

Careful search should be made for these exceptional forms in various localities, and in any case where they are noted prompt report, accompanied by verified specimens, should be made.

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THE RANGE OF THE BLUE ASH, *FRAXINUS QUADRANGULATA*. By W. P. SHANNON.

In Gray's Manual of Botany, edition of 1857, we have given as the range of the blue ash, Ohio and Michigan to Illinois and Kentucky. This is nearly equivalent to saying that Indiana is the center of the blue ash region. Let us look farther. In the 1868 edition of Gray's Manual we find the range given as Ohio to Wisconsin, Illinois and Kentucky. Again, in the edition of 1887, it is, Ohio to Michigan and Minnesota, south to Tennessee. In Wood's Botany, 1868, we find, Ohio to Tennessee and Iowa. In Sargent's Forest Trees of North America we find, Michigan and Wisconsin, south to northern Alabama. In Aggar's Trees of the Northern United States we find, Wisconsin to Ohio and Kentucky.

Putting together all of these definitions of the range of the blue ash we conclude that in going east from Indiana the tree disappears before we get through Ohio; in going north it disappears before we get through Michigan; in going northwest we find it beyond Illinois in Wisconsin, Minnesota and Iowa, and that it is very rare in Iowa and Minnesota; in going southwest it disappears somewhere in Illinois; in going south it becomes rare in Tennessee and disappears in northern Alabama. When we take into consideration the great prairies of Illinois, we see that Indiana is yet the center of the range of the blue ash. There is a northwestern extension around the prairie region through Michigan and Wisconsin to Minnesota and Iowa, and a southern extension through Kentucky and Tennessee to Alabama.

It would be difficult to work out the barriers that hold this tree close to Indiana. The purpose of this paper is this, to call attention to the fact that if any forest tree deserves to be called the "Indiana tree" it is the blue ash. Its range, when compared with that of other trees, is a small spot, and Indiana is the center of this spot. If this is an Indiana tree we would like to know its character when compared with other trees. It is always characterized as growing in rich soil. When a boy I heard my father say that he thought the blue ash the most beautiful tree of the forest. Frequently on looking at a large blue ash, I have thought of the truth of his judgment. From its light colored bark, with, sometimes, an imaginary blue tinge, and long straight stem, it contrasted strongly with other trees, so that the blue ash trees were bright streaks in the forest.

Among the pioneers of Indiana this tree was the choice stick for the rail fence, owing to its durability and its being easily split. A boy could make rails of the blue ash and a woman could split blue ash stove wood. Hence the blue ash soon disappeared as a large or even medium-sized forest tree. As members of the original forest, they are all gone but the scrubs. Unlike many other forest trees, the blue ash is making fair headway towards reëstablishing itself. It is an abundant fruiter, and we frequently find a young tree that has escaped the kind of civilization enforced by cattle and clean farmers.

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BOTANICAL PRODUCTS OF THE UNITED STATES PHARMACOPEIA, 1890. BY JOHN S. WRIGHT.

[ABSTRACT.]

A large number of the official organic drugs are plant products. The revisers of the United States Pharmacopœia, 1890 (published in 1894 and in effect until 1904), admit plant products, such as fruits, leaves, stems, underground portions, inspissated juices, resins, gummy exudations, products of distillation, and other materials of vegetable origin, representing 232 species, 186 genera, and 73 natural orders.

Since the pharmacopœia list of drugs is official, much care is exercised in making admissions to it. Long and general use is usually necessary to demonstrate the claim of a plant or any of its products to recognition in this work, which is the guide to druggists of the United States.

Only occasionally does an entire plant become an official drug, strictly speaking, that part only is official which is mentioned by the pharmacopœia; thus we have, under the title CAPSICUM: "The fruit of *Capsicum fastigiatum* Blume;" or as under ALOES, SOCOTRINE: "The inspissated juice of the leaves of *Aloe Perryi* Baker." In the former case it is the fruit, and in the latter the inspissated juice, only, of the plant mentioned, which is official. In some cases several parts or products of a plant are extensively employed in medicine, and may even be generally recognized in dispensatories and kindred works, though only one of these may be official; for instance, the tubers and leaves of Aconite (*Aconitum Napellus* L.) are each recognized as medical agents, yet the tuber is alone official.

With this conservatism on the part of the revisers of the pharmacopœia, it is found that nearly every official drug is of positive value in medicine, and further, that the official list is very much smaller than any other general organic drug list. As before stated, the official list includes products representing 232