

A. saccharum 'Newton Sentry' (foreground) in the Maple collection at the Arnold Arboretum

Acer saccharum 'Newton Sentry': Setting the Record Straight

Michael Dathe

It stands in an overgrown shrub border on a slope just to the left of the main entrance to Newton Cemetery. Scrub growth of Norway maples, buckthorn, and weeds grow around its base, and yews have closed in on three sides, leaving only a portion of the trunk visible. "Not one person in ten thousand takes note of it or realizes that it is unique," Newton resident A. H. Fewkes wrote in 1924. In the years since, it has received little more recognition.

The tree is the original of its type, a mutant of *Acer saccharum*, the common sugar maple, and has the narrowest canopy of any sugar maple known. F. L. Temple, the Cambridge, Massachusetts, nurseryman who introduced it into cultivation, described the tree as "exhibiting towering shafts of foliage" in startling contrast to the spreading branches of the common species. Temple's 1885–86 catalogue for Shady Hill Nurseries contains the following description:

Acer saccharinum columnare

This is a most remarkable form of the Sugar Maple, which grows in a compact, columnar shape.... The original tree of this sort is 30' high, and only $2\frac{1}{2}$ ' in diameter at the top. The leaves are thick and leathery, and of a very dark color, which gives it a rich appearance. This tree ... will be the parent of a new type of lawn and landscape tree....

(Until 1900 the sugar maple was widely known as Acer saccharinum, which is now the correct name of the silver maple.)

Two years after introducing the Newton Cemetery tree into cultivation, Temple also introduced another upright maple, which he called Acer saccharinum monumentale. Although the two trees are readily distinguishable, their names quickly became confused in horticultural literature, and that confusion still exists today. Bernard Harkness, a taxonomist for the city of Rochester, New York, attempted to clarify the issue in 1954 and proposed the names Acer saccharum 'Newton Sentry' for the Newton Cemetery tree and Acer saccharum 'Temple's Upright' for the other in an article in Baileya (volume 2, number 3, page 99). In that article Harkness correctly identified the two trees with regard to the central leader, but in listing their distinguishing characteristics attributed the stubby lateral branches of 'Newton Sentry' to 'Temple's Upright'. A drawing that accompanied the article perpetuated the confusion, for the artist had drawn the 'Newton Sentry' with a central leader and the 'Temple's Upright' without. The latter mistake was carried into Donald Wyman's Trees for American Gardens (1965) and Hortus Third as well as numerous other publications. Arnoldia played its part in perpetuating the confusion in an article (volume 36. number 4, pages 168-69) by Richard E. Weaver, in which photographs of the two trees appeared with the names reversed.

The key identifying features of the mature 'Newton Sentry' are:

- Lack of a single central trunk above six feet from the ground
- Major and minor branches vertical
- Short, stubby lateral branchlets on secondary branches

The key identifying characteristics of the mature 'Temple's Upright' are:

- Strong central leader well into the crown
- Major and minor branches gradually ascending
- Absence of short, stubby lateral branchlets (secondary branches similar to those of the typical sugar maple)

The original 'Newton Sentry' in Newton Cemetry is now 50 feet high with a 16-inch diameter and a 14-foot spread. As 'Newton Sentry' matures, it develops several major leaders. Branches coming off these leaders closely follow them upward, giving the tree its extremely columnar form. The lateral branches on the secondary branches are generally one to six inches long and often resemble the flowering spurs on fruit trees.

'Temple's Upright' has an elliptical silhouette, with a single main central trunk and major branches bowing out before gently curving upward. It is a superb graceful, branching landscape tree. No data exist on how or where Mr. Temple acquired his first cuttings or whether the parent tree is still standing.

Fewkes observed the tree in its original location, on the grounds of the Claflin Grammar School in Newton, Massachusetts, in



Acer saccharum

1871, when he was a student at the school. It was later (between 1875 and 1880) moved to Newton Cemetery when the school was being enlarged. By 1954 it had grown to 40 feet high, with a 12-inch diameter at approximately breast height.

In 1885 the Arnold Arboretum received cuttings of the Newton Cemetery tree from Henry Ross, the cemetery's supervisor of grounds, and the resultant tree (number 2119), in the maple collection, is now 60 feet high, with a 16-inch diameter and a 17-foot spread. That tree for years was mislabeled because of the confusion with 'Temple's Upright' but now is labeled correctly. Two other trees propagated from number 2119



A. saccharum 'Temple's Upright'

also grow in the Arboretum; one, in the Weld-Walter Tract, is 27 years old, 25 feet high, 4 inches in diameter, and 7 feet in spread; and the other, on Peter's Hill, is 50 years old, 20 feet high, 3 inches in diameter, and 4 feet in spread. The latter cannot be considered indicative of the growth rate of 'Newton Sentry' as it has resprouted from the base following destruction by vandals.

For all Temple's hope for his new introduction, 'Newton Sentry' has never become a popular landscape plant. The usual design limitations of columnar trees and its own sticklike appearance in winter for the first 25 years are possible reasons for its lack of popularity. Another reason may be its lack

of the low branches needed for screening purposes. Its fall coloration is earlier but otherwise similar to that of the common sugar maple. This early defoliation can be used to lengthen the fall foliage season when used in tandem with later defoliating trees. 'Newton Sentry' also has potential as a street tree, having been used in a strip planting in the center of the town of Sheffield, Massachusetts, with good results. In my opinion the tree's best use in the designed landscape is as a focal point, where its distinctly different growth pattern would be most visible.