

a pure line by self-pollination will necessarily have to be extended over a very long series of years. Most of the so-called "improved" varieties of pecans were originally found growing wild and have been propagated asexually ever since.

On exhibit at the Horticultural Show of the A. and M. College of Texas in 1922, was a display of thirty-six distinct types of pecans, produced by thirty-six different trees that were grown from seed, all produced the same year by a single mother pecan tree, the original San Saba. Of the thirty-six samples only four are considered as good as, or better than the mother tree. Two of them, the Texas Prolific and Western Schley, have been introduced as named varieties. In size of nuts there is a rather uniform gradation from those as large as beans to those over two inches in length. No correlation between size of nut and thickness of shell is evident. Some of the larger nuts have very thin shells, while some of the smaller ones have extremely thick ones, and *vice versa*. The accompanying picture gives only a inadequate idea of the difference between these varieties, since size and

shape are the only qualities which show up well in pictures. There are also marked differences in flavor, proportion of kernel to shell, readiness with which kernel separates from shell, and habits of growth of the tree from which the nuts came.

The man who planted the pecans and expected the progeny to be exact reproductions of the San Saba variety convinced himself by this demonstration that propagation of pecans by seed is not a reliable method; and he is now perpetuating his standard varieties by budding and grafting. He continues to plant pecan seeds only in the hope of obtaining chance seedlings which will be good enough to introduce to the public as named varieties.

Thus it will be seen that the propagation and improvement of the pecan is governed by the very same principles which govern the apple, pear, and other fruit and nut trees. There is this one difference, however: the development of the pecan is so recent that there still remain greater opportunities of finding superior seedlings than is the case with the fruits and nuts which have been longer cultivated by man.

The Doctrines of Sidis

NERVOUS ILLS, THEIR CAUSE AND CURE, by BORIS SIDIS, M. D. Pp. 379; price \$3. Boston, Richard G. Badger, 1922.

In this volume Dr. Sidis gives an extended popular presentation of his thesis that mental and nervous diseases are due to perversions of the fundamental instincts of self-preservation and fear. He describes the satisfactory results of his treatment of such diseases

by the hypnoidal state. Two chapters devoted to heredity and eugenics respectively are superficial and bigoted. The chapter discussing eugenics is in considerable part made up of a diatribe against eugenists which the author evidently admires enough to quote verbatim (but without citation) from one of his earlier volumes. Numerous interesting case histories are presented.—*P. P.*