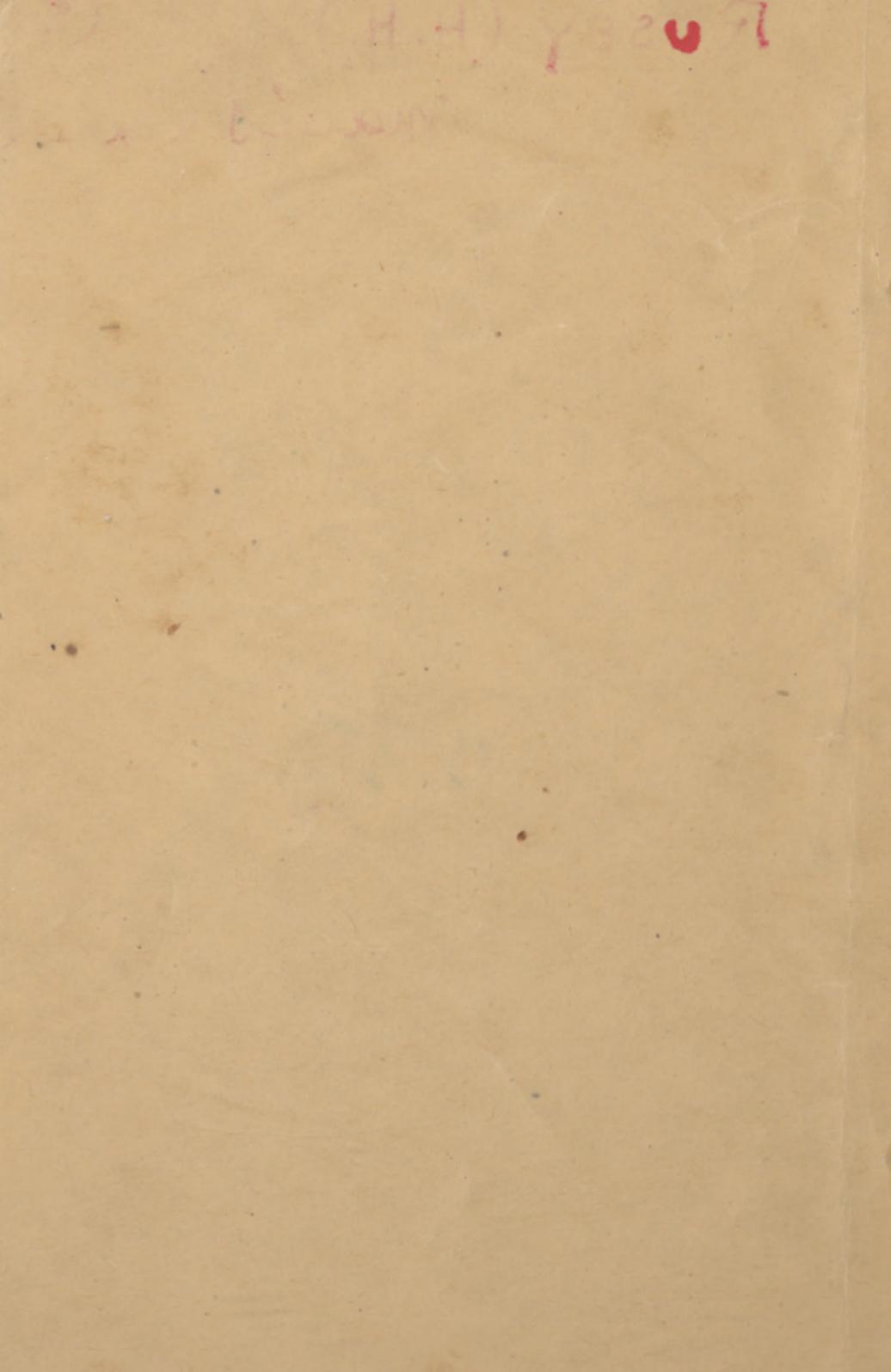


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MACIS,

ITS BOTANICAL NATURE—A CRITICISM ON THE UNITED STATES
PHARMACOPEIA.

BY HENRY H. RUSBY, M. D.

The United States Pharmacopœia defines Mace as
"The arillus of the fruit of *Myristica fragrans*, Hout-
tuyn."

Two distinct errors are involved in this definition. In the first place the structure is not an arillus, but an arillode. Although the difference between an arillus and an arillode is but slight, it is sufficient to constitute an important distinction, and one which is particularly significant in the present instance. In Figs. 1 and 2 we have presented straight or atropous ovules. Should an arillus develop from an ovule of this class, it would plainly exhibit its basal character, as indicated by the dotted lines in Fig. 1. Should an arillode be developed on the contrary, it would evidently be apical, as indicated by the dotted-lines in Fig. 2. But the ovule of *Myristica* is not atropous, but anatropous, being folded upon its funiculus, as indicated in Fig. 3, so that the real apex or micropyle is brought into a basal position. An arillode then, developing from this apex appears basal, like a true arillus, as indicated in Fig. 4. It will thus be seen that



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Mace is really an arillode, and not an arillus, as has been pointed out by Planchon.

