

poured into a mould; the latter are best made by hand.

The glycerinum amyli ordered in the enenata cum sapone may be readily prepared from either wheat or rice starch.

When these soap compounds are extemporaneously dispensed and intended for immediate use, the starch glycerin appears to be in excess, and taking the quantities specified in the official formula, one scrupulo must be substituted for half a drachm. The excess is apparent only, for on keeping, the suppositories stiffen into a mass, the consistence of which leaves nothing to be desired.

The quantity of "starch in powder" is left to the discretion of the pharmacist, but that prepared from rice is strongly to be recommended.

Its firm granular texture renders its use specially advantageous in the required suitable consistence. — [Joseph Ince, in *Phar. Jnl.* and *Transactions*.

ESCHSCHOLTZIA CALIFORNICA, CHAMISSO.

Much interest has recently been excited by the announcement of the discovery of morphine in the California plant *Eschscholtzia Californica*, Cham., that alkaloid having been previously known to exist only in the poppy plant. Aside from the economic and therapeutic value of the discovery, it being expected that the new drug will exhibit special advantages over opium in many of its uses, a special interest attaches to it from a pharmacologico-botanical point of view, as there is scarcely any member of the poppy family in which the discovery of morphine might have been considered so improbable as in this. Had *Papaver somniferum* been the only species of its genus, or even the only one in which morphine had been sought, we might have looked upon its occurrence elsewhere as not at all surprising. But the genus *Papaver* contains some fifteen or twenty species, well distributed through Europe, Asia, Africa and Australia, with one in California. It forms, moreover, a very natural group, and the close structural affinities of its members would have led us to look for more or less community in the important feature of the production of morphine among them. But, notwithstanding that they have been abundantly studied, one of them being an important article of the *Materia Medica*, no trace of morphine has yet been discovered outside of the one species. Not only will these remarks apply to the other species of *Papaver*; but the family is rich in medicinal plants, *Argemone*, *Bocconia*, *Sanguinaria*, *Cheledonium* and *Glaucium*, all being either generally or locally known in medical practice. In none of them has morphine been found, although it has doubtless been sought with more or less thoroughness in all. Yet all these genera, and others, intervene structurally

between *Papaver* and *Eschscholtzia*, the botanical characters which separate these two genera being as broad as the areas which part their respective habitats; the structure of the broad, globular pods of the poppy, with their many lobed stigmas, and discharging their seeds, not by splitting, but through a number of small apical orifices, is familiar to every student of Pharmacy. *Eschscholtzia*, on the contrary, produces a greatly elongated, slender pod, not unlike a couple of matches set end to end, and discharging its seeds by splitting throughout its entire length into two valves. These radically different plans of structure separate *Papaver*, with all the genera above named, into a distinct sub-order, *Eupavaceae*, from that composed of *Eschscholtzia*, *Hunnemannia*, and *Dendromecon*, namely the *Hunnemanniæ*. But even in its own sub-order, *Eschscholtzia* is very peculiar, constituting a genus anomalous in the whole family by having its sepals coherent over the corolla and falling as the flower opens, as well as in its perigynous petals and stamens. Its erratic nature is now still further asserted by the possession of so rare a chemical base.

The discovery leads us to enquire, Is morphine really absent from all other branches of the family? It will now appear somewhat improbable that such is the case, and if the alkaloid discovered in *Eschscholtzia* really be morphine, on which point we are justified in coming to a conclusion, slowly, we shall expect the researches to which chemists must be stimulated by the recent discovery to result in locating this principle elsewhere. California herself is rich in *Papaveraceae*, boasting no less than eight genera and a dozen or more species, outside of *Eschscholtzia*, numbering among them one species of genuine *Papaver*. Another genus, *Dendromecon*, with three species, is the near relative of *Eschscholtzia*, while its other congener, *Hunnemannia*, "scarcely distinguishable" from it, grows in neighbouring Mexico. Our enterprising Californian brethren are not likely to neglect their opportunities for investigating the composition of these interesting plants. Neither would investigation of the species of the neighbouring family *Fumariaceae*—by modern authors classed as a sub-order of the *Papaveraceae*—be misplaced, as *Eschscholtzia* is very near to that family.

There is a second point of view from which the study of *Eschscholtzia* greatly interests us. Should it develop that morphine is really absent, as supposed, from the other genera of *Papaveraceae*, and from all the other species of *Papaver*, then we may reasonably expect that its presence in *Eschscholtzia* may be equally restricted and that it may not occur outside of the one species. The strong possibility, at least, of such a restriction is sufficient to lead to great care in the selection of the drug, and we should do well to avail ourselves of every source of botanical information concerning the group.

The consideration, moreover, will work both ways, as the limits of the species are by no means settled beyond dispute, and their chemical affinities may, under the circumstances, very readily throw some light on their proper botanical arrangement. (H. H. Rushby, M.D., in *Druggists Bulletin*.)

AN ALLEGED NEW OPIUM SWINDLE.

If the information which has just come to us is to be relied upon, a peculiar and unprecedented attempt to swindle consumers of opium is being made by parties in this city. The manner in which the alleged fraud originated and is being carried out makes an interesting chapter in the extensive history of drug adulteration, and the recital of the story in these columns may result in putting a prompt and emphatic period to an iniquitous proceeding. We have so far obtained but partial particulars of the methods adopted to promote the scheme, but so far as they have been made known to us they show that the matter is one which deserves immediate exposure for the protection of the drug trade and the welfare of the public.

The incentive to the fraud is found in the statement of competent authority that the prices obtainable for so-called "padding" or "standardized" opium, in this, the principal market for that grade, have destroyed the profits of the manufacturers. The business, therefore, could not long be continued on the existing basis, and the makers have been casting about for means to enable them to profitably carry it on. About a year ago an attempt was made to pass through the Custom House several lots of opium of less than the legal nine per cent. morphia strength, but, after a portion of the stock got through, it was detected and stopped. Had that attempt proved successful, it would, no doubt, have been followed up promptly by the foreign shippers, but as it was it came near being disastrous to them in an altogether unexpected way. The loss and annoyance caused to certain dealers by the Custom House rejections, and the subsequent rejections of the stock that passed the appraisal, by the parties to whom it was tendered as contract deliveries, resulted in a movement to completely exclude all "padding" or "standardized" opium from the market. This movement, however, was abandoned, partly for the reason that there was too much of a stock here at the time, and partly because a large proportion of the consuming trade insist upon having that grade of the drug notwithstanding its obviously inferior worth compared with natural opium.

Failing to successfully evade the law, the manufacturers of padding opium have taken steps to turn it to their purposes in another way. Expert manipulators of the drug have been sent over here for the purpose of starting a factory for the manufacture of the pro-