as soon as they have enough material before them for arriving at decisions, which would probably be about six months after their organization. The most important modification to increase efficiency and lessen the time of revision, however, would be a personal conference of the Executive Committee, at least once in each two months during the active work of revision. In the interim, the general chairman could place many problems before the committee, with discussions, and a programme for a conference at an agreed time, when most of the questions under consideration could be decided in a one-day meeting. Full stenographic details of the conferences should be presented to each member immediately after the meeting and the decks being cleared by the conference, new work could be considered in preparation for the next meeting. It is believed that if the Executive Committee again consists of the sub-committee chairmen, these personal conferences will tremendously stimulate the work of the sub-committees, as each chairman will be expected to report in full the condition of the work in his own subcommittee at each of these conferences. This plan will, of course, necessitate a personal sacrifice of time on the part of the members of the Executive Committee, but it is believed that this method will so greatly facilitate the work of revision, that it can be concentrated into the first year and everyone promptly relieved of the burden. Of course the railroad and hotel expenses of these conferences should be met by the Convention.

SUGGESTIONS FOR THE NEW PHARMACOPOEIA, WITH SPECIAL REFERENCE TO PETROLEUM PRODUCTS.*

BY ROBERT R. GERSTNER.

Numerous suggestions have been made from time to time in attempts to obtain a more satisfactory ointment base than the usual benzoinated lard from which most official ointments are made to-day. In reviewing pharmaceutical literature it may be noted that the proposed changes are of dubious value, but the very fact that attempts are continuously being made to modify this ointment base is a conclusive proof that a change is desirable.

In the preparation of ointments it is important that perfectly smooth, homogeneous mixtures be obtained and that the fatty vehicle be stable and absolutely free from rancidity, since they are often applied to tender surfaces and would otherwise prove a source of irritation instead of soothing applications. Benzoinated lard no matter how carefully prepared will become rancid. When rancid it is of a granular appearance and consistency and therefore makes an unsightly and unsatisfactory ointment.

The tendency of lard to become rancid is increased very much after such ointments have been heated to the temperature necessary for their sterilization. These drawbacks of this widely used ointment base are just selected at random, but many more have been mentioned from time to time in pharmaceutical publications. In addition the cost of lard at present is constantly increasing and has reached the point to-day where it is the most expensive of the commonly mentioned ointment bases. Pharmaceutical researchers are constantly striving to devise new methods of production, and experimenting with different materials, aiming

^{*} Read before New York Branch, A Ph. A., March meeting, 1920.

to reduce costs without materially affecting the physiological action and physical properties of the original formula.

I would suggest that greater consideration be given to the cheaper but more stable petroleum products in place of the present animal and vegetable bases in the following official galenicals.

Zinc Oxide Ointment.—Ointment bases are classified as non-absorbable or absorbable, the non-absorbable ointments being intended to produce some medicinal effect on the outer skin, such as astringent, counter-irritant, antiseptic, germicidal or similar effect or possibly as protective agent. Penetrating ointments are designed for a deeper local effect, such as anodyne, stimulant, or resolvent. In such ointments where solubility of the medicinal agent and absorption are needed no improvement over the present base can be made. In the case of Zinc Oxide Ointment, however, the therapeutic value of the ointment depends upon the astringency of the powdered zinc oxide and not upon the nature of the base. Therefore petrolatum would possess all of the advantages without any of the abovementioned disadvantages.

Phenol Ointment.—This also is a preparation where absorption through the skin is not desired but acts purely as an external antiseptic. A sterilized ointment of phenol was widely used during the late war in hospitals and surgical rooms and it was found that a petrolatum base could be readily sterilized without any deleterious effects.

