

## PARASITIC FLOWERING PLANTS.

**N**UMBER of our indigenous flowering plants have not hitherto been successfully cultivated. Some of them when in bloom would be very attractive objects in the flower garden, for they are both beautiful and showy. The difficulty has arisen from inattention to the fact that they are root-parasitic. It is not supposed that they are wholly dependent upon their host plant for food ; in fact it has been demonstrated that some of them are not, but nevertheless they are not vigorous and healthy without the nutriment derived from the host. They grow from seed just as any other seed bearing plant ; are nourished for a time by their cotyledons, their root extending into the earth and branching out in search of food supply. Upon the branching roots suckers are formed, which attach themselves to the roots of the appropriate host, and draw from them the required nutriment.

At present it is not known what plants are chosen as host ; whether each requires its own particular host, or uses indifferently any one of several that it may chance to find within reach. Here then is an interesting field for original researches. Who will work it and thus contribute a new item to the sum of human knowledge ? Without waiting for this the gardener can note what plants are growing within reach of the one he wishes to cultivate, and by growing them in connection with it secure the required host.

The parasitic plants that will be named are only such as one might desire to cultivate for the flower garden, and are all to be found growing wild in Ontario. Two of these are perennials, which when properly taken up can be transferred immediately to the flower border ; all of the rest are annuals that must be grown from seed. With regard

to the perennials it is important to bear in mind that the suckers are developed only near the extremity of a rootlet, which forms the terminus of the fleshy roots, radiating horizontally in all directions. About the time that the seeds ripen that portion of the host's root which has been fed upon will have decayed, and the suckers getting no more nourishment also perish. Obligated now to seek supplies elsewhere the tip of the root begins to extend itself and continues to elongate until it meets with a live root of a suitable host plant, and then it develops a new sucker upon the newly found root. These perennials are the two which will now be briefly described.



FIG. 1920—WOOD BETONY.

*PEDICULARIS CANADENSIS*—Linnaeus. Wood Betony. A low growing plant bearing red or yellow flowers in short spikes, with fern-like foliage, blooming in May and June in dry woods throughout Ontario. It is very abundant in the neighborhood of Toronto. (See Fig. 1920) an outline sketch of a small flower cluster with only the stem leaves.

*PEDICULARIS LANCEOLATA* Michaux. Swamp Lousewort. The flowers of this