

to believe, has never been touched in any way since it was made, nearly fifty years ago, either by disturbing the sod or applying manure: at all events, I can answer for the last thirty years, since it has been in my possession. The soil is a light sand and the natural grass that grows on it is a stunted red-top, so stunted that it never requires mowing. Last spring, finding the grass very thin, I applied a dressing of hard wood-ashes, and in a very short time I found the whole covered with white clover, which certainly never showed itself previously. Now can you or any of your readers either practical or scientific explain to me where the white-clover seed came from? It certainly did not come from the ashes as they had never been exposed since they came from my furnace. Neither will the old theory of the seeds lying dormant apply to this case, for if the seeds were sufficiently near the surface to vegetate, it is certain that they must have germinated long ago, as the sun, and moisture are sufficient to cause seeds to germinate, even should they not be able to grow afterwards for lack of some of the necessary constituents of the plant in the soil. Had the clover only shew itself in spots, I might have presumed that birds had carried the seed there, but it is inconceivable that a whole lawn should have been sown in a month or so by this agency alone. The matter yours, remains a mystery to me.

E. J. H. HEMMING.

Dr Hemming's question resolves itself into this: There was no sign of any clover on his raised bed of light sand, and yet when a dressing of wood-ashes was applied, white-clover, which certainly never showed itself previously, sprang up profusely.

My own solution of the question is this: The seeds of the white-clover were in the soil, but, though when rain came they sprouted, the want of proper food prevented the tiny plants from developing themselves, and they perished in consequence. After the dressing of wood ashes, other plants finding their peculiar sustenance—potash and phosphoric acid—ready for them, seized upon it, and thrived abundantly. I can give no other reason.

ARTHUR R. JENNER FUST.

The new farm machine "The Strawsoniser" claims to be able to deal with insects pests in a manner not before attempted. Certainly, it is worth attention; for whether in the spreading of liquid or of pulverized matters, in big or small quantities, its results are quite phenomenal; while easily drawn by one horse, it will broadcast 30 to 40 acres of barley a day, will spray the same area of turnip land with paraffin or other insecticide, covering every leaf and blade with a fine dew, will work equally well through a hop plantation, throwing clouds of spray twenty feet into the air, and will distribute soot, and especially powdered lime, over a great area and with superhuman precision and evenness. (1)

T. BOWICK.

*Price of grain.*—To read in the market-reports, in the Montreal Star, that "oats are worth 85 to 90 cents a bag of two bushels, and pease \$1.00 a bag, is rather startling. Pease at 50 cents a bushel must be rather cheap food for cows, bullocks, or sheep, and I should be inclined, if I could get them at that price to begin a stock for my horses. Fancy pease at \$16.50 a ton! But of course the reporter made a blunder between bushel and bag. Pease, I regret to say, will be very dear this year; the haulm, even on the high ground, keeps on growing and growing, the flowers are produced, but the

pod do not set. Cotton-seed-cake will be the cheapest food for cows, as a bad year for pease is almost always a bad year for linseed, except on the lightest soils. (1)

*Hoskins on Dodge.*—The following, from the Vermont Watchman, has been mislaid since February—it is too good to be lost. The report of poor Mr. Dodge placed the average potato crop of the United-States at 83 bushels an acre!

"TROUBLE ABOUT OUR POTATO STATISTICS.—Our friend Jenner Fust of the *Montreal Journal of Agriculture* has been for some time suffering distress over the unfortunate condition of American potato-growers, as set forth by that wonderful statistician, Mr. Dodge of the Washington bureau. According to Dodge, as figured out in detail by Jenner Fust, the potato-growers of America must suffer a loss on the average, at thirty cents a bushel, of not less than \$16.50 per acre—"to be recovered from the succeeding crops of the rotation." "What does it mean?" inquires our friend. Brother Fust, did you never hear of the bad boy who puzzled some of his mother's visitors by propounding a problem, as follows: "That boy in the garden is the son of my mother's sister, but he is no relation to me." A good deal of mental strain on the part of the ladies, but no satisfactory result, until the maternal parent entered, and settled the matter at once by remarking that "the boy lied." Just so with Mr. Dodge. Any "statistician," no matter how full his skull may be of figures, who declares that the potato crop is grown at a loss in the United States fails to state facts as they are. The potato is unquestionably one of the two or three most profitable farm crops grown on this continent; and if the figures gathered at Washington do not so show it, those figures are wrong."

#### Continuous Winter Stabling for Cows.

JOHN GOULD, OHIO.

Last winter I practiced the advance idea in dairying, and kept the cows in the stables for 120 days without letting them out, and never before wintered my cows so cheaply and well. Never before did they "come through" looking as fine, and so free from ailment. The barn is very warm, the thermometer never but once going below forty-five degrees above zero, the air pure and fresh, and the stable abundantly supplied with light. A large covered tank in the stable supplied from a deep, rock well afforded the best and finest of water. The idea that a cow giving milk, needs exercise to keep her in health and vigor, I now think a mistake. No one thinks of driving his fattening hogs or steers around for exercise, and the secretion of milk is a similar process to secreting fat.

I do not confine my cows with stanchions, but chain them in pairs, in half box stalls, giving them plenty of freedom so far as movement is consistent with safety. A good bed under them and plenty to eat before them, has made them perfectly contented, so far as I could see. They showed no inclination to want to go out, and I finally made up my mind there was no necessity for it. They could lie down at their ease, and the neck-chain was long enough to enable them to sleep with their heads on their sides if they wished. To me it was far nearer an ideal way of wintering cows, than to turn them out into stormy or zero weather to make them hardy, or contract constitutional vigor. I am now fully satisfied that it does not pay to attempt to warm barnyards with cows, or to use hay and grain to warm ice-water inside of a cow's hide. The cows were fed silage, brass, and a little clover-hay, and gave summer messes of milk all winter. I have this summer made calculations

(1) I mean to apply for an agency to sell this invaluable machine.  
A. R. J. F.

(1) Potatoes, which fetched, here, 50 cts a bag in May, are now \$1.00, and poor ones too.  
A. R. J. F.