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## ON GOLDEN OINTMENT AND THE UNG. HYDRARG. OX. RUB.\*

## BY R. J. DOWNES.

The following are the saliant points of this paper :---

Some books state that Singleton's Golden Eye Ointment is prepared from orpiment, or yellow sulphuret of arsenic, and is mixed with an equal weight of lard (Druitt's "Surgery," 10th edition, 1870), whilst, if I remember rightly, Paris, in his "Pharmacologia." informs us that the Ung. Hydrarg. Nitratis is generally sold as "Golden Ointment," whilst Cooley's "Dictionary of Useful Receipts" announces it to be red precipitate ointment; and this is, I believe, the only work in which this fact is stated.

The contents of a pot of Singleton's ointment weigh exactly 56 grains, and having dissolved off the fat with bisulphide of carbon, I obtained a red grandular and crystalline powder weighing 67 grains, or 12 per cent. Portions of this powder were tested for arsenic, but it was absent. Another portion was then tested for mercury, which I found to be present by the following process :—The solution in hydrochloric acid gave a white precipitate with ammonia, and a red one with iodide of potassium. On boiling with copper foil a deposit was obtained which gave metallic globules, and not octahedral crystals, when sublimed in a tube. The precipitate must therefore be mercuric oxide. The fat employed is probably mutton suet. It keeps well, and you may observe that it is covered very carefully with bladder and then with skin.

These experiments bring me to the conclusion that the Ung. Hydrargyri Oxidum Rub., B. P., having 12.4 per cent., is the proper representative.

The Ung. Hydrarg. Oxidum Rub. has always been a difficult one to keep, in consequence of the rapid deoxidation of the mercuric oxide by the fats. The old ointment, you are no doubt aware, was prepared with lard and white wax for a base : the present ointment of the Pharmacopœia, which is a much better keeping one, is made with almond oil and yellow wax, but is still liable to a change. The reason why the yellow wax is directed in preference to white is not plain. That a substance containing an oxidisable colouring matter should be used to preserve a reducible oxide does not appear intelligible. Neither of these formulæ is perfect. The wax also has a tendency to separate by rising to the surface, the oxide to separate by falling to the bottom, and it requires the entire and constant attention of the manipulator. Although the mortar will overcome the precipitation of the oxide, it does not always that of the

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