

### A Gate Fastener.

FIG. 1. represents the gate shut. FIG. 2. is the fastener ready to attach to the gate. The dotted lines show the position of the lever when shoved back ready for opening. FIG. 3, is the wire which

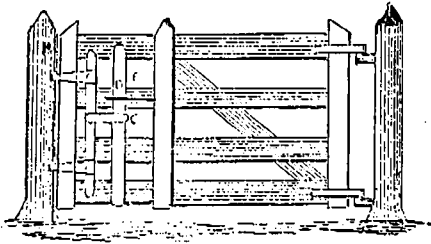


FIG. 1.

holds the top of the lever to the gate. *E*, figs. 1 and 2, is the wire in position. *A, A*, are the pieces or bolts that go into the mortises in the posts; they are fastened to the upright *B*, and this is attached to the lever *D*, by the connecting piece *C*. It should be fastened by a bolt at each end, loose

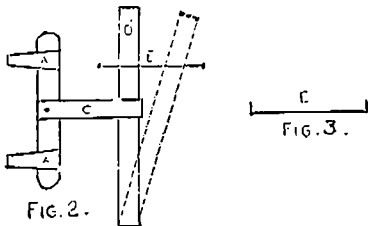


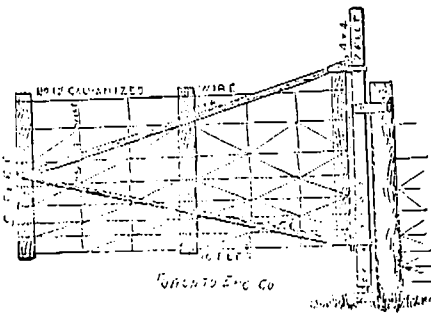
FIG. 2.

FIG. 3.

enough to turn easily as the lever is moved. The pieces *A, A*, work in mortises through the end of the gate (not represented properly by the engraver). This, with the bolt through the lower end of lever, and the wire, *E*, holds the device firmly in position.—*Ohio Farmer*.

### A Wire Gate.

A CORRESPONDENT of the Breeder's Gazette sends this design, which he says explains itself, of a gate he has in successful operation. "The special fea-



Patented Dec. 20

ture is the hinge, which any one can make of light strap iron. The gate is so hung that it can easily be lifted and fastened up to be swung over snow-drifts or to allow hogs to walk under."

THE *N. Y. Herald* received the following question:

I am a country boy. I came from a farm in New Hampshire to New York, with the hope of making a name and a fortune. Either the fame or the fortune would satisfy me, but I prefer both if they are within reach. Will you kindly tell me how I can carve out for myself a successful career?

In the course of its instructive reply the *Herald* asks: Is a surplus of cash the prime factor in the problem of happiness, and is a citizen's usefulness to be measured by his bank account solely? You may also get the fame you wish. It depends on your education, on the quantity and quality of your brains and on your native genius. With these, everything is possible; without them, you will everlastingly hunger for the unattainable, and in the end draw the coverlid of a wasted life over your head and die a disappointed man. Don't make any

mistakes in this matter. If you wish to get out of life all there is in it—for you—there is a way to do it. Real happiness consists of health, self-respect, the good will of the community and a sufficient income to gratify your reasonable wants. Everything else is trivial and not worth bothering about. The man who has steady work, fair wages, a cosy home, enough to eat, a thick overcoat, and the consciousness of personal integrity, is a mightily favored fellow, in possession of more than three-quarters of the best things which this world affords. If you are mechanic, or artisan, or farmer, be proud of yourself, and the rest of the world will soon come to be proud of you. Nothing is needed so much in this generation as a man with skilled fingers. You may have a long pull, but the clock will strike an unexpected hour and the opportunity—which comes to everybody in turn, but which most people miss—will present itself. Study the bull-dog, and when you get your teeth into a big thing, let them stay there. Save money. The coward runs in debt, the brave man has a \$5 surplus in his pocket. The world may laugh at you because you can't have a four-in-hand necktie. All right, let it laugh. You are your own world, and the people who sneer are simply outside barbarians. When they see that \$5 bill growing bigger they will all want to shake hands with you and send you to Congress. Keep well within your income and you will save yourself from skulking round the corner like a kicked dog when the dun is on your track. The handiest thing on the planet is the penny laid up for a rainy day. Now, young sir, get rid of the nonsense that you are a genius, settle down to the conclusion that you are just an average North American boy, and then start in. Keep yourself alert, look after your digestive apparatus, don't smoke cigarettes, get to bed early, be square-toed in all your dealings, and we will wager a cookie that at 60 you will have to look backward for those who began the race when you did. Are you ready? Then, Go!

