

THE AMERICAN CRAB APPLE.

Prof. W. J. Beal, of the Michigan Agricultural College, has furnished the *Botanical Index* the results of an interesting study he has made of the native crab apple of this country (*Pyrus coronaria*). Mr. Case, editor of the *Botanical Index*, at Richmond, Indiana, has kindly allowed us to reproduce the article from his excellent journal. We believe this view of an original fruit will interest our growers of improved sorts, and may to some bring new points of information.

Of the American crab apple there are two or three varieties. The leading one is *Pyrus coronaria*, a small tree, which extends from near Lake Superior in British America to Louisiana. It is especially abundant in the highest of the Alleghany mountains. It thrives in open places, in cool soil which is deep and rich, though it is not uncommon in soil of moderate fertility. The tree varies in height from 15 to 30 feet, according to soil and climate. The diameter of the trunk is 3 or 4 inches, but in some cases it reaches 15 inches. The leaves are ovate or broad ovate, variously cut, serrate, and often lobed. The flowers are quite large, in corymbs, pale rose color, and very fragrant. The fruit is about 1 to 1½ inches in diameter, flat, globular, with a slight abrupt folded basin, and a very shallow cavity. The color is yellowish green, unctuous, and very acid.

The engraving on this page, shows a branch with leaves and two apples, with a section of a third, about two-thirds the natural size; also a flower and a flower bud. The latter is copied from Michaux's *North American Sylva*. There are 35 or 40 species of *Pyrus*, natives of both hemispheres, in the north temperate zone. Along the Alleghanies there is a narrow-leaved crab apple, which may be a distant species from the one here figured. In Oregon we find *P. rivularis*, which bears small, reddish-yellow fruit, about the size of that borne by mountain ash. The Indians use it for food.

To a limited extent, the crab apple has been tried as a hedge plant. It is well adapted to a high northern latitude; is a very stiff grower, well covered with sharp spines; grows faster than hawthorne; is hardy and not liable to disease. At Michigan Agricultural College, there has been started a short hedge of this plant. In the city of Lansing, near by, is a close row along the front line of a city lot. These trees have been allowed to grow in a natural way. When in flower, the display is very fine, filling the air with their delightful perfume. The thorns, rough bark, crooked limbs, and rather open top, give the tree a rather picturesque appearance. Perhaps these may be some of the reasons why it is not much used in this country as an ornamental tree, though it has long been considered one of the prettiest flowering shrubs in England.

The American crab apple is probably capable of improvement by selection and cultivation. Why not? Everything that has been faithfully tried has improved sooner or later, under the fostering care of man. What virtues lay hidden in this wild fruit, probably we may never know; as no people will be likely to persistently try to improve a sour, wild apple, while we already have those so much better.

Pyrus Malus and *P. prunifolia* already have the lead. Certainly, for over 2,000 years, the common apple has been undergoing improvement, how much longer no one knows. In a late essay, Dr. A. Gray "speculates as to what our pomology would have been if civilization had had its birthplace along the southern shores of our great lakes, the northern shores of the gulf of Mexico and the intervening Mississippi, instead of the Levant, Mesopotamia, and the Nile;" our apples would have been developed from *Pyrus coronaria*, and might have equalled anything we actually possess from *Pyrus malus*.

It is not certain that this species can be crossed in either way with our common apples. On two seasons several attempts were made by the writer, but all to no purpose. Like experiments made in crossing our cultivated crab

apples on the wild species have been successful, and will be continued. In this way we can get new blood into our cultivated crabs, and, perhaps, gain some desirable point in tree or fruit for the coldest parts of our country. It may, however, turn out like a cross of our common cattle with the American bison; no advantage to the buffalo, and a great detriment to our cattle. J. G. Souldard, in the Horticultural Report of Illinois for 1868, speaks of some trees which were cultivated and bore fruit three or four times the size of the ordinary fruit. He fancied they were not quite so harsh. The tree origi-

THE SECRET OF BEAUTY.—The true secret of beauty is health. Those who desire to be beautiful should do all they can to restore their health, if they have it yet. No one can lay down specific rules for other people in these matters. The work one may do, the rest he must take, his baths, diet and exercise, are matters of individual consideration, but they must be carefully thought of and never neglected. As a rule, when a person looks well he feels well, and when he looks bad he feels bad, as a general thing. There are times when one could guess, without looking in the glass, that his eyes were



FOLIAGE, BLOSSOMS AND FRUIT OF PYRUS CORONARIA.—After Michaux.

nated in Missouri, and was thought to be the result of a cross with our common apple, some of which grew in the immediate vicinity. Some specimens of the fruit were seven inches around. It is valuable for cooking, preserving, and jellies. He adds: "It will keep for two years with common care in a cellar, and will stand repeated freezing and thawing in a darkish place." Perhaps he might add, that without damage, it it could be shaken or beaten from the tree, and taken loosely to market in a lumber wagon.

A BEAUTIFUL girl up town received a fragrant bouquet from one of her many admirers. "How lovely!" exclaimed the ecstatic fair one; "it fumigates the entire domicile."

dull and his skin was mottled. This is not a case for something in a pretty bottle from the perfumer's, or for the lotion the circulars praise so highly. To have a fresh complexion and bright eyes, even to have white hands and a graceful figure, you must be well. Health, and the happiness that usually comes with it, are the true secrets of beauty.—*Quarterly Review*.

PAPER THAT WILL WARP.—A new paper is now made of palmetto fiber which can be washed with soap and water, as one would wash a piece of linen cloth, then rubbed, wrung out, and dried. The paper resembles parchment in color. It is not as strong but is tough, although of uneven thickness.