

enable you to ascertain what quantities of certain materials are being brought into the country.

Another publication of the Bureau which will be of interest to you is our *Miscellaneous Series* No. 82 entitled "Chemicals and Allied Products used in the United States." After the outbreak of the war in Europe and the cessation of exports from Germany and Austria-Hungary, many chemicals and chemical materials were very difficult to obtain in the American market, and it seemed desirable to ascertain definitely where we obtained the bulk of our chemicals and chemical materials prior to the war. Through the coöperation of the American Chemical Society funds were raised to make an examination of the consular invoices for all imports during the fiscal year ending June 30, 1914. The results of this work are shown in our *Miscellaneous Series* No. 82 which gives figures showing the quantity and value of the imports of 2500 separate classes of products, and the percentage of the total quantity imported from each foreign country. These 2500 products include all those whose import value during the year ending June 30, 1914 exceeded \$100. The remaining 3,000 products which were valued at less than \$100 each during the year are shown in a separate list without figures showing the quantity and value of each commodity.

THE MEDICAL DIVISION OF THE NATIONAL MUSEUM.*¹

BY CHARLES G. MERRELL.

Those of you who have kept in touch with the proceedings of the American Pharmaceutical Association will recall that some years ago an effort was made to bring about the establishment of a national pharmaceutical museum at Washington, where material bearing upon pharmaceutical history might be collected and deposited for future reference.

The Historical Section of the American Pharmaceutical Association has, for years, busied itself with the collection of historical material of various kinds, and it was largely with a view to providing a permanent home for such material that the movement for a national depository for matters of historical interest from a pharmaceutical standpoint was carried on.

This end has at last been achieved through the enlargement of the field of the Smithsonian Institution, which now, under the name of the National Museum, has established a very interesting medical division, which includes much matter of interest to pharmacists.

This medical division is located on the south side of the gallery in the East Hall of the Arts and Industries Building of the Museum. The subjects illustrated are grouped under four heads, namely:

- (1) History of Medicine.
- (2) *Materia Medica*.
- (3) Pharmacy.
- (4) Sanitation and Public Hygiene.

* Read before 1920 Meeting of Ohio State Pharmaceutical Association.

¹ This paper has interest, aside from the matter presented, because of the desirability of enlisting the coöperation of the American Pharmaceutical Association, state associations, and the drug trade, in the efforts of the Smithsonian Institution to add to its pharmaceutical exhibit.

Three alcoves are devoted to the history of medicine, starting from the beginning of medicine in India, Egypt, Greece, Rome, China, and among the Hebrews.

Two alcoves are devoted to the history of medicine in America, which is illustrated by biographical sketches, portraits, etc.

Three alcoves are devoted to materia medica, and two to pharmacy, including both modern and historical pharmacy. It was through the efforts of Mr. F. L. Lewton that the section of pharmacy was established.

Several of the leading manufacturers of the United States have contributed material illustrating the lines in which they are interested and the products they prepare.

Many of the members attending the meeting of the American Pharmaceutical Association and of the delegates attending the Tenth Decennial Convention for the revision of the United States Pharmacopoeia at Washington in May took the occasion to visit the National Museum and see the display of articles of medical interest which has been organized there in the Medical Division under the supervision of Mr. F. L. Lewton, curator, and of Mr. C. Whitebread, the assistant curator of that division.

Through the courtesy of Mr. Whitebread I am able to present a photograph of one of these displays which will give an idea of the pains which the museum authorities have taken in the preparation of the exhibit.

The still shown in the accompanying illustration is used for the distillation of the oil from the bark of the *Betula lenta*, the black, or sweet, birch which abounds in the mountains of the Carolinas, eastern Tennessee, Kentucky, and some sections of Connecticut and Pennsylvania. In Connecticut the oil is obtained from the twigs of the small birch bushes, the supply of trees having been exhausted.

The still used in the Carolinas is about 8 or 10 feet long and about 4 or 5 feet high and about the same width. The still is made of wood, except the bottom, which consists of sheet iron. Between 8 and 9 inches from the bottom is a false bottom of wire mesh or perforated sheet iron.

The distiller buys the bark privilege from some lumber company, and under this privilege cuts down the birch trees, paying a stipulated sum for each tree used. These trees run up to as much as 10 or 12 inches in diameter.

When the tree is cut down the buyer removes the bark by beating the trunk and the larger branches with a maul, and carries the bark thus obtained to the still in baskets.

The bark is laid on the false bottom of the still, about 40 bushels constituting a charge, and the cover is fastened on with wedges as shown in the illustration.

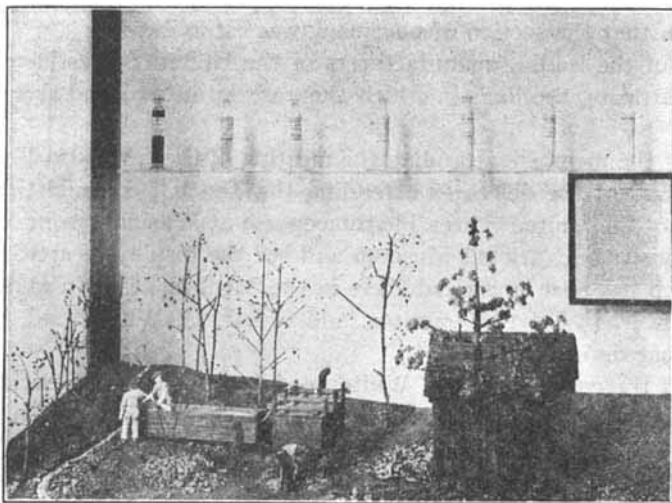
The outlet of the still is an ordinary gas pipe, generally from $\frac{1}{2}$ to 1 inch in diameter and about 10 feet long. This is encased in a long box or trough through which a stream of water flows, condensing the mixture of steam and oil which comes off. The bark is first steamed for about 12 hours, as the oil does not exist in the bark as such, but as a glucoside which is hydrolyzed by the steaming and thus yields oil. The heat is then raised sufficiently to insure distillation, which goes on generally for about another 12 or 14 hours, making 24 to 28 hours to run a charge.

