

DR. ASA GRAY'S SEVENTY-FIFTH  
BIRTHDAY.

THE seventy-fifth anniversary of the birth of Dr. Asa Gray occurred on the 18th of November. At the suggestion of the editors of the *Botanical gazette*, many of the botanists of North America united in presenting to the foremost botanist of the country a token of love and esteem in the form of a silver vase.



This vase was presented on the morning of the 18th, without formality. It is about eleven inches high, and is appropriately decorated with those plants which are distinctively American, and which are most closely associated with Dr. Gray. The place of honor on one side is held by *Grayia polygaloides*, and on the other by *Shortia galacifolia*. Among others, *Aster Bigelovii*, *Solidago serotina*, *Lilium Grayi*, *Centaurea Americana*, *Notholaena Grayi*, and *Rudbeckia speciosa*, are prominent. The

workmanship is highly artistic, as well as remarkably accurate, and reflects credit upon the designers, Messrs. Bigelow, Kennard, & Co., of Boston.

The vase stands on a low ebony pedestal, which is surrounded by a silver hoop, bearing the inscription, —

1810 — November eighteenth — 1885.

ASA GRAY,  
in token of the universal esteem  
of American botanists.

The greetings, by card and letter, of the one hundred and eighty contributors, were presented on a plain but elegant silver tray. They contain the warmest expressions of esteem and gratitude.

In the afternoon Dr. and Mrs. Gray received, quite informally, many of their friends.

A NEW SYSTEM OF OYSTER-CULTURE.

THE hope that I might solve, or help to solve, the oyster-problem practically, has served to constantly encourage me for the five years that I have been working with that object in view. In the belief that what I now have to offer presents one of the only possible practical solutions of the oyster-question, I submit it to the oystermen of our country as a method by the help of which they may be enabled to rear an abundance of 'seed' upon areas which are positively and absolutely under individual, proprietary control. The first principles of the new method are given below, and it will be seen that they include or embrace all that it has been proposed to accomplish by the use of any other plans hitherto proposed; that is, it is proposed to utilize the three dimensions of a body of water, moved automatically back and forth in a canal by the tides, for the purpose of spat-collecting. In such a canal an enormous amount of cultch or collecting surface will be exposed to the fry, diffused throughout the three dimensions of the surrounding water, during the spawning season. In this way the maximum amount of spat can be obtained with a minimum expanse of water.

The first principles of the new method of spat or 'seed-culture,' which I here propose, are the following: —

1. Oyster embryos diffuse themselves throughout the three dimensions of a body of water, and will affix themselves to collecting surfaces similarly distributed, up to and even above low-water level.
2. The floating fry will adhere to smooth surfaces as well as rough ones.
3. The surfaces upon which spatting occurs must be kept as free as possible from sediment and organic growths, in order that the very tiny young