

since I first called the attention of this Society to the great importance of producing fruit from seed, in order to originate and obtain such varieties as might be adapted to the varied climate and sections of our ever-increasing and immense territory.

"It has long been known that varieties raised on our own soils, and in our localities, are generally better suited to our various regions than those from foreign lands, and although we have some varieties from abroad of great excellence and wide adaptation, there are, comparatively, only a few out of the thousands of foreign kinds which we have proved in the last fifty years, that now remain in general cultivation. Formerly the accessions to our catalogue were from the Old World; now they are mostly of American origin, and so it will continue to be in future time. These are benefactions not only to our country, but the world. He that originates a new and valuable fruit, suited to general cultivation, is as much a benefactor of mankind as he who discovers a new principle in science which increases the comfort and happiness of our race.

"Natural fertilization, unaided by the hand of man, is as old as creation; but the knowledge of manual fertilization, the ability of man to assist nature in the process of improvement, seems to have been mostly withheld from us until the present age. Wonderful is this fact, but it is not more so than the unlimited extent to which it may be carried by the genius and sagacity of him who would co-operate with nature in this enchanting labor.

"Strange, indeed, that this art should have been held in suspense for so many ages, nor until our own time to be brought into practical use. But, thanks to the Disposer of all temporal concerns, it has now come as the harbinger

of a progress which is to revolutionize and improve the fruits of the earth while time shall last. Thanks, too, to Knight, Herbert, Lindley, Darwin, Gray, and other teachers of later time, for the lessons of wisdom, which have encouraged us to prosecute this most noble work.

"The process of fecundation was known far back in the centuries of the past, but not for the production of new and improved varieties of plants. From the days of Pliny, to the present time, the custom of suspending the blossoms of the date palm over the trusses of the fruit-bearing trees, was known to be necessary for the production of fruit. So Tournefort and Linnaeus understood the sexual order of plants; but we have no facts to show, so far as I know, that either of these writers had a knowledge that the crossing of different species and varieties would produce from the seed a new variety which would possess in a greater or less degree the characteristics of the parent plants, and it is doubtful whether Duhamel, Van Mons, or Noisette, was acquainted with this wonderful art for the indefinite improvement of our fruits.

"This is the art that doth help nature, and great as has been the progress in our time, it is but as the dawn of that day when every section of our varied climes shall be furnished with products of the earth as well adapted to each as the people who inhabit them. How grand the acquisitions of this art in our day! It is only about fifty years since Mr. Hovey, myself, or other cultivators of our country, attempted the hybridization of fruits or flowers. Now the knowledge of this art is as well understood as the cultivation of the soil. These are the means provided by an all-wise Providence for the improvement of our fruits. Would that Prince, Downing, Brinckle, and those other pioneers who have gone before us, could now