

CHAPTER IX.

CULTIVATED PLANTS: CEREAL AND CULINARY PLANTS.

PRELIMINARY REMARKS ON THE NUMBER AND PARENTAGE OF CULTIVATED PLANTS—FIRST STEPS IN CULTIVATION—GEOGRAPHICAL DISTRIBUTION OF CULTIVATED PLANTS.

CEREALES.—DOUBTS ON THE NUMBER OF SPECIES.—WHEAT: VARIETIES OF—INDIVIDUAL VARIABILITY—CHANGED HABITS—SELECTION—ANCIENT HISTORY OF THE VARIETIES.—MAIZE: GREAT VARIATION OF—DIRECT ACTION OF CLIMATE ON.

CULINARY PLANTS.—CABBAGES: VARIETIES OF, IN FOLIAGE AND STEMS, BUT NOT IN OTHER PARTS—PARENTAGE OF—OTHER SPECIES OF BRASSICA.—PEAS: AMOUNT OF DIFFERENCE IN THE SEVERAL KINDS, CHIEFLY IN THE PODS AND SEED—SOME VARIETIES CONSTANT, SOME HIGHLY VARIABLE—DO NOT INTERCROSS.—BEANS.—POTATOES: NUMEROUS VARIETIES OF—DIFFERING LITTLE, EXCEPT IN THE TUBERS—CHARACTERS INHERITED.

I SHALL not enter into so much detail on the variability of cultivated plants, as in the case of domesticated animals. The subject is involved in much difficulty. Botanists have generally neglected cultivated varieties, as beneath their notice. In several cases the wild prototype is unknown or doubtfully known; and in other cases it is hardly possible to distinguish between escaped seedlings and truly wild plants, so that there is no safe standard of comparison by which to judge of any supposed amount of change. Not a few botanists believe that several of our anciently cultivated plants have become so profoundly modified that it is not possible now to recognise their aboriginal parent-forms. Equally perplexing are the doubts whether some of them are descended from one species, or from several inextricably commingled by crossing and variation. Variations often pass into, and cannot be distinguished from, monstrosities; and monstrosities are of little significance for our purpose. Many varieties are propagated solely by grafts, buds, layers, bulbs, &c., and frequently it is not known how far their peculiarities can be transmitted by seminal generation. Nevertheless.