

itable for yersel' as the wark o' yer head has been for ither. Ye'll get mony's the bump, nae doot o' that; but gin ye ken hoo tae meet them, ye'll find they'll be helpin' ye along, instead o' knockin' ye doon, as sometimes happens tae the chap wha is weak in the knees. An' whether ye win oot or no', there's naething like havin' high ideals an' daein' yer best tae reach them. I mind weel, when I was a wee laddie gangin' tae schule, hoo we wad be tryin' tae see what a muckle lang jump we could make when we would be crossin' a ditch that was alongside o' the schulehouse. The first time I tried it I kept lukin' at the opposite bank, and the consequence was I landed not mair than three-quarters o' the way across, an' ma breeks were a' plastered wi' mud an' dirt. Ane o' the aulder laddies wha was with me says tae me, "Gin ye try that again, Sandy, keep yer eyes on that stane there an' ye'll mak' it oot, I'm thinkin'." The stane was about twa or three feet frae the bank, an' the next time I tried the jump I took a guid luke at it, an' made up my mind I wad reach it. I didna' quite mak' it oot, but I cleared the ditch wi'oot gettin' intae the mud, and ever since I hae been a firm believer in high ideals. Gin we hae a clear idea in oor minds o' what we want tae acquire, whither it be the half o' the township, or the abeility tae play Annie Laurie on the Jew's harp; an' gin we hae the high ideal o' perfect accomplishment, we are mair than likely tae come within measurable distance o' gainin' oor object, an' we will hae made a comparative success, which is a muckle sight better than a complete failure. I mind weel o' a young chap wha went intae farming on comin' tae this country, an' it was his purpose an' intention tae hae a herd o' about twenty coos that wad gie him a hundred poonds o' milk apiece. He hasna' made it oot, but at the same time he has worked up a bunch o' cattle that canna' be beat in that part o' the country, an' they're puttin' guid money intae his pocket every day before breakfast.

It doesna' dae to say that what was guid eneuch for oor fathers is guid eneuch for us. Gin we get tae thinkin' an' talkin' that way, it winna' be lang till we'll be in a far worse condition than ever oor fathers were. Discontentment is an unco' guid thing up tae the time we've done the best we ken. I dinna' believe it was ever intended that man should be satisfied wi' his lot. There's always something better on ahead, an' we should be gettin' after it wi' baith feet.

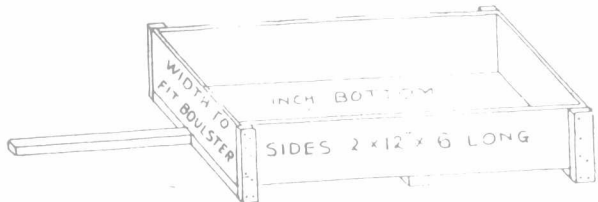
I'm no' tellin' ye a' this, Mr. Editor, because I think ye dinna' ken it already. I'm gey apt tae get goin' juist tae hear mysel' talk. But I thoct I'd juist wish ye weel in yer latest undertakin', an' gie ye a bit warnin' no' to be doon-casted gin the farm doesna' pan oot to an extent that will fulfil yer "high ideals." Remember what I telt ye; we'll no' jump on yer back gin we're sure ye've done the best ye kenna'.

"SANDY FRASER."

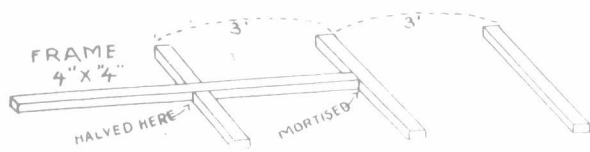
Dumping Device for Wagon.

Editor "The Farmer's Advocate":

Please find enclosed a sketch of box we made last fall to fit our low wagon, which we used for excavating from beneath a part of our house which was standing on posts. Size of box can be made to suit your fancy. The box is used on the hind bolster, with center four-by-four just ahead of the bolster, and the short tongue resting on front bolster. The tail-board rests against small strips nailed to box, so as to be easily removed. By having wagon coupled quite short, one can sit on front of box, and rest the feet on front part of wagon. Have a board on the front wagon to



Strong board nailed on corners to hold box to frame.