The second error is in attributing the arillus to "the fruit." An arillus is not a development from the fruit



as a whole, but from the ovule after fertilization has occurred. The fruit of the nutmeg is shown in Fig. 5, and

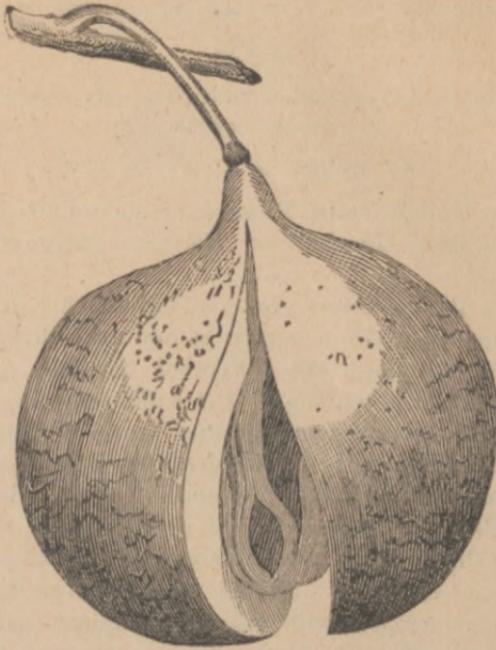


Fig. 5

the matured seed bearing the Mace in Fig. 6. While

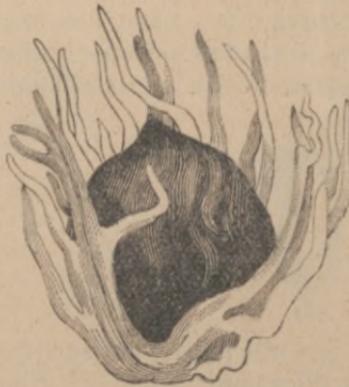


Fig. 6

there might possibly be a doubt in some minds as to the

actual origin of a true arillus, it beginning at a point between the ovule and the ovary, so to speak, there can be none in the case of an arillode, for which reason I have spoken of the distinction as being peculiarly significant in this instance.

The Pharmacopœial definition, therefore, should read as follows: "The arillode of the seed of *Myristica fragrans*, Houttuyn."

MONTHLY REVIEW.

Prof. C. S. Sargent, in his notes upon Some North-American Trees, in the *Garden and Forest*, follows the Preliminary Catalogue of the Torrey Botanical Club in adopting the name *Magnolia tripetala*, L., instead of *Magnolia umbrella*, Lam., as it is called in Johnson's Medical Botany. This name, it should be pointed out, has long been adopted by Maisch, and by the last edition of the United States Pharmacopœia. An important correction of a previously accepted botanical name, and which will require correction in the new edition of the Pharmacopœia, is *Castanea sativa*, Miller, *var. Americana* (Mx.), Sarg., for *Castanea vesca*, L.

At the meeting of the Torrey Botanical Club, on Tuesday, November 12th, Prof. Joseph Schrenk read a very elaborate histological paper, illustrated with microscopic slides, upon a peculiar development of the stems of *Nesaea verticillata* where it comes into contact with the water. This paper will appear in the next number of the Torrey Club *Bulletin*.

Miss Emily Gregory, Ph. D., an eminent worker in the same field, contributed at a previous meeting a very learned paper entitled "Notes on Some Botanical Reading Done in the Laboratory of Prof. Schwendener in Berlin, in June and July, 1889," which is printed in the Torrey Club *Bulletin* for November, p. 297. Among the important matters discussed is that of the manner in which plants obtain their nitrogen, and the theory that in certain plants this supply is produced by bacteria-like

organs developed in tuberous roots, is carefully discussed.

"The Vegetation of Hot Springs," forms the subject of a communication of Mr. W. H. Weed, to the *American Naturalist*, Vol. XXIII, p. 394. The author calls attention to the fact that such vegetation is a relic of the flora of past geological ages.

A leading article in the *College and Clinical Record* for November is a communication by Dr. Frank Woodbury on the value of Erythroxyton, and especially the native, or Lorini, Elixir in the treatment of typhoid fever. Dr. Woodbury concludes, from a very extended experience in the treatment of this disease, that Elixir of Coca is most generally indicated, while alcohol is in a majority of cases contra-indicated. Other important indications for its use are stated as follows:

In exhaustion from prolonged lactation, the Elixir Coca Lorini gives full and complete satisfaction; it can be used just before nursing, when faintness or dizziness is caused by putting the child to the breast, and it may also be given after meals to stimulate digestion. It is decidedly stimulating to the mental functions, but is not followed by depression.

