HARDY FORSYTHIAS
WITH A SHORT ACCOUNT OF THE HISTORY OF GARDEN FORSYTHIAS
AND REMARKS REGARDING THEIR POSSIBLE FUTURE DEVELOPMENT.

Three species of Forsythia have proved thoroughly hardy at the Arnold Arboretum this spring: Forsythia ovata, F. europaea, and F. japonica. In an ordinary year they are relatively inconspicuous members of the collection. This spring, as full of bloom as ever, they stand out in dramatic contrast to the bare branches of the commoner sorts. Of the three, the Korean Forsythia, F. ovata, is probably of the greatest garden merit. Though its flowers, as shown in the accompanying plate, are smaller than those of most garden varieties, they have a delicate and airy grace. Wholly aside from its hardiness, F. ovata would in certain situations be preferred to other Forsythias by reason of its flower color and habit of growth. The flowers are borne closely clustered on the branches and are of a soft, light yellow.

The Korean Forsythia was introduced into western gardens in 1917, when Dr. Wilson brought back seeds from the Diamond Mountains of Korea. He tells us that in its native home it is "a straggling, often sprawling shrub of no great size." In cultivation it makes a small upright bush, less diffuse in habit than are most members of the genus. It is not only among the hardest of all Forsythias, but it is with us distinctly the earliest to bloom. All in all, it is decidedly worth growing, and there are many situations where its smaller size, neater habit, and more delicate flowers make it preferable to any other variety.

Forsythia japonica (under which name may be considered as well the barely distinct F. saxatilis) has been grown at the Arnold Arboretum since 1924, when cuttings were received from the Botanical Garden
at Tokyo. In flower and leaf it is very similar to *F. orata*, its most important difference, so far as its use in gardens is concerned, is its lower habit of growth. Like many Forsythias it is a native of rocky places, and it might find its happiest use as a low shrub for the rock garden.

*Forsythia europaea*, while of great botanical interest, is of little importance horticulturally. American plant breeders should be interested in its hardiness and its profuse bloom. These should prove useful in building up an American race of garden Forsythias. In itself the species is too weedy and coarse for customary garden use. Botanically it is noteworthy as the only species which is not native to the Orient. It grows abundantly in combination with similar weedy shrubs in scrublands of the Balkan Peninsula, where it was first discovered by Dr. Baldacci in 1897. Its natural habitat in dry situations suggests that it might be worthy of extended trial in the more arid parts of the middle west.

Comparatively speaking, Forsythias are newcomers to our western gardens. It was just a century ago that the first plants were brought back to Holland from Japan. Actually, the genus did not become well known until Robert Fortune sent *Forsythia viridissima* to the garden of the Horticultural Society of London in 1844. The following account is taken from a letter he sent back to the society.

"I first discovered it growing in a garden...which belonged to a Chinese Mandarin, on the island of Chusan, generally called the 'Grotto Garden' by the English. It is a great favourite with the Chinese, and is generally grown in all the gardens of the rich in the north of China. I afterwards found it wild amongst the mountains of the interior in the Province of Chekuang, where I thought it even more ornamental in its natural state amongst the hedges than when cultivated in the fairy gardens of the Mandarins."

On a subsequent trip Fortune introduced the variety of *Forsythia suspensa* which still bears his name. Nearly all of our garden Forsythias trace back at least in part to the very plants introduced by Robert Fortune. In his day it was no easy matter to bring back living plants from the Orient. He has left us a detailed account of the careful way in which his precious collections were prepared for the long sea-voyage by sailing vessel.

"As I had now secured living specimens and seeds of all the ornamental trees and shrubs of this part of Japan which I was likely to meet with at this season of the year, the whole were removed across
the bay to Yokohama, and placed for safety in Dr. Hall's garden* until
Ward's cases were ready for their reception....

"But the latter part of the business was no easy matter. To go
from England to Japan was easy enough; to wander amongst those
romantic valleys and undulating hills was pleasure unalloyed; to ran-
sack the capital itself, although attended by an armed guard, was far
from disagreeable; and to get together such a noble collection as I have
just been describing was the most agreeable of all. The difficulty—the
great difficulty—was to transport living plants from Yedo to the Thames,
over stormy seas, for a distance of some 16,000 miles. But thanks to
my old friend Mr. Ward, even this difficulty can now be overcome by
means of the well-known glass cases which bear his name....

