

Hant reflections. The hen is similar in color and special points to the cock; her body is massive, and her legs strong to match her stout body. Her plumage is perfectly black, the crest is large, and the beard full and profuse, and the comb, which is horned, is much hidden in the crest. As these birds become aged a few stray white feathers will appear in the crest, which, however, should be an objection in young birds. When but one breed is kept, the Houdan would be preferable to the Crevecoeur, on account of its more lively color, but were cross-bred birds are not objected to, a few of the latter with their remarkably beautiful color, when in a bright light, their large size and handsome carriage; their desirable table qualities, and the habit of the hen to lay when all others are broody, would make a very desirable addition to a flock of light Brahmas, or white Cochins. Black fowls do not seem to become popular very readily, just as black breeds of cattle have few admirers, in spite of their many claims on the grazier and the butcher, but if any black fowl is to be chosen, we would certainly give the preference to the Crevecoeur.

Hints and Helps for Farmers.

FASTENING FOR SWINGING DOORS.—L. M. St. John, Canajoharie, N. Y., sends the sketch of a fastening for a swinging barn-door, shown at fig. 1.

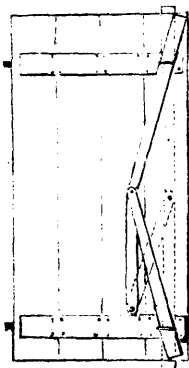


Fig. 1.—FASTENING.

1. The center-bar is made of a piece of hard wood, 1½ inch thick, and 3 inches wide at the ends, tapering gradually from the ends to the central part of the door. They are made to slip loosely through iron staples on each batten of the door, and are joined together by halving the ends, and putting a bolt through them, and also through the narrow end of the guide which lies beneath them. The latter is fastened to the door, as shown in the engraving, by a rivet or screw which permits it to play back and forth. When the central points of the bars and the guide are pushed to the right or left, the ends of the bars are made to project beyond the door, and engage with the straps or mortises made to receive them. The bars are then firmly held in place by the guide, as shown by the dotted lines. The advantages of this fastening are that it is always in place;



Fig. 2.—PIG-TROUGH.

is easily opened and shut, and when frozen fast at the bottom, the power of the toggle-joint easily loosens and draws the end. The door is also fastened at the strongest place, and cannot spring open; the bar will hold without slipping, although the mortises should become worn, and although it should be but slightly caught, because the guide holds it rigidly. The ends, too, are entirely out of the way when the door is opened, and if it should blow to, they will not drop of themselves.

AN IRON PIG-TROUGH.—In looking over a cata-



Fig. 3.—WAGON-JACK—DOWN.

logue of the New York Plow Company, we find an iron pig-trough mentioned. Having some time ago



Fig. 4.—WAGON-JACK—RAISED.

used similar iron troughs, we found them very durable, and very cleanly, and far preferable to wooden ones of any kind. The trough referred to is shown at figure 2, and can be procured at a cheap enough rate to make them generally used.

AN IMPROVED WAGON-JACK.—A reader of the *American Agriculturist* sends a drawing of a wagon-jack, which speaks for itself. It is shown at figure 3, as down, and at fig. 4 as raised. As seen by its structure, the weight is thrown over the center of the pin, or pivot, so that the jack can not come back, and no fastening for the handle is necessary.

A Case for Carrying or Keeping Eggs.

Eggs are the most fragile of things, and to be carried or even stored safely, they need to be packed in the most careful manner. Many devices have been used for this purpose, but although some of them have been found available for business purposes, none of them have been adapted to domes-

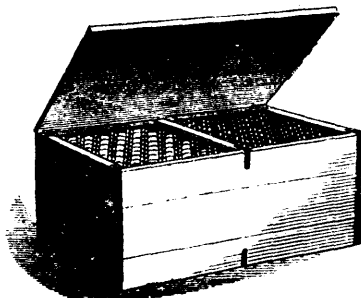


Fig. 1.—EGG CARRIER COMPLETE.

tic uses for the storage of eggs. A "Safety Egg-carrier," devised and patented by A. R. Sprout, of Lycoming Co., Pa., here illustrated, seems to meet both of these requirements in the most effective