STRAWY stable or barnyard manure should not be put on light soils for corn. The manure will increase droughty conditions to such an extent that it will do more harm than good unless the season is unusually wet.

THE common and indispensable disinfectant, fertilizer, and sweetener of pen, stable and henhouse, is lime. After cleaning any of these places, sprinkle a little lime over the floors. The application of lime as whitewash is indispensable. An addition of sulphate of iron and carbolic acid to lime as a disinfectant either as a whitewash, or for sprinkling over cleansed henneries, stalls, or stables, cellars of house or barn, is made advantageously.

It is best to prevent as far as possible the removal of washings from the barnyard. During the heavy rains in spring when the ground is thawing, there will be, most likely, an overflow. The problem is to direct this from its course to the neighboring stream and run it upon a field near by. A very little labor will probably suffice for this, as a few shallow channels can be hollowed out with the shovel or one-horse plow, and these will collect the surplus liquid and conduct it to a point where the slope of the ground will allow it to be discharged under the fence into the field or truck patch.

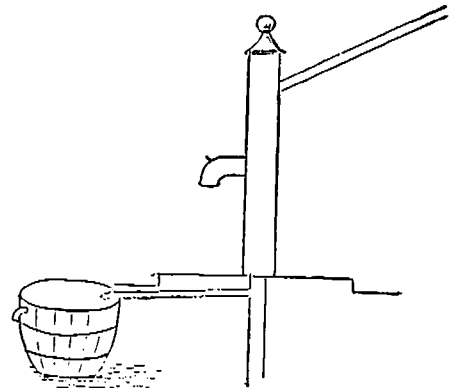
THE plum needs a moist rich soil, and is benefited by liberal manuring with strong manures like poultry and hog manure. Poultry and pigs allowed to run in plum orchards are beneficial to the trees and keep the insects in check. The plum orchard should always be planted near the poultry house so as to be included in the poultry yard. To bring the trees to early bearing, the growth of wood for the year should be cut back about the last of September so as to promote the development of the fruit buds. If the tree makes slow growth, it is advisable to cut back shoots a little in spring and thin out superfluous shoots. Plum trees generally come into bearing early and are not very long-lived, therefore the grower should expect to set new trees in season to have them ready to take the place of the old trees.

ON light soils never wet trees while transplanting, except possibly when there is such a mass of small roots, that it is necessary to bring the soil into intimate contact with them. When planting in heavy or lumpy soil, bring finely pulverized earth from a distance, if needful, to put the earth into intimate contact with the roots. Water after transplanting, in case of continued drought; but in such case, make a slight trench to receive the water, and return the earth after the latter has been absorbed. Prepare the entire ground to the full depth of planting. Then dig holes broad enough to receive the roots of the trees in their natural or proper position. Never dig a hole in a retentive subsoil to hold stagnant water beneath the tree after planting. Plant trees, in average soils, about as deep as they naturally grow; and on heavy soils, not quite so deep, but bring them to the original depth by raising the earth about them. On quite light soils, they may be planted from two to three inches deeper than they originally grew. The soil should be well tramped about the roots, when the hole is half filled, and again when well filled, except when soaked down with water, in which case the surface should be covered with dry earth, and left to settle naturally.

### Live Stock.

#### A Cattle Pump.

A PLAN by which the water-trough for cattle or poultry can be kept supplied without having them come to the well (which should never be permitted), is to tap the pump cylinder just below the pump and insert a small pipe, which runs to the tank.



Whenever any one draws water for house or barn, a liberal percentage of it is forced through the little pipe. Another advantage is, that as soon as the pumping ceases, the water in the pump runs off and does not go back into the well or freeze in the pumps. In summer, the immediate draining of the pump does not allow it to soak, sour or decay, and its life is thus lengthened. The connection between pipe and cylinder must be tight, and a little higher than the top of the tub. At the tub an overflow pipe must be fixed to carry off surplus water under ground, if a muddy place about it is not desired. A combination force and lifting pump would force water to the tub up almost any grade.—*Country Gentleman*.

A NICE root brush and a little kerosene oil, says an exchange, will take the dirt and rolls out of the horse's mane and tail, promote growth of hair and add to the appearance of the animal.

SHEEP must have plenty of room and fresh air; if crowded on a field, the ground soon becomes foul with droppings, and this tends to cause disease. There is no tendency in sheep to develop disease, naturally. It is the fault of the shepherd when a flock becomes diseased, and crowding is the worst of all faults.