

MANY of our readers will recollect having seen fine specimens of the comparatively new forage plant, COMFREY, at the Provincial Exhibition. For their information we take the liberty to print the following note received from Major DeBalinhard, along with an article from the *Digby Courier* :—

DIGBY, Sept. 9th, 1879.

Sir,—A couple of years ago I obtained from England a few roots of the new fodder plant, *Caucasian Comfrey*, about which several articles appeared in nearly all the papers in England, America, and the Dominion of Canada. I received mine at same time and per same steamer as the parties in the United States received theirs. It is known as the solid stem variety, in contradistinction to the old Comfrey, which has a hollow stem, and was the first introduced into the States some five or six years ago, but since which time, cultivation by some of the first growers in England has brought to its present standing as a solid stem plant, thereby increasing its value for fodder. I send a few plants for you to see, the top or crown plants and the ordinary root cuttings.

I am, &c.,

J. A. C. DEBALINHARD.

P. S.—The present length of leaf of fodder planted in *flower pot* 1st of August, 14 inches long, 4 inches wide; planted in the *open field*, 19 inches long, 6 wide or broad. Planted in *flower pot*, 1st September, 5½ x 2½. The flower of this plant or shrub is in racemes, of a bell shape, from blue to purple, and blooms for two months or more.

J. A. C. DEB.

Why do not our farmers plant the new fodder, Prickley Comfrey? The cost is cheap, and it has yielded the heaviest returns of any fodder plant, requiring less manure and less cultivation than corn. Once planted it will continue for twenty years or more. It is a deeply rooted plant, independent of weather or climate, for in the driest and hottest seasons it will afford several heavy cuttings, when all other vegetation is either burnt up or at a stand-still. It also comes in earlier than any other crop, and lasts longer, continuing to afford fodder until December. This year it yielded at the rate of twenty tons to the acre before the middle of June. The roots may be sub-divided, and planted at all seasons of the year, except in frosty weather. It is most readily propagated by placing root cuttings under two or three inches of good earth, covered by a few inches of manure. In a few days the cuttings will throw out a quantity of fibrous roots and small leaves, when they may be set out the same as potatoes, in hills, and if the ground is moist and warm the plants

will appear in a few days. Keep the plants free from weeds while young. If planted in early spring several cuttings may be obtained the first year, as it should be cut at least every two months. It cannot be propagated in this climate from seed, as not one in a thousand will germinate; but, after the first year, the roots may be sub-divided and planted again. Comfrey culture is simple: the ground is either forked or ploughed six or eight inches deep, and manured same as for potatoes, planted three feet apart each way. When once the plant is established very little expense is needed, as manuring is all that is required, once in two or three years, according to the soil. It can be dried the same as corn leaves, laying in bundles. It ought not to be allowed to flower when needed for fodder; the leaves when dried keep well for forage in winter, and are excellent food for all kinds of stock.

It can be cured as green fodder in any weather, wet or dry, by running it through a hay cutter and filling into barrels or pits a foot of Comfrey, then two inches of chopped straw, keeping it from the air until wanted for use.

The juice of the Comfrey is a thick gum and mucilage, containing very little sugar, and is unlike most of our roots and corn, yet it is much of the same chemical composition as sugar. Acted upon chemically, the gum is changed into sugar, and this change occurs in the mouths and stomachs of animals eating it, making it a most healthy food. It is deuretic, hence it prevents fever, and cattle fed upon it are free from the ravages of lung, foot and mouth diseases, and are strongly fortified against infection. Its curative properties have long been known. Many who have used Comfrey for years say they get better and richer milk from their cows, and a higher price for their butter. The same may be said as regards beef cattle fed upon it. They are in a more healthy condition, being exempt from the usual diseases of their kind; hence its adaptability to present circumstances. Stock raising is now becoming so profitable to the farmer, and the facilities for sending all he can raise to an English market, renders this plant a great acquisition. A gentleman raising this fodder in one of our counties writes: "I find that each cutting is capable of being divided indefinitely, and the plant can be propagated readily. With high cultivation it will yield an immense quantity of fodder, as a neighbour of mine has this spring raised from one plant, obtained from one stock, twenty pounds of fodder, covering an area of two feet. I have a very high opinion of it as a forage plant. My animals eat it with avidity, and are kept up all the time, and I find the manure extra more than pays

the labor of attendance. I am therefore preparing to increase my plantation," etc.

This speaks for itself. In June a farmer planted a root of Comfrey in the same soil as used for tomatoes. In three months it was measured and had grown to the enormous size of three and a-half feet in height, seventeen and a-half feet in circumference, each leaf weighing one ounce. This is with high cultivation.

Again, this spring, without manuring last year, he raised at the rate of twenty tons to the acre, the same as the gentleman above referred to. Why do not some of our farmers try this plant? The *English Field*, the *American Country Gentleman*, the *Genessee Farmer*, and many of the Canadian papers have spoken of this plant and in all cases its enormous yield of fodder has been well testified to, but being a new thing people seem to be chary of testing its qualities, yet it is cheap, and requires very little trouble to cultivate.

WE have received from the office, 37 Park Row, New York, a few numbers of a new publication, issued at \$2.00 a year, under the title of "LAND AND HOME." It gives earnest of good things. Dr. E. Lewis Sturtevant shows how to grow 100 bushels of corn per acre. We should be sorry to see any of our readers in Nova Scotia try to do it, as we can raise more profitable crops; but the article may be read with profit by all notwithstanding. Dr. S. shows that deep ploughing, so universally recommended, is a delusion in America, that it is an outcome of dense population and "intensive" culture. Corn is a shallow feeder, its roots also go deep; they grow most rapidly in a temperature of 96° to 100°; they consist of a mass of fine rootlets near the surface, the "feeders;" and others, coarser ones, running straight down, the "drinkers." Put some superphosphate on a few plants, and note how, after a short time, the feeders have increased. Dr. Sturtevant's experiments result practically thus: "the nearer the surface the richer the soil;" at or near the surface is the "feeding ground" of the plant. By shallow ploughing we put the richer surface soil into the position where the heat of the sun can stimulate the roots the most toward feeding upon the plant nutriment contained therein. The same reasoning tells us that the land requires deep pulverisation so that other roots can pass downward, and thus secure the crop a supply of water during droughts. Another reason,—rains in summer penetrate only a few inches; plant food requires water for its solution; the upper layer receives the water the most times, and thus the manurial substances in it have the best opportunity of being dissolved and made available for absorption