2. From the formula found in the literature it was also calculated that the potassium salt should contain 31.079 per cent. iodin and 13.22 per cent. of water.

3. In the first examination we reported finding but about 10 per cent. of iodin in the bismuth salt (in which 19.69 per cent. iodin had been claimed) and about 50.6 per cent. of bismuth, an amount considerably larger than that indicated by the formula.

4. We also reported finding about 28.06 per cent. iodin in the firm's specimen of potassium iodo-resorcin sulphonate in which, if the formula were correct, there should have been 31.079 per cent.

## THE FIRM'S REPLY

These facts, substantially as given, were submitted to the firm which replied to the points raised as follows:

la .-- The theoretical iodin content of the firm's bismuth salt was 20.76 per cent. and its bismuth content was 45.36 per cent.

2a.-The potassium salt contained no water of hydration and theoretically should, therefore, contain 35.84 per cent. of iodin.

3a and 4a.-The method used by the Association laboratory for the determination of iodin was not a standard one in chemical literature since it gave but about 70 per cent. of the total iodin present. After the firm had reexamined a portion of the original specimen, it reported that by its method it had found 14.2 per cent. iodin. According to the formula it should have contained 19.69 per cent. iodin, although the Association chemists had found but about 10 per cent. iodin. The firm stated that in the earlier examinations of its product a reagent had been used which was afterward found to contain large amounts of chlorin. In making the iodin estimations this chlorin was weighed as (silver) iodid with consequent erroneous results, no control estimations, evidently, having been made.

### BEEXAMINATION BY THE LABORATORY

Our calculations of the theoretical iodin and bismuth content in bismuth iodo-resorcin sulphonate having been challenged, the values were recalculated. This recalculation showed that the values first reported were correct and that the firm's challenge was unwarranted.

Our findings concerning the iodin content in bismuth iodoresorcin sulphonate also having been challenged, the iodin in the original specimen was redctermined by several independent methods. The highest result obtained by any method was 11.59 per cent. iodin. Although somewhat higher than that obtained by the method previously used, it is still considerably less than was claimed by the firm in its reexamination, viz., 14.2 per cent. An appreciable quantity of chlorin was also found, which may explain, at least in part, the firm's wrong estimate of its product.

On reexamining the potassium salt we found 32.00 per cent. of iodin and 10.41 per cent. of water-this notwithstanding the fact that the firm had asserted that its product contained no water of hydration.

A review of the above facts shows that the contentions of the firm could not be substantially confirmed. To summarize:

## SUMMARY

1. The firm's claim that the laboratory's ealculations were wrong is shown to be unfounded.

2. The firm's statement that its potassium salt of iodoresorcin sulphonic acid contained no water of hydration is shown to be wrong, the salt, in fact, containing more than 10.0 per cent. of water.

3. The contention of the firm that the first method of analysis used by the Association laboratory gives low results is correct. The assertion is, however, not justified that the method gives but 70 per cent, of the iodin present since the amount first reported by us is about 88 per cent. of the amount found later.

The accompanying table gives in graphic form the essential points of the controversy.

Accordingto firms formula or formula in literature.		According to an- alysis of Asso- clution chem- lsts.	According to the firm's revised statements.	According to the check analysis of Association chemists.
lodin content in bismuth salt 19.69	•	10.00	20.76 § 14.20	11.59
Bismuth content in bismuth salt 43.17	•	50.60	45.36 §	No analysis made.
lodin content in potassium salt 31.079 <sup>s</sup>	t	28.06	35.84	32.00
Water of hydration in potassium salt 13.22	t	No analysis.	. 0.0	10.41

• Based on formula given by firm. † Based on formula given in literature. § These figures were later acknowledged by the firm to be incorrect.

# PHYSICIAN AND DRUGGIST Charles M. Siever, Ph.G., M.D.

### HOLTON, KANS.

The difference that has long existed between physician and druggist in regard to counter prescribing and the refill-ing of physicians' prescriptions has been brought about, in part by the action of the physician himself, and in part by the misuse of the prescription by the druggist; that is, the refilling of the prescription by the druggist without the permission of the physician who wrote it. This refilling has often been done, not only for the person for whom it was originally intended, but for persons who have not had even a speaking acquaintance with the physician. Too many physicians use in their prescriptions so many proprietary preparations, which are so labeled, and the therapeutic indications given in such detail, that the druggist feels in dispensing them that he is handing out no more than a "patent medicine." and, as a matter of fact, that is what they amount to and what they often become.

Many patients soon learn the name of this class of remedies and call for them without a physician's prescription; so that in many cases the dispensing of ready-made preparations, or the refilling of prescriptions, is not wholly the fault of the druggists. While I believe the majority of druggists are honest and would not refill prescriptions if physicians asked them not to do so, yet many prescriptions are so simple, especially those for proprietary preparations--ready-made pills and tablets-that it is a great temptation for even the most honorable druggist to refill such prescriptions. In so doing he feels that he is saving the patient a fee, and also making a sale for himself. I do not believe the physician should use so much ready made stuff, yet the druggist should not take advantage of his weakness, even in selling or refilling a prescription for such a simple thing as a laxative pill. There are many prescriptions refilled for patients which no doubt do them more harm than good, and in order to save the druggist from this temptation, and to protect the interests of the physician as well as the physical interest of the patient, there ought to be some better method devised than the one now in vogue.

This brings up the question of who owns the prescription. In my opinion, it is the exclusive property of the physician. It is simply an order on the druggist to prepare certain medicine for a certain person and to label it according to instructions. After it is filled, the patient has no more claim on it than he has on a check after it has been cashed. The druggist has no more right to retain the prescription than the bank has to retain the check after it has fulfilled its mission; but as a precaution and for the protection of the druggist he should be allowed to place it on file for a reasonable length of time, perhaps not to exceed thirty days. At the end of that time, it should be returned to the physician who wrote it, to be destroyed or otherwise, as he sees fit.

The working of such a system would be as follows:

The physician would give the patient a prescription, stating the date and for whom the medicine was to be prepared.

The patient would take the prescription to the druggist who would prepare the medicine and then stamp the prescription with a stamp which would state that the prescription had been filled on a certain date and was cancelled.

