

form was lost. In the sixth generation this maize perfectly resembled a European variety, described as the second sub-variety of the fifth race. When Metzger published his book, this variety was still cultivated near Heidelberg, and could be distinguished from the common kind only by a somewhat more vigorous growth. Analogous results were obtained by the cultivation of another American race, the "white-tooth corn," in which the tooth nearly disappeared even in the second generation. A third race, the "chicken corn," did not undergo so great a change, but the seeds became less polished and pellucid. In the above cases the seeds were carried from a warm to a colder climate. But Fritz Müller informs me that a dwarf variety with small rounded seeds (*papagaien-mais*), introduced from Germany into S. Brazil, produces plants as tall, with seeds as flat, as those of the kind commonly cultivated there.

These facts afford the most remarkable instance known to me of the direct and prompt action of climate on a plant. It might have been expected that the tallness of the stem, the period of vegetation, and the ripening of the seed, would have been thus affected; but it is a much more surprising fact that the seeds should have undergone so rapid and great a change. As, however, flowers, with their product the seed, are formed by the metamorphosis of the stem and leaves, any modification in these latter organs would be apt to extend, through correlation, to the organs of fructification

*Cabbage (Brassica oleracea).*—Every one knows how greatly the various kinds of cabbage differ in appearance. In the Island of Jersey, from the effects of particular culture and of climate, a stalk has grown to the height of sixteen feet, and "had its spring shoots at the top occupied by a magpie's nest:" the woody stems are not unfrequently from ten to twelve feet in height, and are there used as rafters<sup>64</sup> and as walking-sticks. We are thus reminded that in certain countries plants belonging to the generally herbaceous order of the Cruciferae are developed into trees. Every one can appreciate the difference between green or red cabbages with great single heads; Brussel-sprouts with numerous little heads; broccolis and cauliflowers with the greater number of their flowers in an aborted condition, incapable of producing seed, and borne in a dense corymb instead of an open panicle; savoys with their blistered and wrinkled leaves; and borecoles and kails, which come nearest to the wild parent-form. There are also various

<sup>64</sup> 'Cabbage Timber,' *Gardener's Chron.*, 1856, p. 744, quoted from Hooker's *Journal of Botany.* A

walking-stick made from a cabbage-stalk is exhibited in the Museum at Kew.