One ton of green bark will usually yield about three pounds of oil. The bark which has been distilled serves as fuel for the next charge.

The distillate, consisting of a mixture of oil of birch and water, is collected in a funnel placed in an ordinary Mason jar placed on a hollowed receptacle. The oil of birch settles to the bottom and the milky mixture of oil and water overflows the jar and passes down through the receptacle beneath the jar into a small pipe which leads into the still below the water level.

The apparatus is, therefore, in the nature of a continuous reflux still, though in a very crude form.

In the bottles above the model are shown samples of the oil and its derivatives, natural salicylic acid in large and in small crystals, and the sodium, lithium, strontium and magnesium salts of that acid.



DISTILLING BIRCH OIL IN THE CAROLINA MOUNTAINS

The illustration shows a model of a North Carolina still in operation which is exhibited in the Division of Medicine of the National Museum at Washington. The exhibit was prepared under the supervision of Mr. C. Whitebread.

This type of still is used in the mountains of the Carolinas, where it is generally set up temporarily and moved when the supply of birch trees is exhausted.

In Connecticut, however, the industry is on a more permanent basis. The stills are larger and more effective than that shown in the illustration, and each distillery has a warehouse in which it stores the twigs and brush which are used for distillation, these plants being quite extensive and representing considerable investment.

This particular exhibit interested me for the reason that such great difficulty has been experienced in obtaining pure birch oil that we have found it necessary to purchase and operate our own stills. I was also interested from the therapeutic point of view, for I am firmly convinced that better therapeutic results are obtained from the natural acid and its salts than are obtained from the use of the synthetic product, and my belief is shared by a large number of practicing physicians. I am in receipt of a note from Mr. Whitebread on the subject, who writes:

"The Museum desires to have the state pharmaceutical associations advised of its efforts to collect articles bearing on the history of pharmacy in the United States and appreciates very much your cooperation in presenting the matter to the Ohio Pharmaceutical Association at this time. The task of collecting proper material relating to pharmacy is an immense one when placed in the hands of one or two men, but if all pharmaceutical associations will bear in mind our efforts and do their bit by calling to the attention of the Museum information where historical material can be obtained the task will be an easy one and it will not be long before we shall have a national collection which will be worthy of the subject which it represents."

In order to make a beginning in this direction I would suggest that a committee on National Museum Exhibit be appointed by the Ohio State Pharmaceutical Association, whose object it shall be to coöperate with the Museum authorities in collecting suitable material to add to the pharmaceutical exhibit.*

CINCINNATI, Ohio.

COMMITTEE REPORTS

REPORT OF THE COMMITTEE ON REORGANIZATION, A. PH. A., 1920.†

Your Committee on Reorganization sent a circular letter to one hundred leading members of the Association in which the following three propositions were presented for consideration in connection with a paper read by your chairman before the Association at its last annual meeting and entitled, "Shall we reorganize the American Pharmaceutical Association?" This paper was published in the March (1920) number of the JOURNAL:

1. Shall we reorganize the American Pharmaceutical Association and make it a commercial body presided over by a House of Delegates composed of representatives of the manufacturers of "proprietary" medicines and commercial druggists, acting as their agents and antagonistic to the medical profession; or
2. Shall we reorganize and make it a delegate body of pharmacists and manufacturers pledged to practice the vocation of pharmacy in compliance with professional and scientific requirements, and in accord with the medical profession; or
3. Shall we retain the present form of organization with or without minor changes for improvement?

About fifty replies have been received to this circular letter, some of which have been handed to the chairman of your Committee during the present session of the Association, and many excellent suggestions have been presented in these replies, and also presented by others in conversation with members of your Committee. An attempt to discuss these suggestions during the limited time at our disposal is impractical. Your Committee therefore recommends and moves that the Committee on Reorganization be continued for another year and that it shall, in the near future, place in the hands of the Editor of the JOURNAL a digest of these suggestions, and that the Editor be requested to publish the same in the JOURNAL with a request that the members of the Association give the subject careful consideration in the light shed therein in the aforesaid paper on reorganization published in the March number of the JOURNAL, also in the light of the suggestions made in the digest of replies to the circular letter, and in the light of the points brought out in the discussions in the pages of the JOURNAL which will probably occur as the result of such publication.

Your Committee requests the privilege of adding to its membership individuals belonging to the Association who are specially interested in the subject of reorganization, the names of such individuals to be presented to the Council and approved.

(Signed)

S. L. HILTON,
JULIUS KOCH,
F. E. STEWART, Chairman.

* Such a committee was appointed by the Ohio Association.

† Read in General Session of the Association, Washington meeting, 1920; accepted and recommendations approved.
