

has a splendid effect, and should help to minimize the development of tuberculosis to a great degree in our northern cattle, which have to be housed quite a large part of the year. Perhaps the instance I have given antedates the poultrymen, although I am aware of the latter using the method to a great advantage for the benefit of the health and stamina of their birds.

The instance I gave, of course, referred to hospitals for human tubercular cases. Little artificial heat is provided, and if they, although emaciated and anemic, could endure a lowered temperature, I would think that stock—cattle particularly—would not be subjected to an unduly low temperature when they have such powers of generating heat and keeping up the temperature of their usual quarters. "What is good for the man should be, in this case, good for the beast." Elgin Co., Ont. R. W. SHAW, M.D.

SELLING CROPS ON FOOT.

Editor "The Farmer's Advocate":

I have been a subscriber to your valuable paper for over forty years, and can rank as one of the oldest on your lists. We always look for "The Farmer's Advocate" with the deepest interest, as it certainly has been of great assistance to us. It goes without saying that no Canadian farmer can afford to be without your magazine, and I hope that success and many years of usefulness may still be in store for it.

I have pursued mixed farming, our land being a clay loam, and well adapted to all varieties of crop. We endeavor to sell all our coarse grains on foot, and seldom dispose of any grain but wheat. We always winter a considerable number of steers, buying them in the fall, and having them ready to go off between the 1st and 15th of July. We raise draft horses, which pay exceptionally well, especially at current prices. We found the growing of as much clover as possible indispensable to the rearing of horses and grazing cattle, and as a factor in keeping weeds in the background. By means of live stock, good prices are realized for the farm products, and the soil is enriched, so that good crops of every description may be grown. RICHARD HICKS.

Huron Co., Ont.

THE FARM.

FOUR-HORSE PLOW ATTACHMENT.

Editor "The Farmer's Advocate":

We note that one of your subscribers has asked you to give through your paper information and plan re a 4-horse attachment for riding plow, so that the horses will be abreast, and the off horse in the furrow. There are a great many four-horse attachments made. We



Straightaway Four-horse Hitch.

enclose cut, but, not knowing the make of plow which your subscriber has, it would be impossible for us to recommend any one four-horse attachment to do this work. For, if your subscriber is an Ontario farmer, it is altogether likely his sulky plow would be of a very narrow type, not plowing over eight to ten inches wide, and in this width of furrow there has never been a four-horse evenner manufactured so that the horses would be abreast and the off horse in the furrow. But, where he is plowing a 14 or 16 inch furrow, the style of four-horse evenner we herewith enclose will answer the purpose. VERITY PLOW CO., LTD.

[Note.—We are also indebted to the Paris Plow Company for a sketch of a patented four-horse evenner which they handle, and which they inform us gives good satisfaction in the West.—Editor.]

A THANKSGIVING-DAY SUGGESTION.

Editor "The Farmer's Advocate":

With regard to Thanksgiving, I would suggest that our Governor-General proclaim a Thanksgiving Sunday, and declare the Monday following a public holiday. Eastertide has come to be almost nationally observed, as services appropriate for the occasion are held in churches of nearly all denominations. In a short time, I believe, a Thanksgiving Sunday, followed by a public holiday on the Monday, would become a satisfactory national institution. W. S. L. Middlesex Co., Ont.

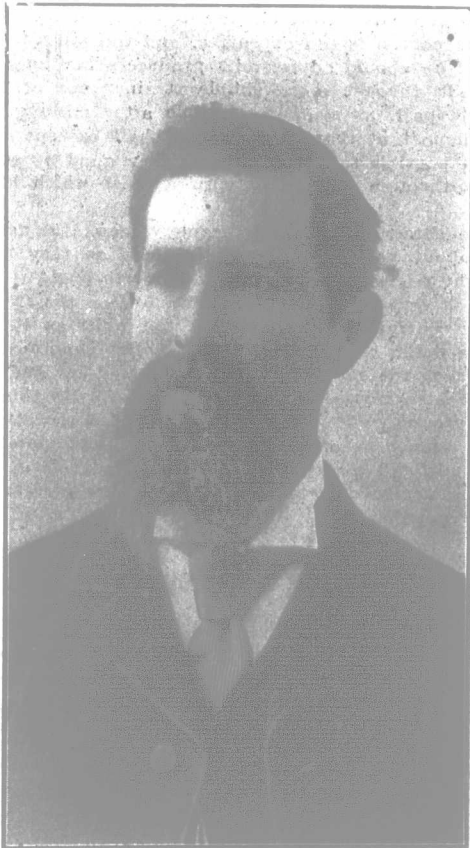
SPECIAL OFFER TO NEW SUBSCRIBERS.