Iodine Ointment.—It is a well-known fact that this ointment never possesses its full amount of free iodine, due to the fact that the lard becomes iodized. This not only means a lowering of the iodine content but also results in a change of the physical appearance of the ointment which becomes more or less granular. However, in the use of Iodine Ointment absorption through the skin is often desired. Petrolatum itself, therefore, would not properly replace the present ointment base. Nevertheless a mixture of readily absorbable lanolin with petrolatum would form a satisfactory base which would possess all of the advantages with none of the disadvantages of lard.

Sulphur, Tar and Similar Ointments.—These are ointments in which no absorption is desired; their action is purely local as an antiseptic and germicidal agent, the base acting merely as a vehicle; petrolatum in addition to being a vehicle would serve as a protective agent.

Camphorated Oil.—Cottonseed oil has been used as a base for Camphor Liniment since the 1880 Pharmacopoeia. Previous to that time olive oil was used. The change to the present base was no doubt made for reasons of economy, for both oils are about equal, comparing their therapeutic value. Cottonseed oil is about one-half as expensive as olive oil.

While, of course, it will always be desirable to have a 20 percent Camphor Liniment vegetable oil base official, yet the author believes that a weaker Camphor Liniment with mineral oil base could in many instances be used without disadvantage. At present in addition to the 50 percent Mercurial Ointment with lard base there is in the Pharmacopoeia the dilute ointment with petrolatum. No criticism has ever been made, as far as the author knows, in thus having two ointments of the same medicinal ingredient, one stronger and using the more expensive base, the other weaker and using the cheaper and more stable base. Consideration of these facts should show that the above suggested plan of having two forms of Camphor Liniment is not as radical as it would seem at the first glance.

In concluding it may be also pointed out that while there is no doubt considerable difference of opinion in the medical profession regarding the value of mineral bases in comparison with vegetable bases, yet not many years ago olive oil and other vegetable oils were used exclusively as vehicles where bland and soothing bases were required; to-day, however, mineral bases have already grasped a firm foothold in the manufacture of such medicinal preparations and the writer predicts that in the near future phenomenal strides will be made along these lines.

A FEW SUGGESTIONS FOR THE FORTHCOMING PHARMA-COPOEIA.*

BY JACOB DINER.

Inasmuch as the Pharmacopoeia is, primarily, intended to be a scientific book of standards, and, in consideration of the fact, that article 18 of the "General Principles to be followed for the ninth revision" (p. 34) specifically states, "It is recommended that the introduction of new compound preparations be discouraged as far as possible," there seems to be no reason why some of the compound preparations of the ninth revision may not be deleted. Especially is this true in the case of compound preparations which are rarely used and which could just as readily be incorporated in the National Formulary, which is primarily designed for that purpose and has a legal status equal to the U. S. Pharmacopoeia. As examples of compound preparations which could readily be spared from the U. S. P., the following are mentioned: Creosote Water, Cantharides Cerate, Compound Infusion of Senna, Compound Glycyrrhiza Mixture, Aromatic Spirit of Ammonia, Compound Powder of Glycyrrhiza, Compound Spirit of Juniper, Compound Syrup of Sarsaparilla, and the various official troches.

Instead of stating, under tests, the result of a reaction by one term, a few explanatory words are advised; for example, "**** roo mils each of Distilled Water are not affected by the addition of barium chloride T. S. (sulphate) ***. " "Absence of sulphate" would state the facts more clearly.

International standards have been adopted for preparations of potent drugs a step decidedly in the right direction. Bearing this in mind, I fail to see why Camphorated Tincture of Opium should materially differ in opium content from European pharmacopoeias, neither do I consider the mode of preparation an ideal one. The British, Swiss, French and German pharmacopoeias all have an opium equivalent of five (5) grammes; three are made with tincture of opium, the French employing powdered opium. I suggest the following formula:

Tincture of Opium	50 mils
Benzoic acid	5 Gm.
Camphor	5 Gm.
Oil of Anise	5 mils
Diluted Alcohol to make	ooo mils

* From a paper read before New York Branch, A. Ph. A., by the author, March meeting, 1920.