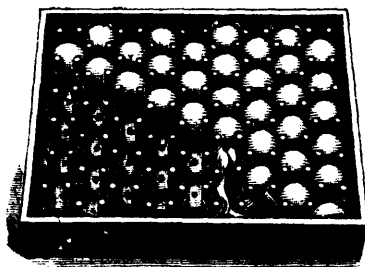


Fig. 2.—SINGLE TRAY OF EGG CARRIER.

manner. Figure 1 shows the box, with the trays, of which it contains eight, and holds altogether 36 dozen eggs. The eggs are held in place by means of pins inserted in the bottom of each tray, and forming a circular supporting wall around each egg, as shown at figure 2. Some soft material is wound around each pin, forming an elastic padding by which the eggs are held firmly and securely. The trays, when filled, are placed in the package, one above the other, the bottom of one forming the cover of the one below it; the lid of the box holds all tightly in place. Small holes are bored through the bottom of each tray, the small end of each egg rests, and is thus held in the position, which is the best for long and safe keeping. Each tray of eggs may be inspected at any time, by holding it to the light to determine their soundness. For household use, each tray forms an independent receptacle for eggs; the package or box being provided only for the purpose of the shipper or dealer.

Stove for a Poultry-House.

A simple and safe method of warming a poultry-house in winter, is as follows. With a few bricks and common mortar, build up a wall in the shape of an oblong rectangle, twice as long as it is wide, leaving an open space in the front about a foot

wide and the same in height. Lay upon this wall, when 18 inches high, so as to cover the space within the wall except about 6 inches at the further end, a piece of sheet-iron. Build up the wall over the iron another foot, and then build in another sheet of iron, covering the space enclosed all but a few inches at the front. Then turn an arch over the top, and leave a hole at the end for a stove-pipe.

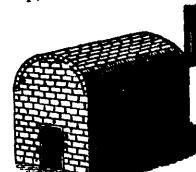


Fig. 1.—STOVE.

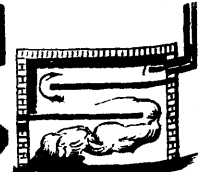
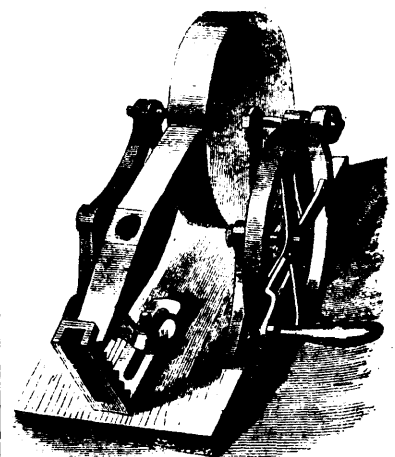


Fig. 2.—SECTION.

The stove thus made will appear as at figure 1, and a section of it as at figure 2. A small fire made in the bottom at the front, will then heat this stove very moderately, the heat passing back and forth, as shown by the arrows, will warm the whole just sufficient to make the fowls comfortable, and there will be no danger of injury to their feet by flying up upon the top, as it will never be hot if a moderate fire only is kept. The stove will be perfectly safe, and may be closed by a few loose bricks laid up in front, through which sufficient air will pass to keep the fire burning slowly. Ordinarily a fire need only be made at night during the coldest weather.

Grinding Tools.

The useful effect of many tools depends greatly upon the exact grinding of their edges to a proper



DEVICE FOR GRINDING MILL-PICKS.

level. A cold chisel, for instance, requires an edge of a certain bevel to cut hard metal, and one of a different angle for softer metal; the harder the work to be cut, the greater should be the angle formed by the edge, and the softer the material, the more acute the edge. The same rule is to be observed in wood-cutting tools. But there are no tools which require more exact and careful grinding than mill-picks, and the first business of a miller is to know how to grind his picks. Upon this depends the dress of the stones, and the quality of work turned out by them. The illustration represents a small grindstone for sharpening picks, which is run by means of friction wheels covered with leather, and provided with a gauge for setting the pick at a variable angle to the stone. This gauge has been recently patented, but is so serviceable as to be worth a moderate fee for its use. It consists of a series of steps raised upon a slotted plank, which is screwed upon the frame of the grindstone. By means of the slot and a set screw, seen below the pick, the gauge can be set for tools of different lengths, and each step causes the tool set in it to be ground at a different angle.