

Potato Diggers.

The potato crop is an unusually heavy one this year, and any implement that will reduce the cost of harvesting it is much needed. We give below an illustration of Allen's Potato Digger, or plough—one that is highly spoken of in the States, where it has been in use for some time. It is of light draught, the weight of the implement being only one hundred pounds, and with a pair of small horses, or one heavy horse, and a boy to ride or drive, while a man guides the handles, it is said that it will throw out the potatoe as fast as twenty men can pick them up, and turn them out so cleanly that not over one bushel in fifty will be lost or left in the ground. The vines when dead do not clog



the implement, but if they are green and the land is very weedy, it would be well to pull them first. It is made and sold by R. H. Allen and Co., of New York, U. S., and can be had for \$15 American Currency, as shown in the cut, made of wood and wrought iron. A cheaper one, costing \$10, is made of cast iron.

Constructing Farm Yards.—Saving Manure.

The time has now arrived when almost all farmers have their farm yards clear of manure, and no better opportunity can be found than the present to turn their attention to the remodelling the yard, and so constructing the surface as to effect the saving of all the most valuable portions of the manure that are usually lost by drainage.

Your farm yard must first be graded, and to do this effectually all manure must be entirely removed, and the yard carefully and thoroughly shovelled over, all surface mould must be turned up into heaps, and at once carried out on the grass lands. Then make a measurement and survey of the yard by driving short stakes every twelve feet all round the outside of that part to be appropriated for the purpose, taking care so to plan the yard that any buildings you erect in future may be now laid out, so far as a ground plan is concerned, the object being to make the yard into the form of a square or oblong, with depression in the centre. When all round the edge is staked out as described, at every twelve feet, you may com-

mence to level. To do this, however, requires a level, and one must be had. A simple and efficient one may very quickly be made by taking a board about six inches wide, perfectly straight, and twelve feet six inches long. Then take a similar one, three feet long, and screw it firmly with four wood screws on to the face of the long piece, and at right angles from it, attaching a brace on each side, with screws well entered, and jointing through the lower end of the brace, whilst the upper part is firmly screwed down. Then draw a line down through the centre of the upright piece, and cut three saw cuts about an inch deep into the upper end. Now hang on a weight by a piece of twine attached to the top of the upright piece, and

rest the end of the long piece of board on two pegs exactly twelve feet four inches apart, driven into the ground and allowed to project somewhat. You will now proceed to test your level by putting it on the pegs so as to allow the centre weight or "bob," technically so called, to hang down. Rack the upright piece, and tap in one or other of the pegs, until by reversing the level, that is turning it end for end, you find it is absolutely level and true. When the string with the "bob" attached to it hangs perfectly down the line, whether the level is one way or reversed end for end, then you have an absolutely true level, and must now screw the screws of the braces firmly into the main portions of the level, and there will be no danger of its getting out of "truth;" but should it do so, you can easily test it in the same way; though hereafter you must alter it by taking a little off at either end, as required to adjust it. You are now ready to level all round the yard, at the upper edge, or outside, moving your level from peg to peg, as you go on, until you get back to the one you started from. If then, after going all round, you find much variation, just go back again, and be more accurate, tapping in the pegs as you proceed. When this is corrected, measure to the centre, as nearly as convenient, from the pegs all round, and the middle will be the place for your reservoir or tank. Now say you are laying out a farm yard 150 feet by 100 feet, or any size and shape that may suit your premises or locality; you now commence at any one of the pegs on the longer side, and place one end of your level on it, pointing at right angles towards the centre

line, and drive another peg into the earth at twelve feet distance, just so deep that a block of five inch scantling resting on the second peg will cause the level to appear to be correct. Again, place one end of the level on this second peg, and directing the other end along the same line, towards the centre, drive a third peg into the ground, just deep enough to make the level true when placed upon it with the intervention of the five inch block, in the same manner as before. Repeat this process as often as necessary till the centre line is reached. This will give you just five inches fall every twelve feet, or in the fifty feet about twenty inches fall to the centre. Do this at each peg, all over the yard sides and ends, driving in each peg firmly into the earth. Your yard will, when finished, be correctly surveyed and levelled, forming a square or oblong basin, as the case may be, with twenty inches depression in the centre. Your pegs being all driven in firm, now commence with plough and scraper, to move just one-half the earth so surveyed, and haul it away to the upper side all around, until the pegs show you have depressed ten inches in the middle, and raised ten inches on the outside. Then, when all is carefully and correctly levelled, according to the pegs, your work will be near done so far.

You may now remove all the pegs, and the first wet time that nothing else can be done, get all the animals you can into the yard and drive them round and round until the surface is entirely and thoroughly puddled, being all trodden into mud, about ten inches deep. Your yard will now be watertight, or nearly so, if the soil is clayey. In a few days it will be dry and solid, and may now be harrowed smooth, and the cattle feet marks all levelled in.

Now run a box drain along the line in the centre of the yard, and leave a space of about twelve feet in the centre, into which you must now proceed to sink your tank. A full description of this, and the way to construct it, with manure pump and power applied to empty the tank occasionally, will be given in another communication.

Saving Manure.

No. II.

Having in the previous article described the first steps in laying out and preparing a farm yard, with a view to saving as much of the manure as possible, we now come to the most important part of the construction and utility of our undertaking, namely, means by which the labour in constructing such a dish-shaped farm yard as that described shall be made remunerative, and not in its practical application cost more than it is worth. It will be remembered, that all through the centre of the graded yard there is a line, (longer or shorter according to whether the shape is more or less oblong),