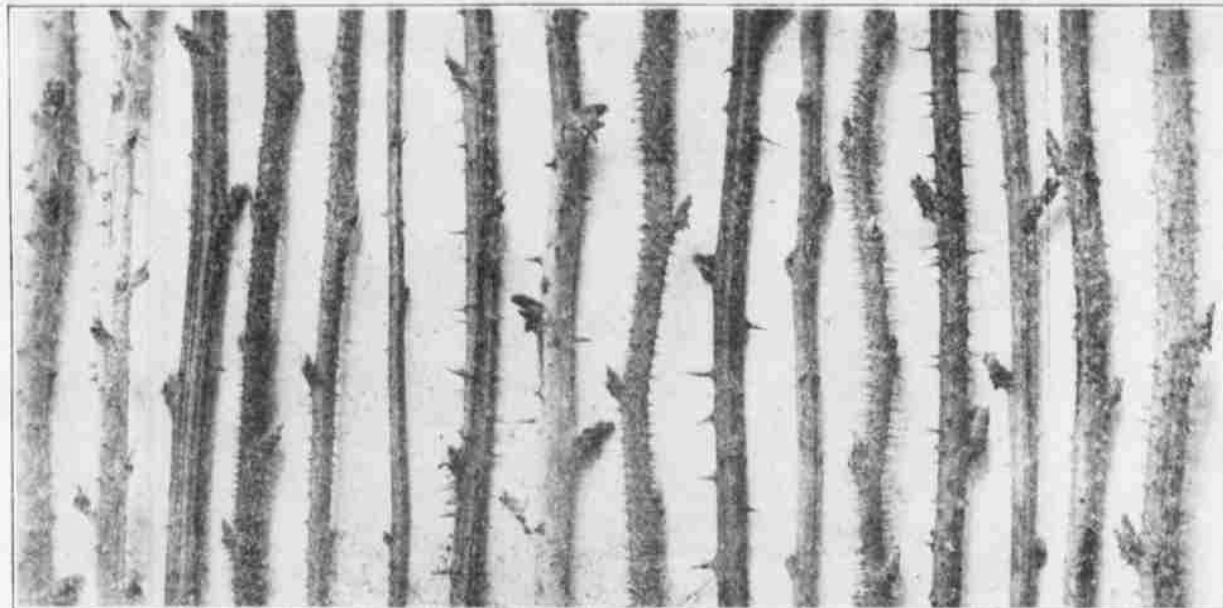
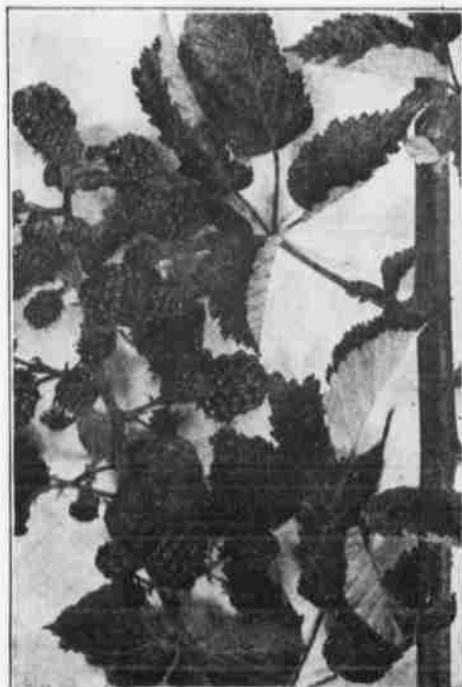


Producing a Thornless Blackberry



Some Variations in Canes Secured by Crossing

THE thornless blackberry will find a ready welcome from those who have known the scratched, bleeding hands that result from a day of berry picking. But this was not the motive—which



Burbank Thornless Blackberry, Bearing

acted Luther Burbank to produce a blackberry which grows upon a stem as smooth and devoid of spines as the stalk of the smoothest flower.

—Mr. Burbank's theory in beginning these experiments many years ago was that blackberry thorns are a needless waste—that it takes energy to make these tacks—energy which would otherwise go into leaves and later into an increased yield of fruit.

Mr. Burbank's theory further was that the tack or thorn was produced by the blackberry as a means of defence from being devoured by wild animals—that some time or other in the early history of the plant the stalks were smooth—but that in self-defence the thorns appeared and grew.

Today, grown with the kindest care to serve the appetite of mankind, the blackberry has no need of thorns. Its growers protect it from the ravages from which it used to have to protect itself.

The illustration above shows some of the results obtained by crossing different kinds of berries.

The illustration at the right below shows the absolutely thornless blackberry which through these and other crossings, and by selection, Mr. Burbank was finally able to produce. The illustration at the left shows the new thornless berry bearing fruit.

Although the thornless blackberry now produces luscious berries in large quantities, the experiment is not yet at an end. It gives assurance of being as suc-

cessful as at first hoped for. And it stands as another proof of the forces of evolution in plant development—an other object-lesson of how they may be employed, almost at will by man.



Smooth Cane of the Thornless Blackberry