Spaced thus to keep from tipping back.

stand on when dumping, which is done by means of the short tongue. If you wish to have a box for lining earth with shovel after unloading, start with horses off as you raise the tongue, and you will enable you to spread it as thin as you wish. In our case, we used the earth to fill the area between the barn, and the device was better than a regular dump-cart. We also found it very handy for dumping the stone into the cellar, as well as for the sand which was at the barn. We expect to use it next for gathering stones off the meadows, and also for numerous other jobs before the snow

mer is over. You can't put it wrong. It is the most useful thing about the place for the price. There is not a bolt in it—just nails. It ranks next to the split-log drag.

To make, build the frame first, and nail the bottom boards on it securely. Take the plank sides and space them to fit your wagon, and nail the front across the ends of the sides; inch is heavy enough for ends. Tack the tail-board in to hold sides in place, then turn the bottom over on the sides and nail well; turn back and nail the corner board outside, connecting sides to frame or scantling.

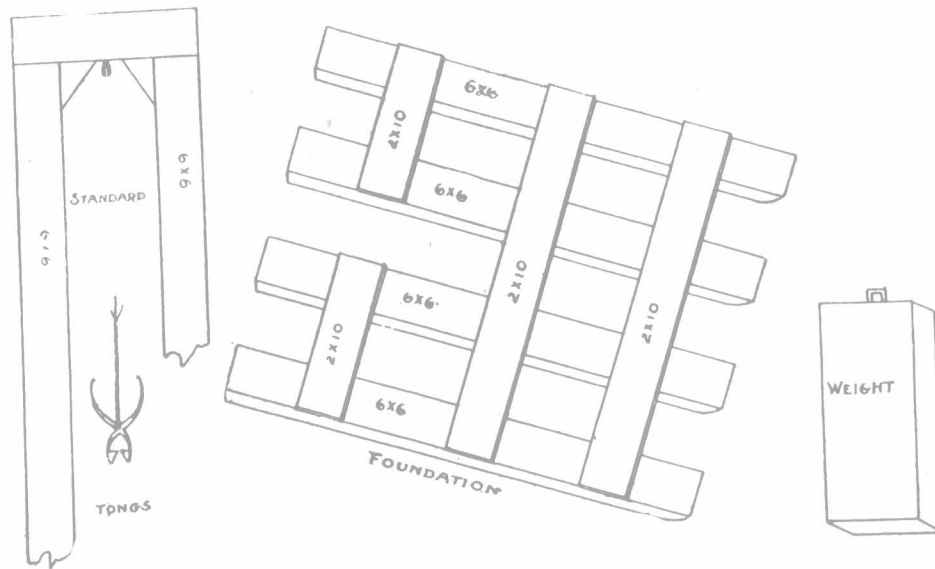
T. McDOWELL.
York Co., Ont.

Post Driver.

A friend of mine was telling me you had a description of a post-driver, one that goes on a wagon and drives from the side. This appeared some years ago. Would like the measurements given again, if you please.

H. K.
The description of post-driver asked for appeared in issue of Sept. 3rd, 1908, and, with sketches, was sent in by W. M. Turnbull, Perth Co., Ont. It is as follows:

The bottom is made of four pieces, 6 x 6, and 12 feet long, with cross-pieces of plank 8 or 10 inches wide and 12 feet long, bolted on. It can be a little narrower, if necessary, to pass through gates. The uprights are 6 x 6, and 20 feet long; they are fastened to bottom behind the middle cross-piece, to the two center skids, and braced on all sides a little better than half way up. In



Post-driver, Illustrated by Diagrams.

the machine I saw, a heavy wooden block was used. It was probably 4 feet long, 16 inches square, with four iron pins driven on the sides to keep it between the uprights, and a square-topped staple driven in the top for the tongs to grip. Two level pieces nailed in the top of standard will set the weight free by closing the handles of the tongs. Any blacksmith can make the tongs. Attach rope to tongs by eye in the center, and run over pulley in top standard, and down to pulley at heel of standard. If desired, an iron weight, with grooves in sides, could be had at the foundry, any weight required. If iron weight is used, spike a piece two inches wide on inside of standard to fit the groove in hammer. There is a gap in the rear plank between the middle skids, so as to leave room for post when moving ahead. Make frame of some good hard wood.

Outside Whitewash for Buildings.

Slake in boiling water $\frac{1}{2}$ bushel of lime. Strain so as to remove all sediment. Add 2 pounds of sulphate of zinc, 1 pound common salt, and $\frac{1}{2}$ pound whiting, thoroughly dissolved. Mix to proper consistency with skim milk, and apply hot. If white is not desired, add enough coloring matter to produce the desired shade. This makes a cheap, attractive wash.

WHITWASH FOR ALL INDOOR PURPOSES.

