

Farm and Home.

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PUBLISHED

SEMI-MONTHLY

(1st and 15th of each month)

BY THE PHELPS PUBLISHING CO.

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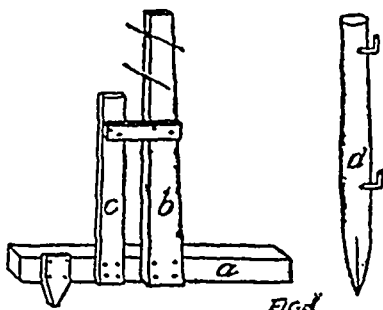
FARM AND HOME,

Springfield, Mass., or Chicago, Ill.

All Around the Farm.

HANDY AND PORTABLE FENCES.

There are several kinds of movable fences, the general utility of which will commend them to the attention of farmers. Fig 1 shows two supporting de-

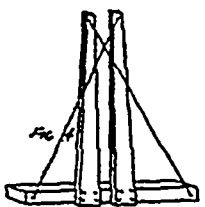
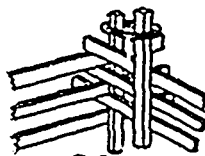


A HOMEMADE FENCE.

vices, either one of which may be used to hold the panel shown in Fig 2. To make the device in Fig 1, take a piece of 2x4 or 3x4 scantling, 4 ft long, and nail on one side a piece, b, of 1 1/2 in material 4 ft long, 5 in wide at the lower end and 2 1/2 at top; the piece, c, is 2x1 in, 3 ft long. These uprights are connected by a crosspiece at proper height and are just far enough apart to admit the ends of two panels, which rest on the base and the crosspiece. The panels may be made of 16-ft fencing boards, and the movable fence will be suitable for confining hogs, and with a couple strands of wire stretched above panels, will be high enough for cattle.

The device, d, in Fig 1 is still easier to make. Taking posts 4 to 5 ft in length, sharpen one end and bore two 1/2 in holes in the side of each post, about 3 in deep, and at suitable distance apart. Take an iron rod, 1/2 inch in diameter, heat and bend one end into a 2-in right angle, cut off this hooked end, leaving 5 in of a straight shank, and make twice as many of the hooks as there are to be posts in the fence. Drive one in each hole in posts, leaving a space of 2 in between post and angle of hook. These posts should be made and finished complete whenever the farm work permits and if the panels are ready. It is short work to drive the posts into the ground and hang the panels on the hooks, making a very convenient fence. Of course, the posts can be of any dimensions, and the panels can be made different from those used with the device a if it suits better the farmer's purpose when constructing the fence.

Another fence which is very handy and can be moved from place to place is made by taking three 2x4 scantlings, each about 4 1/2 ft long, and three 16-ft boards for the panels, and setting up



when finished in zig-zag fashion, as shown in Fig 3, using an iron ring on end pieces to hold panels in position. If desired but two boards may be used to make each panel, and a couple of strands of wire used to take place of middle board. Panels for this kind of movable fence can be made from light poles, 12 or 14 ft long, using four shorter poles in each panel for cross-pieces. Make notches in the poles and crosspieces when nailing together and this makes a light, strong panel. Fig 4 shows the invention of a western farmer, and it may be found useful to the farmer who has plenty of old fencing rails for making a straight and semi-portable fence. The base piece is a 2 1/2 ft scantling of any reasonable breadth and thickness, and the uprights nailed to it are similar to the piece b in the device shown in Fig 1. Leave space

between uprights to allow ends of rails to be inserted; brace with wires as illustrated. Build the fence five rails high, below where wires cross, and put sixth rail on top of wires, pressing it down to tighten them. When stretching wire above panels, to make the fence cattle-proof, never use barbed wire. Animals which smooth wire will not restrain are not adapted to be confined with portable fences, and I consider barbed wire unnecessarily cruel in every case where used, no matter what kind of fence.—[J. G. Allshouse, Armstrong Co, Pa.]

ECONOMY IN MANURING.

Land should be well supplied with humus or vegetable matter. This can be done most cheaply by growing cowpeas or clover and turning them under. Too much of such crops will sour the land. As an offset, a dose of slaked lime, say about 40 bu p a, should be applied about once in 5 yrs. The lime will not only hasten the decomposition of the organic matter, but will also unlock some of the latent plant food in the soil, notably potash. By a thorough system of cultivation, the physical condition of the soil can be greatly improved, enabling the air to have more free access, thus causing oxidation and the soil water to percolate more freely. This will dissolve the plant food and move it about in the soil so as to be readily available to the roots.

