

Banksian rose; and from the much enlarged point of junction, whence the *Devoniensis* and Banksian still continued to grow, a third branch issued, which was neither pure Banksian nor pure *Devoniensis*, but partook of the character of both; the flowers resembled, but were superior in character to those of the variety called *Lamarque* (one of the *Noisettes*), while the shoots were similar in their manner of growth to those of the Banksian rose, with the exception that the longer and more robust shoots were furnished with prickles. This rose was exhibited before the Floral Committee of the Horticultural Society of London. Dr. Lindley examined it and concluded that it had certainly been produced by the mingling of *R. banksiæ* with some rose like *R. devoniensis*, "for while it was very greatly increased in vigour and in size of all the parts, the leaves were half-way between a Banksian and Tea-scented rose." It appears that rose-growers were previously aware that the Banksian rose sometimes affects other roses. As Mr. Poynter's new variety is intermediate in its fruit and foliage between the stock and scion, and as it arose from the point of junction between the two, it is very improbable that it owes its origin to mere bud-variation, independently of the mutual influence of the stock and scion.

Lastly, with respect to potatoes. Mr. R. Trail stated in 1867 before the Botanical Society of Edinburgh (and has since given me fuller information), that several years ago he cut about sixty blue and white potatoes into halves through the eyes or buds, and then carefully joined them, destroying at the same time the other eyes. Some of these united tubers produced white, and others blue tubers; some, however, produced tubers partly white and partly blue; and the tubers from about four or five were regularly mottled with the two colours. In these latter cases we may conclude that a stem had been formed by the union of the bisected buds, that is, by graft-hybridisation.

In the 'Botanische Zeitung' (May 16, 1868), Professor Hildebrand gives an account with a coloured figure, of his experiments on two varieties which were found during the same season to be constant in character, namely, a somewhat elongated rough-skinned red potato and a rounded smooth white one. He inserted buds reciprocally into both kinds, destroying the other buds. He thus raised two plants, and each of these produced a tuber intermediate in character between the two parent-forms. That from the red bud grafted into the white tuber, was at one end red and rough, as the whole tuber ought to have been if not affected; in the middle it was smooth with red stripes, and at the other end smooth and altogether white like that of the stock.

Mr. Taylor, who had received several accounts of potatoes having been grafted by wedge-shaped pieces of one variety inserted into another, though sceptical on the subject, made twenty-four experiments which he described in detail before the Horticultural Society.¹⁰⁹

¹⁰⁹ See 'Gard. Chron.,' 1869, p. 220.