"In a foreign country, however, even Ward's cases cannot be made
without some difficulty.... Luckily, however, a sufficient number of
cases were got ready to enable me to carry the collections on to China.
The steam-ship 'England,' Captain Dundas, being about to return to
Shanghai, I availed myself of the opportunity to go over to that port
with my collections, in order to ship them for England, there being
as yet no means of sending them direct from Japan. Mr. Veitch had
also put his plants on board the same vessel, so that the whole of the
poop was lined with glass cases crammed full of the natural productum,
of Japan. Never before had such an interesting and valuable collection
of plants occupied the deck of any vessel, and most devoutly did we
hope that our beloved plants might be transported with fair winds and
smooth seas, and with as little salt water as possible—a mixture to
which they were not at all partial, and which sadly disagrees with their
constitutions....

"A defect in the construction of many of these cases is the shortness
of their feet. The bottom of the case should always be at least six
inches raised from the deck of the vessel... Washing decks is the first
part of the sailor's business every morning at sea, and they are not
generally very particular as to where they throw the water. If the feet
of the plant-case are shorter than six inches, there will not be sufficient
room for the sailors to dash the water below it, and consequently the
bottom and sides will stand the chance of being washed every morning
as regularly as the decks. In the course of a four or five month's voy-
age, the salt water is certain to find its way into the soil, which it then
saturates, and destroys the roots of the plants....

*This was, of course the Dr. Hall of Bristol, Rhode Island, who introduced
many Japanese plants into American gardens.
"When the vessel is about to sail the cases should be closed firmly, and the joints must be made perfectly tight. Narrow strips of canvas dipped in a boiling mixture of tar and pitch, and put on the outside of the joints, answer the purpose admirably, and should always be used where there is any difficulty in making the joints close. Large vessels with poops are the best for plants, and should always be preferred where there is any choice, as their decks are higher, and consequently less liable to be washed by the sea. The poop, either in small or large ships, is the best place for the cases to be placed; in small vessels they should either be put there or not sent at all. The main or mizen top is sometimes recommended; but most captains object to having such heavy articles placed so high above the decks."

The little plants which travelled back to England in tight glass cases, thrived amazingly well in Europe. In a few decades Forsythias were commonly grown in Europe and America. Both there and here, natural hybrids occurred in nurseries and botanical gardens. Zabel, the Curator of the Arboretum at a forest school in Hanover, was the first to give them the name of Forsythia intermedia. His sharp eyes noted the peculiar leaves of one set of seedlings and he thought they might be hybrids of Forsythia suspensa and F. viridissima. When they came into bloom his suspicions were verified and many of the garden Forsythias grown today are the ultimate result of these or similar crosses and are classified as varieties of Forsythia intermedia. One of the loveliest of the new varieties, the Primrose Forsythia, F. intermedia var. primulina, originated at the Arnold Arboretum as a chance seedling. It was discovered growing among the great mass of Forsythias on the side of Bussey Hill, by Professor Rehder, whose sharp eyes noted the lovely soft yellow tone of its flowers. To sensitive gardeners, the rich butter-yellow of most Forsythias is a little too bright, particularly so in a shrub which in ordinary years produces such large masses of color. The soft primrose yellow of F. intermedia var. primulina is less tiring to the eye and forms a beautiful background for the brilliant colors of early spring flowers.

The past century has seen a rapid development of garden Forsythias. Riding safely to Europe in little glass cases on the decks of sailing vessels, these oriental shrubs have increased and multiplied. Sharp-eyed botanists and nurserymen have selected the showiest of their hybrids. Collectors have assembled new species from Albania and Korea. Will another century show a correspondingly great development? Will these new species be incorporated, as they easily could be, in outstanding garden varieties? One looks forward hopefully to the new American
Forsythias which may soon be originated: Forsythias which will combine the hardiness of the European and Korean species with the larger flowers of the Chinese species and hybrids; Forsythias whose flowers will be less glaringly yellow and more light and airy in their carriage; which will somewhere in their development lose the coarse and weedy habit which characterizes the wild species and which unfortunately is not even yet eliminated from our cultivated varieties.

Edgar Anderson

EXPLANATION OF THE PLATE

Forsythia ovata Nakai. Natural size. In the lower right hand corner a spray of X Forsythia intermedia Zabel has been drawn at the same scale for comparison.

(Drawing by Blanche Ames Ames.)