

clear solution poured off. In this perfectly clear solution the necessary amount of pyroxylin, Canada balsam, and castor oil were dissolved. This produced an article identical with the B.P.C. formula without requiring the inconvenient and tedious settling process. The essential difference between this modification and the original formula is that the pyroxylin is added to an easily obtained and bright solution of the extract instead of the extract being added to the collodion.

I do not claim that this modification turns out a satisfactory preparation. Far from it. All that can be said for it is that it enables one to produce the article within a reasonable time. In other respects it has all the defects of the B.P.C. article. By whichever of these methods the collodium belladonna is prepared, one is naturally struck with the fact that most of the extract is left undissolved, and it seemed to me desirable to ascertain the quantity and alkaloidal value of the dissolved extract, as well as of the undissolved portion. For this purpose I took 5 oz. of the B. P. alcoholic extract of belladonna, dissolved it in 2½ fluid ounces of rectified spirit, and added sufficient of the collodion solvent (three ether and one spirit.) to produce 20 fluid ounces. This was well shaken up at frequent intervals during the course of one hour, and allowed to settle for twelve hours. The liquid portion was then decanted and found to measure 15½ fluid ounces. The undissolved extract, holding part of the solvent, formed a semi-solid mass, measuring 4½ fluid ounces, its weight being 5 oz. 260 grs.

The extract used on drying at 212° F. lost 12.5 per cent. of its weight.

One fluid ounce of the liquid portion, evaporated and dried at 212° F., yielded 16.5 grains, equivalent to 18.8 grains of the extract used.

From these figures we arrive at the following:—

	Grains.
Total weight of extract used, 5 ozs.	2,187.5
Weight of ext. in 15½ fl. ozs. of liquor	18.8 x 15½
	291.3

Weight of undissolved extract, 1,903.2

On testing the alkaloidal strength of these extracts by Dunstan and Ransom's process, I obtained the following results:

	Grains.
The extract used yielded 2.34 per cent. of alkaloid, equivalent on the 5 oz. to	51.18
One fl. oz. of the liquid portion of the preparation gave 1.55 gr. equivalent on the 15½ fl. ozs. to	23.44
The undissolved extract gave 1.1 per cent. of alkaloid, equivalent on the 5 oz. to	26.02

The alkaloid from the liquid portion and from the undissolved extract—23.44 grs. and 26.02 grs.—amounts to 50.36 grains, which, allowing for experimental errors, agrees fairly well with the total alkaloidal content of the extract used, 51.18 grains.

Taking the alkaloidal contents as the basis of valuation, we find that more than one-half is wasted. This being so very unsatisfactory, it occurred to me that probably the B. P. extract was not a suit-

able one for this preparation. The B. P. extract is not in reality an alcoholic extract, water being used to follow the spirit in extracting the powdered root by percolation. This introduces into the extract substances that are less soluble in collodion, and which, to a very considerable extent, reduces its alkaloidal value. Accordingly an extract of belladonna was prepared with rectified spirit alone, and with this extract the same experiments were repeated, with the following results:—

On dissolving 3 oz. of this extract in 2½ fluid ounces of spirit, adding sufficient of the collodion solvent to produce 20 fluid ounces, shaking for one hour at frequent intervals, and allowing it to rest for twelve hours, 15½ fluid ounces of clear liquid was obtained. The undissolved extract holding some of the solvent measured 4½ fluid ounces, its weight being 5 ozs. 145 grs.

The extract used, on drying 212° F., lost 14 per cent. of its weight. One fluid ounce of the liquid portion, evaporated and dried at 212° F., gave 22.7 grains—equivalent to 26.4 grains of the extract used.

From these figures we get the following:

	Grains.
Total weight of extract used, 5 ozs.	2,187.5
Weight of extract in 15½ fl. ozs. of liquor, 26.4 x 15½	409.2

Weight of undissolved extract, 1,778.3

The results on testing the alkaloidal strength of these are:—

	Grains.
The extract used gave 3.84 per cent. alkaloid, equivalent on the 5 oz. to	\$4.00
One fl. oz. of the liquid portion gave 2.05 equivalent on the 15½ fl. ozs. to	31.77
The undissolved extract gave 2.2 per cent. alkaloid, equivalent on the 5 oz. to	51.31

More of this extract was dissolved than of the previous kind, and although more of the alkaloid was taken up, still the proportion of the whole is less than in the experiment with the B. P. extract.

I quite admit that it is easier to criticize than to originate, but I hope at an early date, to go further into the matter, and with your indulgence, to submit to a future meeting of this association, if I succeed, a better and less wasteful formula for this useful preparation.

I may say, in conclusion, that Dunstan and Ransom's method for the estimation of the alkaloids in this extract is an excellent one—easily worked and yielding reliable and constant results.—*Chemist and Druggist.*

A New Solvent of Camphor.

From the frequency with which the indications for the subcutaneous injections are met with, it is evident that a good and reliable solvent for this substance is a great desideratum. Etheral solutions rapidly evaporate. Alcoholic solutions also evaporate, and the camphor becomes precipitated, so that injections of such solutions produce severe pain or even abscess. Solutions of camphor in oil are difficult to employ, while besides possess-

ing the disadvantage of the liability of becoming rancid.

In the *Zeitschrift für Therapie* for September 1, 1891, Dr. Karl Rosner recommends in the highest terms a solution of camphor in liquid paraffine, which, when slightly warmed, forms a perfectly clear and limpid solution. He states that he has kept this solution for more than five years without its properties becoming changed.

Restoration of Etheral Oils that have become Resinous.

The *Drogestin Zeitung* gives the following: The oxidation of etheral oils from exposure to the atmosphere is much retarded by exclusion of light. Amber-colored vessels for such oils are therefore recommended. The addition of ½ of 1 per cent. of sodium bisulphate to such oils will keep them from change indefinitely.

When oils have already become resinous, they may be restored to their pristine condition by mixing them with one-half their weight of any odorless fat and adding a 3-per-cent. solution of common salt, and then distilling. If the quantity of damaged oil is a small one, shake with a mixture of animal charcoal and a solution of borax for fifteen to thirty minutes. The gummy or resinous portions will saponify with the borax, while the oil, restored to its original color and smell, may be decanted or filtered off.

Depilatory Powders.

DR. CLASEN says (*Monatshfte f. Prakt. Dermat.*, 1889, 9, 541) that among the best depilatory powders are sulphohydrate of sodium and sulphide of barium. As to the sulphohydrate of sodium, he says that used as a paste, one part to eight of water, and allowed to remain on for a very short time, it acts well. But it deteriorates very rapidly and is dangerous to give to a patient, as it is quite capable of producing scars. The sulphide of barium is a safer powder for the purpose. It may be used by mixing fifty parts of it with twenty-five parts each of starch and oxide of zinc. This is mixed with water so as to form a soft paste and spread upon the face. After ten minutes it is scraped off, and leaves a smooth skin.—*Medical Tribune.*

PRESERVATION OF VALERIANATE OF AMMONIUM.—It frequently happens, says the *Bolletino farmaceutico*, that the valerianate of ammonium of Commerce, after being kept awhile, acquires a disagreeable odor and presents an acid reaction. This is due to loss of ammonia, and the consequent formation of valerianic acid over the surface. By neutralization with ammonia the valerianic acid again disappears and the strong, disagreeable odor is lost.

AN acid cellulose solvent has been discovered by Cross and Devan, consisting of zinc chloride dissolved in two parts of acetic anhydride.