more difficult to compose than one modifying a simple flower. In the case of the flower, it must not be imagined that the ultimate constituents of the perfume are simple. The only difference is that nature is the perfumer. Oil of ylang-ylang, for instance, contains something like 25 or 30 perfume ingredients which nature has most wonderfully combined to make what the Filipinos have named "The flower of flowers." However, some very beautiful odors have been produced by skilful perfumers, and they deservedly enjoy wide popularity.

I might mention that bouquets might be sub-divided into French bouquets and Oriental bouquets. The French bouquets are of a more flowery character; not necessarily of light flowery character; they may contain heavy floral odors, such as lily, but they are flowery rather than aromatic. Oriental bouquets, on the other hand, contain many perfume notes of an aromatic or ambrosial character, such as sandalwood, amber and musk, amber being, probably, the most prominent.

Perfume materials are used very largely for soap; not the highest quality perfume materials, but a very great bulk, probably a greater bulk than for all other purposes. There is no soap that is not more or less perfumed. Even laundry soaps are perfumed with oil of citronella. For toilet preparations, such as creams and powders, special perfumes are required. In the perfuming of a powder, care must be taken not to use materials which will either oxidize or otherwise deteriorate in odor on exposure to the oxygen of the air on the enormous surface exposed by the particles of powder. Materials which discolor must also be avoided, such as methyl anthranilate, which turns yellow in powder, and indol, one of the constituents of jasmine, which turns red in preparations in which it is used.

Nearly all perfumes require fixatives, or non-volatile materials, to hold the more volatile oils and to prevent their evaporating too fast when the perfume is used. The principal fixative is synthetic amber, which is really an oleoresin of labdanum. Many other resinous bodies are used, however, such as benzoin, tolu, orris, musk, castor, civet, etc.

Time will not permit the discussion of individual oils, but I might say a word or two about the most famous of all perfume materials—otto of rose.

It is said that the otto was first distilled in 1612 in Persia and is first mentioned in the history of the Moguls. At the marriage of Princess Nour-Djihan and Djihan-Guhr, the mother of Nour-Djihan presented the prince with "Essence of Rose Water." The prince called the perfume "Perfume of Djihanguhr" and presented the princess with a 30,000 rupee necklace. Another version of the story is that at the wedding, a rose water canal was constructed in the garden and oil of rose noticed floating on the surface. This was collected and recognized as a most wonderful perfume. Like the oil of ylang-ylang that I have previously mentioned, oil of rose also contains a great many constituents. Among them, I might mention geraniol, citronellol, rhodinol, a paraffin $C_{16}H_{34}$, phenyl-ethyl alcohol, nerol, farnesol, a sesquiterpene alcohol, $C_{15}H_{26}O_1$, eugenol, linalol and nonylic aldehyde. A ton of rose petals yields two-thirds of a pound of otto of rose.

CHARLES E. DOHME LECTURES.

The Charles E. Dohme lectures of this year were delivered by Dr. Walter Ernest Dixon, formerly professor of materia medica and pharmacology at King's College, University of London, and now reader in pharmacology and assistant to the regius professor of physics at the Cambridge University. As is quite generally known the lectureship was founded in memory of the late **Charles E. Dohme,** who was President of the AMERICAN PHARMACEUTICAL ASSOCIATION, 1898–1899. Few, if any, of the A. PH. A. presidents were held in higher esteem by pharmacists.

PHYSICIANS' HOMES.

The American Medical Association has endorsed a campaign for the establishment of three homes for "old and financially insecure" physicians of this country. These will be established in the North, South and Middle West.