinine. He gives xxx grs. of Morphine by mistake for Quinine, the man dies; the stomach is sent to Dr. Ellis, and the druggist appears at the next assizes to answer to the charge of manslaughter. Now, had these been in volumetric solution, with dose for each 1 ℥, the physician would have written Quinine Sulph. 6 ℥s. and then, as the dose for morphine would have been exactly the same, a poisonous quantity would not have been administered.

The above are the principal features of the system, but what would, I think, still further improve it, would be the introduction of metric system of measures. The dose for all being the same, there would not be the danger of misplacing decimal points as in the metric system as now applied. Taking for the standard dose 1 to 2 cubic centimetres and having our bottles made in sizes of 100 and 200 C.C.'s, there would be much greater facility of reckoning than at present.

By having a uniform dosage system, not only would much unnecessary work for the student be abolished and enable him to devote more of his time to the much more essential study of therapeutics, but for therapeutic purposes we would have a most complete scientific system, as the standard dose $\frac{1}{4}$ --1 ℥ or 1--2 C.C.'s as the case may be, would be the therapeutic unit, as 1 ℥ of tinct. aconite would produce the maximum therapeutic effect of the drug, and so likewise the 1 ℥ of tinct. opii the 1 ℥ of tinct. digitalis, etc., *ad infinitum*. In the name of the army of students of the future, we press the claims of this system for adoption.