To $\frac{1}{2}$ bushel of unslaked lime, add sufficient boiling water to slake it, and cover it to keep in the steam. Mix together one peck of salt, previously dissolved in warm water, 2 pounds of glue dissolved in three quarts of water, 6 ounces of bicarbonate of potash, and $\frac{1}{2}$ pound of whiting. Add these to the lime, stir well, strain and apply hot, either with a brush or a spray pump. Add water to thin the mixture so as not to clog the nozzle. A bushel of lime makes 30 gallons of whitewash. Light coats frequently applied are better than heavy ones. While still wet, a light coat may seem to have failed in its object, but as it dries it becomes beautifully white.

DISINFECTANTS FOR STALLS, WALLS, GUTTERS, ETC.

8 lbs. 1-4 pounds powdered bluestone (sulphate of copper), 4 pounds of fresh lime, 40 gallons of water. Use as a spray.

No. 2.—Whitewash walls, ceilings, etc., with ordinary lime wash to which had been added a quarter of a pound of chloride of lime to the gallon.—[From "Farm Dairying," by Laura Rose.]

Growing Corn.

C. P. Hartley, by whom a long and careful investigation was made for the United States Department of Agriculture, reaches the conclusion that it is possible, within a few years, to double the average production of corn per acre in the Republic, without any increase in work or expense. Now, it may not be desirable that the present corn crop should be doubled, nor is it altogether probable, but it is desirable, at least, to produce the same yield on a smaller number of acres, and with less labor. If 60 bushels are raised on one acre, instead of on two acres, what a saving in capital invested, and in plowing, harrowing, planting, cultivation, and harvesting! The average production in the United States has been 26 bushels per acre, 70 pounds of ears, or 56 pounds of shelled corn, being generally recognized as a bushel of corn. Twice that would be a fair crop, three times 26 a good crop, and four times 26 have been frequently produced. A Pennsylvania grower, whose methods are described by Mr. Hartley, reports his yields as not less than 100 bushels per acre for twelve years past, with the exception of two seasons, and last season the average from 90 acres was 130 bushels per acre.

Corn is sensitive to weather, and unfavorable weather is usually blamed for poor crops, but there are many conditions directly under control of the grower that make it possible to double the yield. Many have done it others can if they will. There are three lines of progress: (1) improvement in the seed, (2) improvement in the condition of the soil, and (3) improvement in methods of cultivation.

Corn-planting will soon be in progress in the steadily-widening corn area of Canada, so it is worth while to select from the data Mr. Hartley has compiled what might seem applicable to Canadian conditions. Beyond planting the best

available seed of a sort that does well in one's neighborhood, little can now be done in the matter of seed improvement, which is the work of years. And the operations of previous seasons have much to do with the quality of the soil into which the seed will be deposited. The weeds of last year, and their heritage of seeds, and the tillage of 1910 have a great deal to do with what manner of corn crop we can grow in 1911. Canadian farmers, as a rule, do not plant in soil too poor to grow corn profitably. They know that soil, as well as farmer, will remain poor. The past makes the present easy or difficult, and the results great or small. Generous applications of manure will yet enrich the soil of the cornfield, giving prompt response in luxuriance of growth. And the mechanical state of the soil can be bettered by more thoroughgoing modes of tillage. Our main reliance now, however, must be improved methods of planting and cultivation.

A good clover sod, thoroughly worked, is one of the very best places in which to plant corn. More corn crops are cut short for want of moisture than from any other one cause. For a good crop, it would be sufficient to cover the field to a depth of 10 to 15 inches of water, according to scientific research. About three-fifths of this is absorbed by the roots, and exhaled by the foliage. In this process the soluble plant food passes into the composition of the plant, whereas, if by careless methods of tillage, we allow that moisture to evaporate, the crop will inevitably suffer. As the surface moisture is allowed to evaporate, it is replaced by moisture drawn from below, as oil is drawn up through the wick of a lamp to replace what is consumed by the flame. The rapidity of evaporation depends upon the condition of the capillary tubes or pores that connect the surface with the deeper soil. Any dry blanket that can be placed between the atmosphere and the damp soil will check evaporation, and the most practical protection is a couple of inches of finely-pulverized dry soil. By loosening the surface layer, the soil particles are disarranged, and the capillary tube broken. Rains cause the soil to run together and reset them. Hence the need of thorough tillage of the seed-bed to begin with, and repeated cultivation all through the season.

In case of land manured during winter, it has been found a helpful practice to give the field a stroke of the harrow to smooth down any ruts