who had had malaria and who were carrying parasites were given the Standard Treatment. The result was to diminish the malarial cases by approximately 80 percent. In one town in Arkansas in three years' time 97 percent of the malaria had been eliminated by proper control movement. It is obvious that mosquito control is also highly necessary if malaria is to be completely banished. If there are no mosquitoes there will be no malaria and consequently anything that reduces the number of mosquitoes tends to reduce the prevalence of malaria. Persons who have malaria should be protected by a proper screening from mosquito bites, so as to avoid infecting mosquitoes which may transmit the disease to others. Control of mosquitoes is, naturally, a more difficult problem than that of sterilizing the malarial patient, but much can be done at little outlay to diminish the number of places where mosquitoes breed.

As a result of all the work that has been done the U. S. Public Health Service is taking steps to extend this Standard Treatment to all sections of the country where malaria is prevalent. Work has been started in the states of Georgia, Louisiana, Alabama, Mississippi, Tennessee, Arkansas, Texas, Missouri, S. Carolina and Virginia. Physicians and druggists are being asked to coöperate in this movement which is the first attempt which has been made on a very large scale to bring about a real control of this insidious disease.

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## THE MANUFACTURE OF ANHYDROUS AND HYDROUS WOOL FAT.\* BY K. F. EHMANN.

Wool fat, as the name implies, is obtained from the wool of the sheep. The fat is removed by scouring or washing the wool. The fat at this stage is known as "swint," which is an admixture of hair, dirt and soap; the color varies from a light yellow to a very dark brown, having a very disagreeable animal odor.

The swint is now placed in a steam-jacketed kettle, fitted with a suitable mechanical stirrer; cold water is run in until the kettle contains equal parts of water and crude fat, and two percent of sulphuric acid. The mixture is now stirred for at least one hour, at the end of which time steam is applied and the mixture heated to just below 100° C. Care must now be exercised, for if the fat is overheated, it will seriously interfere with the separation of the two layers, water and fat. This procedure must be continued until the wash-waters are perfectly clear and do not have an acid reaction with litmus.

At this point of the purification a sample of the crude fat is taken and tested for acidity, alkalinity of ash and iodine value. From the results it is ascertained what treatment the crude fat requires. If the fat shows a high acidity, it will then have to be treated with sodium carbonate. The use of the stronger alkalies, such as potassium or sodium hydroxide, must be avoided; they have a tendency to form a strong emulsion, which is very difficult to break. If such a condition should occur, as often it does even with the use of sodium carbonate, the process of "salting out" must be resorted to. After this, the alkaline solution should be washed out

<sup>\*</sup> Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., New Orleans meeting, 1921.

with several portions of warm water. Should the crude fat show a high iodine value, a small quantity of sodium phosphate is stirred into the warm fat and allowed to stand, with occasional stirring. After two days, the chemical is washed out with warm water. The fat is again tested, and if the results show that it comes within the limits of the Pharmacopoeia, the bleach is applied.

After bleaching, the fat is washed until analysis shows that the product meets the requirements of the Pharmacopoeia and the wash-water does not respond to the test for the bleach used. The finished product should have a light yellow color and be free of any strong animal odor. The last traces of water are removed by allowing the fat to stand in a warm kettle. A more improved method is to pass the washed fat through a high-power centrifugal.

From this anhydrous fat is made the hydrous product. As we are aware, wool fat will hold as much as thirty percent of water. This amount of water can be worked in very well, but when the product reaches the market it has a tendency to separate out. It is better to add only twenty-seven percent of water. The product is now ready to be run off into containers, direct from the emulsifier or mixer.

To conclude: Swint is an admixture of hair, dirt, soap and fat. It must be washed with an acidulated water, and is purified by successive washings. The final water is removed by allowing the fat to stand in a warm kettle or by use of a separator. The finished product should be of a very light yellow color. Hydrous wool fat is made by incorporating twenty-seven percent of water, thoroughly mixed until a smooth cream-yellow color results.

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## SOLICITING PRESCRIPTION PRACTICE.\*

## BY K. F. EHMANN.

In order that a successful prescription practice may be established, one must first lay proper foundation. The equipping of this department requires care and attention. Location, suitable apparatus and the convenient placing of all pharmaceuticals used are essentials, to say nothing of cleanliness; in a word it must be inviting and attractive. Going into many pharmacies an individual would get a very broad idea as to what a prescription department should and should not be---in some cases, it is the get-together room of the neighborhood, where all the happenings of the day are gone over.

After it is completely equipped, the next consideration must be given to the containers for prescriptions—the bottles, corks, labels and caps. For capsules or tablets, a metal screw-cap vial is best suited, with the label on the inside. Powders have a better appearance in hinged boxes. The advantages of neat-looking packages are many and well worth the investment. A legibly written label, on a clean container, is a very good advertisement; it attracts the doctor and the patient; the appearance of the finished prescription when it arrives at the sick room is the silent salesman for the pharmacy from whence it came.

<sup>\*</sup> Read before Section on Practical Pharmacy and Dispensing, A. Ph. A., New Orleans meeting, 1921.