Even though intelligent and conscientious attention must be given to every detail from the time the preparation of parenteral solutions is begun until they are administered, still there is no reason why the trained pharmacist in the hospital dispensary or in a retail pharmacy should not be competent and willing to assume this responsibility.

WHY SIMPLE OINTMENT, U. S. P.?*

BY WILLIAM A. PROUT[1] AND JAMES R. ADAMS.[2]

Dispensing pharmacists are asking why we have Simple Ointment as it now appears in the pharmacopœia, when apparently it cannot be employed as a base in any of the official ointments, therefore why include it? With this question in mind, we began a study and comparison of the pharmacopœial ointments with regard to the constituents of their bases and the proportion in which they are combined. As a result we find a group of ten ointments, three of which have a base composed of constituents identical with those of Simple Ointment, six of which use yellow petrolatum in place of white, and seven of which use yellow wax in place of white. In none of the bases did the percentage strengths of the constituents in the bases vary more than one and one-half per cent in the case of wool fat and wax and not more than three per cent in the case of petrolatum, as is shown by the table following.

TABLE I.

Pharmacopœial Ointments.	Per Cent of Active Constituent.	Per Cent of Constituents Other Than Those in the Base.	Per Cent of Petrolatum.	Per Cent of White Petrolatum.	Per Cent of White Petrolatum if Simple Ointment Was Used.	Per Cent of Wool Fat.	Per Cent of Wool Fat if Simple Ointment Was Used.	Per Cent of Yellow Wax.	Per Cent of White Wax.	Per Cent of White Wax if Simple Ointment Was Used.
Boric acid	10	....	..	80	81.0	5	4.5	.	5	4.5
Tannic acid	20	Glycerin 20	54	..	54.0	3	3.0	3	.	3.0
Belladonna	10	Dil. alcohol 5	75	..	76.5	5	4.25	5	.	4.25
Chrysarobin	6	Chloroform 4	74	..	75.6	5	4.2	5	.	4.2
		Liq. petrol. 6	..	..	....	.	..	.	.	..
Nutgall	20	....	70	..	72.0	5	4.0	5	.	4.0
Ammoniated mercury	10	....	..	80	81.0	5	4.5		5	4.5
Yellow mercuric oxide	1	Liquid petrolatum 1	88	..	88.2	5	4.9	5	.	4.9
Iodine	4	KI 4	70	..	72.0	5	4.0	5	.	4.0
		Glycerin 12	..	..	....	.	..	.	.	..
Sulfur	15	. ..		75	76.5	5	4.25	5	.	4.25
Zinc oxide	20	Liquid petrolatum 10	..	60	63.0	5	3.5	.	5	3.5

Aside from the difference in the color of the finished product, bases made with yellow wax and yellow petrolatum in place of white wax and white petrolatum seem to be equally satisfactory in consistency.

---

* Presented before Section on Practical Pharmacy and Dispensing, New York meeting, 1937.

[1] Professor of Operative Pharmacy, Medical College of the State of South Carolina.

[2] Instructor in Pharmacy, Medical College of the State of South Carolina.

After making this comparative study, we feel that the variation in percentage strengths of the constituents of these bases is neglible. We find that we can make just as satisfactory products using Simple Ointment in place of the basal constituents as listed in the different monographs. For the convenience of the pharmacist who can make these ointments using a standard base, we ask the question: why cannot we have Simple Ointment as the base for the ointments in the Pharmacopœia as was done in previous revisions?

IODINE IN LIQUID PETROLATUM.*

ITS PREPARATION AND A METHOD FOR ASSAY.

S. W. BOWER AND LEWIS G. FREEMAN.[1]

The therapeutic value of Iodine in Liquid Petrolatum has long been recognized, but no satisfactory method of procedure has been advanced to obtain a solution, the definite strength of which may be reasonably certain in the finished preparation. The lack of uniformity of the product is largely dependent upon the method of dissolving the Iodine, also, the volatility of this element at room temperature requires extra precautions in effecting solutions. Furthermore, the time required for solution is governed by the viscosity of Liquid Petrolatum used. On account of these differences several questions arise.

How much Iodine is lost by the prevalent trituration procedure?

Is the often recommended addition of Potassium Iodide advantageous in effecting solution more rapidly and is the limit of solubility increased by this addition?

Is this limit of solubility the same in Light Liquid Petrolatum and Heavy Liquid Petrolatum?

Are the advantages of solubility obtained by any alternative method superior to solutions made by trituration?

Limited information is available on the physical constants of solubility of Iodine in Liquid Petrolatums. Clark (1) in 1919 reported the findings of the Chemical Laboratory of the American Medical Association, in which a saturated solution was equivalent to 1.4% Iodine. No statement of specific gravity and viscosity of the Petrolatums used in this experiment is given. Two kinds of Liquid Petrolatum are described in the U. S. P.—the Heavy Liquid Petrolatum having a kinematic viscosity of not less than 0.381 at 37.8° C., and the Light Liquid Petrolatum having kinematic viscosity of not more than 0.370 at 37.8° C. No limit is given for the specific gravity of each, but a range of 0.828 to 0.905 at 25° C. is the U. S. P. XI standard.

One commercial source supplies six grades having definite physical constants for both viscosity and specific gravity. They are according to trade names:

---

* Presented before Section on Practical Pharmacy and Dispensing, New York meeting, 1937.

[1] School of Pharmacy, Univ. of Buffalo, Buffalo, N. Y.