There are only three ingredients of plant food which have to be considered in feeding the soil. These are phosphoric acid, potash and nitrogen. The last-named can be furnished by clover or peas, while the other two can be purchased cheaply on the market in the form of acid phosphate or bone for phosphoric acid, and muriate of potash or sulphate of potash for potash. These materials should be applied directly to the land, to be sown to clover or peas, so as to insure a heavier growth and thereby a larger absorption of nitrogen. [Bryan Tyson, N C.]

EXPERIENCE AGAINST THEORY.

I have read much of late on the subject of like producing like, or natural laws as applied to agriculture. I believe in natural laws, I believe in accumulated knowledge, but reject the idea of all knowledge being accumulated upon general principles or limited scientific investigation. Practical experience has gone a long way toward obtaining facts and accumulating knowledge. Theory without practice amounts to but little, and imperfect investigation of natural laws often leaves us in the dark. We have certainly learned but little from scientific investigation in reference to the cause of cheat from wheat, oats, barley, etc. Attempts have been made to do so but have thrown but little light upon the subject.

Men of learning, close observers and students of research, many of whom once ridiculed the idea of wheat, rye, etc., being converted into cheat or chess, have stopped their ridicule and freely confessed there is something in it. We must have a clearer conception of the phenomenon. Have scientific investigators entered into a practical test of this mooted question? Or have their declarations been made upon general principles of like always producing like? Agricultural science has too often ignored the import of accidental occurrences. I strongly maintain that like does not always produce like. If the laws of nature are inflexible what would become of the evolution theory? If the laws of nature were inflexible, how could the higher type of vertebrate life been developed from the lowest, which is claimed by some of our most scientific men? If they are inflexible, what would be the character of our tomato to-day, and our potato, and many other vegetables which have been brought up from so low a type that once they could not be utilized as food? Their characteristics have been entirely changed. And if change to a higher life can and is made, why cannot an arrest and a revision of her laws take place by some accident? I am clearly of the opinion

"That this world is not governed by chance;

By laws every action is bound;
And back of each strange circumstance
A reason may ever be found."

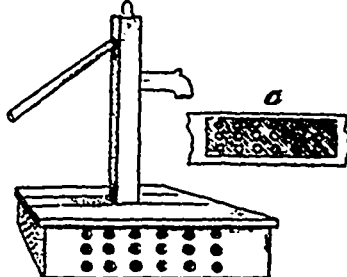
And so back of this phenomenon a reason may be found; a cause for this mysterious appearance of cheat in

wheat, oats, barley, timothy grass, etc. No scientific or practical minded man can believe in the inflexibility of natural laws. Uninterrupted natural laws bring unerring results. But when interrupted, deflection takes place and often reversion, an effort to return to the original type or species. Under my own observation I have seen wheat sown free from all impurities and in a land where cheat had never been seen, and as the wheat was about in the "boot," sheep had broken through and eaten it off in a complete circle before discovered, and to the exact line of their ingress nothing but cheat was matured.

Another case: A field of heavily timbered land was cleared and planted in corn. Next year it was put in wheat and all around the fence next to the woods where rabbits, squirrels, etc., had eaten it off, nothing was matured but cheat. These are facts founded on personal observation and facts which claim cannot be successfully controverted. A little more practical experience and less scientific theory and we will get much closer to facts.—[R. R. Reeves, Buncombe Co, N C.]

VENTILATE THE WELL.

The illustration shows a plank frame covering the well, with small holes bored on all sides for ventilation. The



WELL PLATFORM AND VENTILATOR.

holes of each plank should be covered by a piece of wire mesh or netting, to show at a, to keep out animals and insects. Put the wire netting inside the box.

CULTIVATORS IN A CORNFIELD.

Four acres of land were divided into tracts of one acre each at the New exper sta, and each tract was cultivated by a different cultivator, the same one being used on each throughout the summer. The cultivators used were a corn plow, to represent the deep style of cultivation, and the spring tooth cultivator to represent the shallow cultivators. In the fall the corn was picked from each acre and weighed. The yield was for deep cultivation 59 bu p a, for shallow cultivation 69 bu. The land receiving shallow cultivation was stirred to a depth of 3 in, that receiving deep cultivation 6 in.

Shallow cultivation for corn possesses two advantages over the other method. By stirring the soil to a depth of only 3 in the air does not penetrate so deeply, and it does not dry out to such a depth. A study of the roots of the corn plant show that many of them would naturally grow within 1 or 4 in of the surface, but when the upper layer of soil is dry they cannot obtain any nourishment from this layer.

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