main post, and secured with screw and nut. For the brace, use an iron rod ½ inch in diameter with an eye to hook on the upper hook in post. Pass this brace entirely through the heel post of the frame, bend it down to near the bottom on the other end of the gate, passing through the end of the other post of frame, and secure it by screw and nut with a washer, as at that place much of the weight of the gate rests. At the bottom hinge use a common eye with washer in heel post of frame.

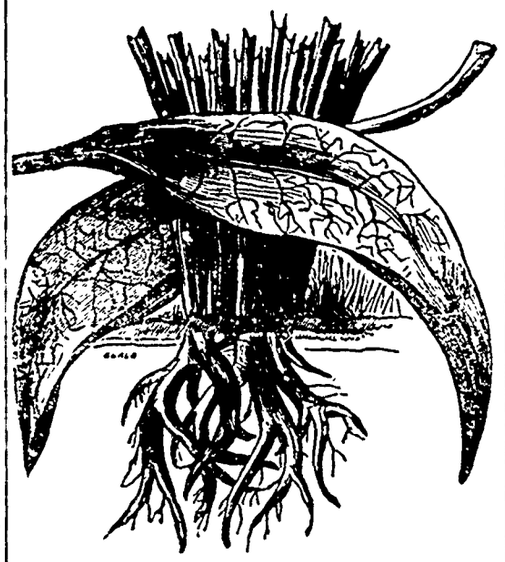
When shut, the end post of the frame at the bottom rests on what I call a "shoe" or piece of thick plank spiked on the foot of the post near the ground, and on which the gate rests when closed. Into the frame post drive a staple on each side; into the post drive two staples, with a hook in each from four to six inches long. The gate thus opens each way, and as it rests on the wooden support at the bottom, where a slight notch is made for the frame post to rest in, there is no sagging or getting out of place by the wind. In any case the gate cannot sag except very slightly, as the iron rod is sufficient to hold all in place. Either one of the hooks at the top keeps the gate in place. A gate of this kind requires less work to keep clear of snow drifts than any other that swings horizontally, as there is no bottom board at the bottom of the pickets.—*Country Gentleman.*

The Prickly Comfrey.

We have given in the CANADA FARMER from time to time all the information we could get about this promising new forage plant, for we believe that there is reason to expect the comfrey to suit our climate, as it is a native of a climate with similar extremes of heat and cold. Additional information is to hand from the English *Live Stock Journal.* It seems that the true sort is a perennial herbaceous plant, native of Caucasus, perfectly hardy; introduced into England in 1799, simply as an addition to the then collection of herbaceous plants. It belongs to the family of Anchusa or Borage plants, in Linnæus's system of botany, class Pentandria, order Monogynia, genera Monopetalous Tetrospermus, and is therefore safe as a food, non-poisonous in all stages of its growth; herbage not unlike stem or haulm of potato, but very much stronger and fuller of leaves, particularly at the base of the stems; leaves greyish green, rough in texture, elongated like the fox-glove—*Digitalis rubra*—but much larger, with several stems, throwing up almost shrub-like; the flowers are produced on the points of the stem, small in size, blue colour, only four seeds in a small capsule. The seeds are rarely known to be fertile raised in this country, unless it becomes impregnated with pollen of *Symphytum officinale*, a native of Britain, the *common* comfrey, a worthless plant, which no domestic animal will touch. Seedling plants are therefore tainted stock, useless to grow as fodder. Both species, *Symphytum asperrimum* and *Symphytum officinale*, are somewhat alike when growing, also the root, but easily discernible when seen together; also in taste and smell. The *Symphytum officinale* has a dirty dead taste, and is decidedly a purgative, with very little mucilage; the true *Symphytum asperrimum* has a brighter taste, and is full of a not unpleasant glutinous mucilage, very useful in the cure of wounds interior and exterior, a diuretic, hence preventive of fever. The simple extract is given to adults and children as a tea or syrup, sweetened with sugar or honey, in cases of severe colds, coughs, and lung complaints, with good results. For horses and cattle the mucilage extract is made by boiling the herbage in summer, and the roots in winter, given both warm or cold, as the case may require, in the form of a drench, made palatable with a little sugar. In cases of constipation or incipient fret, known as colic or gripes, which some horses are subject to after having worked very hard or been a long time without food or water, it has been used with the best results, acting as a solvent on the system, as well as on the bowels and urinary passages.

All domestic animals, from the horse down to the pig, can be made to eat it with avidity; a reluctance may be shown at first, in which case the best method is to take some leaves and stems fresh from the plant, run it through a chaff-cutter, cut short with good clover and meadow hay mixed, one-third of *Symphytum asperrimum*, two-thirds of hay. Give them this with a usual feed of oats or mixed corn, *all mixed.* After three or four consecutive feeds the animals will not fail (the horse particularly) to remind you that its feeds are deficient in quality, should you fail to replenish it with the green herbage. After this he will eat with the same avidity as in eating green clover or tares. Cattle—*all classes*—do well on it, thrive and fatten, if judiciously used. To horses with broken wind and to such as have had a chill in the blood after being much heated by hard driving, which often produces a surfeit or scurf disease on the skin—*hard, very hard* to cure, as well as being irritating to the horse as soon as harnessed, and very unpleasant to the owner in using an otherwise valuable and favourite animal—more good has been known to result by feeding with the herbage and mucilage extract in the feeds of corn than all the nostrums devised in the shape of powders, nitre, &c., given as diuretics and skin cleansers, which are ruinous to the horse's constitution, and after which he often dies suddenly. In common parlance he is then said to have died through his lungs being "as rotten as a pear," he really having been destroyed by repeated doses of black powders in his feeds, with the view to give him a sleek-looking coat, an abominable practice, wherever carried out.