In gastralgia, coming on after eating, and sometimes when independent of the presence of food, this preparation has given better results than cocaine alone, which has been so highly lauded for this condition. This difference is even more evident when the pain is a colalgia and not true gastralgia. It agrees perfectly with the stomach, and increases the digestive power.

In ataxic dyspepsia, or the weak digestion attending neurasthenia, much relief is obtained; probably the alcohol assists greatly. Ringer insists upon its value in this condition.

In neurasthenia due to sexual indulgence, loss of sleep, excessive worry, or prolonged study or other sedentary occupation, its action is prompt.

Those who are interested in following up the physiological properties of cocaine will find several important communications concerning its poisonous effects, as fol-

lows: Dr. C. W. Richardson in the *Journal of the American Medical Association*, and reprinted in the *American Lancet*, p. 438. Dr. A. L. Wagner in the *Therapeutic Gazette*, p. 733, contributes an important paper on the value of cocaine in relieving the pains of labor. In the same number, p. 791, a report by Dr. Vinogradoff on post-mortem appearances after cocaine poisoning, is presented.

Boldo is rapidly coming to the front in the treatment of hepatic disorders. It is now proposed to introduce it into the next edition of the *Pharmacopœia*, and there is little doubt that such action will be taken. In the *Therapeutic Gazette*, p. 756, a paper by Dr. Campenon is concisely reviewed. Dr. Campenon's method of prescribing it was 5 drops of the tincture in a little water, a few minutes after eating on the first day. This dose is increased by a single drop daily until a dose of 15 or 20 drops has been reached, when it is gradually decreased to the original dose and then again increased in the same way. Long continued treatment is necessary to secure the full effect of the drug.

"Some New Researches on Hyoscine," forms the title of a valuable article in the *Therapeutic Gazette*, p. 743. Attention is here called to the fact that the great discrepancy in previous reports upon this subject is undoubtedly due to the differences in preparations employed. The paper covers results reached by Drs. Malfilate and Lemoine, Drs. Coleman and Taylor, Dr. Schleussner, Drs. Magnan and Lefort, and Dr. Mitchell Bruce. The general conclusion reached is, that this drug is of considerable value in the treatment of various forms of lunacy marked by excitement.

One of the most important communications upon the therapeutical value of Hoang-nan, is contributed by Dr. John V. Shoemaker to the *Therapeutic Gazette*, p. 735. A general similarity in its physiological action to that of strychnine is recorded. The same similarity is observed in its general tonic effects as described by the author. He has not found that it produced any marked curative result in the treatment of erysipelas. He is

skeptical as to its exercising any specific curative effect in leprosy, or in hydrophobia. In seborrhœa, alopecia, hyperidrosis, pustular eczema, acne, sycosis, furuncles, carbuncles, and similar cutaneous diseases, it has been found to have a peculiar and great value.

The value of *Euphorbia pilulifera* in the treatment of asthma is also coming to be acknowledged slowly but surely.

The *Medical Age*, p. 498, reprints a paper by Dr. Edwin M. Hale in which the author bears the strongest testimony to the value of Quebracho and Aspidospermine in relieving dyspnœa due to whatever cause.

In a letter to the *Medical Age*, p. 463, Dr. J. W. Smith points out a number of dangers attending the use of bleached dried fruit. "The bleaching process," says the writer, "consists of exposing the green fruit to the fumes of burning sulphur." He quotes German reports of the occurrence of zinc in such American dried fruits, on account of which they were ordered destroyed by the authorities. Sulphuric acid also is generated in small quantities by the bleaching process. In any case, he holds that the process must destroy, to some extent, the value of the fruit, aside from any question as to the danger from poisoning.

Dr. Fields, in the *British Medical Journal*, offers a plea for the use of Pilocarpinè to prevent, and even to cure, many forms of deafness.

Additional testimony to the very probable fact that Oleander leaves share the cardiant properties of other members of the natural order Apocynaceæ, is offered by Dr. Ponloux in the *Bull. Gen. de Ther.*, p. 393, and quoted in the *Medical Age*, p. 473.

In the *American Journal of Pharmacy* will be found an important report by Robert Glenck, on the nature and behavior of the Resin of Ginger.

Dr. Wm. S. Disbrow recently presented an important paper before the Practitioners' Club of Newark, N. J., on the relation of Inosite to Diabetes, a condensed account of which will be found in the *Medical Record*.

At the National Meeting of the Wholesale Drug-

gists, Mr. J. H. Zielin, of Philadelphia, read an exceedingly interesting paper entitled: "Drug Business in the Late Confederate States," which may be found in the *Pharmaceutical Record* of November 4th, p. 344.

Prof. Sadtler's introductory lecture to the students of the Philadelphia College of Pharmacy, upon the Synthesis of Alkaloids, is printed in the *Pharmaceutical Record* of November 18th, p. 351.

In the *Druggists' Circular*, p. 244, appears the translation of a paper in the *Pharmaceutische Zeitung*, on the quantity of Emetine in various preparations of Ipecac. From this it would appear that the most efficient preparation of this drug is the wine.