The correspondent whom we are quoting says that the *Symphytum asperrimum* will, without doubt, become one of the best summer forage plants grown, if not *the* best both in quality and quantity. Forty years ago the plant was grown rather largely in a clergyman's large garden in North Hampshire for three or four seasons with the greatest success, but the then state of affairs in this district, owing to the unsettled feeling of the country and the agricultural interests (rick-burning and mobbing being common about then), did not admit of a new forage plant



being introduced as a permanent food. Where the plant did get a trial, in most instances, when the produce came to be cut for use, it was found *the wrong variety had been cultivated*, and the cattle would not eat it. This mishap was brought about by the farmers and other intending growers buying for cheapness anything that was offered, providing it could be called a *Symphytum* or comfrey. The wild *Symphytum*, or common comfrey, both plants and seed, was searched for in all directions, and palmed off as the real thing; this, as a natural sequence, totally destroyed for years all chance of the introduction by proper cultivation of a most valuable plant.

All railway companies ought to have brought into cultivation their available slopes, both from the rails downwards and up the slopes to the boundary fences, where the ground was found to be suitable. In the first all available ground has been removed and pulverised in forming the embankment; therefore, where the nature of the soil is suitable, it has been ready for years to receive plants and grow heavy crops of the true *Symphytum asperrimum* which must be so much needed as horse fodder for the immense number of heavy draught horses the railways now employ, as well as the vast number of horses now in general use. The plant having no turpentine in its constitution runs no risk of being destroyed by the fire of the engines, neither, from its component parts, can it be likely to take up into its system any noxious vapors which, in using, would make it injurious to animals. It would be wrong for our seed merchants to send out *seeds* raised in this country for the true sort, as it *cannot* be raised *true*, and it is to be hoped that no nurserymen will, under any circumstances, buy of promiscuous collectors of *Symphytum* roots, and send them out as true *Symphytum asperrimum* plants.

The clergyman before spoken of gave it to his cow, a fine young animal of large size, which had not long calved. The calf was sent to a farm, the rector requiring all the milk and butter that could be had for his family and household, which was large. The cow, when fed on *Symphytum asperrimum*, gave thirty-six quarts of milk every twenty-four hours (thrice milked), being an *increase* of rather more than twelve quarts on what she had given previously, from which was made a goodly quantity of splendid butter twice a week, while new milk was used freely in the family. No positive statement was ever attempted to be made of the quantity of butter made, but the milk was good, and by no means deficient in rich cream. The clergyman's horses, donkey, pigs, rabbits, &c., all fed on it, and did well—they all had the run of a meadow. The growth—*three* cuttings in the season—was carefully estimated to weigh at the rate of 86 tons per acre. Four cuttings were tried, which increased the weight cut considerably, but not equal to either of the three cuttings, it being too late in the season for making a good growth.

To add to the interest with which the above will be read, and for the information of our new readers, we reproduce an engraving of the Prickly Comfrey from our columns of last year.

Laying Out a Farm.

EDITOR CANADA FARMER:—Can you, through the medium of your valuable paper, inform me of a plan to lay out a farm of one hundred acres, with buildings, orchard, and all modern conveniences. Said farm is square and perfectly level, with concession in front and side-line along side.

Collingwood. A SUBSCRIBER.

"A Subscriber" has not mentioned here what system of cultivation he intends to adopt, whether dairying, stock-feeding, or general farming—an important desideratum, for the last mentioned, or a mixture of grain crops with stock-raising and dairying on a small scale, requires a different plan of subdivision from either of the other two. Assuming, however, that his object is general farming, we cannot do better than quote the following remarks on the subject by Alex. Hyde, in the New York *Times.* He says—"For a farm of eighty to one hundred acres, upon which the usual rotation of clover, corn, oats, and wheat is followed, and stock, chiefly cows, with a small flock of sheep, is kept, to consume the bulky portion of the crop, a pasture of twenty acres will be found sufficient. This should be divided into at least three fields. One would be grazed by cattle, followed by the sheep—for these should never be pastured together—but the latter, being close feeders, may follow the former with advantage, while the former could not find subsistence in a field that had been cropped by the latter. The third field then rests while the others are being fed off. The alternation would be beneficial for both the grass and the stock. The rest of the farm should be divided into fields or plots of proper size by bands of grass, which can be moved, or by simple paths. The most convenient division is into six fields, which would give each year one each of corn, wheat and oats, and three of hay. One of the latter three fields might be appropriated to provisional crops, such as potatoes, roots, corn-fodder, buckwheat, or millet. The orchard, garden, barn-yard, with the building sites, and a few paddocks around the barn-yard for calves and colts, will occupy at least five acres upon a farm of the size here described. All these must necessarily be permanently and safely inclosed, and the whole farm will be surrounded with a substantial fence. However much the abolition of fences may be desirable, it is improbable that it will soon be found practicable. Such fences as are here mentioned may be taken as the least requirement in that way of any well-managed farm under our present circumstances. Outside fences may certainly be done away with if a general understanding is arrived at to that effect.

The low banks which mark the boundaries of farms in parts of Europe might be amply sufficient for our purposes, if the general consent were once obtained, and farmers and drovers would exert themselves to prevent the trespass of their stock upon others' fields; but so radical a change cannot be expected to be made very soon, however much it may be desired. In the meantime, by doing without a large portion of their inside fences, farmers will learn to do without exterior fences in course of time.

The manner in which the fields are laid out is to be considered with reference to convenience of access and cultivation. The homestead should be placed as nearly as possible in the centre of the farm. This will reduce the