As announced elsewhere in this issue the literary treat of the season for "The Farmer's Advocate and Home Magazine" readers will be the publication of the popular new Canadian serial "Carmichael," by Anison North, beginning with next week's issue. Arrangements are also under way for a highly-attractive Christmas number in December. Reader, call the attention of your friends, who are not now enjoying the weekly visits of the paper, to these unique features, which may be secured, along with all the regular issues, from now till the end of the present year for 40 cents.

SOIL IMPOVERISHMENT.

Editor "The Farmer's Advocate":

In your issue of September 5th I noticed a rather novel method advocated for keeping the soil fertile, by a Mr. Prophet, of Nova Scotia. It certainly has some of the elements of truth, but it is mixed with error as well. Mr. Prophet's premise that nature, if allowed, will restore available fertility to the surface soil through time, is correct; but, as he admits, life is too short to avail ourselves of growing a forest and



Richard Hicks.

A subscriber to "The Farmer's Advocate" for over forty years.

then clearing it away for this purpose. Then he suggests that a portion of each crop be allowed to go back into the soil each year, no matter what that crop is, as a method of keeping the soil fertile through natural means. In the first place, I would like to draw Mr. Prophet's attention to the fact that, while, as he says, plant food comes from the soil and the air, he has been figuring on available fertility, and not on what a kind Providence has locked up, to be drawn upon by succeeding generations. It is so planned that no man can take everything from the soil in one generation, although it is too true that we have plenty of soil robbers who get the cream of the available fertility from the surface soil in a lifetime. The chemist tells us that in most soils there is raw material enough, if cared for, to last

place, Mr. Prophet has forgotten all about the weed problem. What would the weeds be doing these three or four years he would be sowing clover and allowing it to soak in, so to speak. True it is that clover is a good weed-smotherer when sown in a fine seed-bed and in good soil, well prepared. Under the method advocated in the article, I fancy that in the three or four years a very fine weed-bed would be the result, which would cost the farmer an endless amount of labor to clean up, and a life-long fight. It appears to me that it wouldn't be a very practical scheme, that, after cultivating a good root crop, to leave part of it to rot in the soil. See the extra land which would require extra cultivation to produce sufficient crops to feed the farmer's stock. Of course, Mr. Prophet has met this by cutting out the stock feature, and, I suppose, shipping the turnips to Boston. It would be difficult to see how his plan, if at all practical, could be carried out in growing hay and cereal grains. Such a method would be slovenly, costly, impractical, and in the end would not work out in practice what the writer anticipates. In the third place, he argues that stock will not improve the soil conditions, except indirectly, as outside food is consumed. Mr. Prophet no doubt knows that, with the exception of nitrogen, potash and phosphoric acid, nature has been most lavish in its supplies of plant foods. Stable manure adds the three necessary ingredients, provided it is properly handled, by not allowing it to fire-fang, get washed, or decomposed too much, when the most valuable constituent, nitrogen, is lost or partly lost, according to the extent of the injury. In keeping stock, we have the factory for manufacturing the best kind of available fertility. It is only in the young, growing animal that more is taken from the soil than is returned by them. If, therefore, properly managed, this need not be the case, as they can use a lot of rough fodder to advantage, and the refuse worked into stable manure, at small cost, when the feed is loose in box stalls during the winter months. Matured animals, if properly handled, give back in the stable manure and by-products, much of the nitrogen, potash and phosphoric acid. Then, when they are fed the marsh hay, Western bran, and other concentrated foodstuffs, they will pay a profit on the food and make the richest kind of stable manure to keep up the quality of the land. Mr. Prophet will have a great host of witnesses rising up against him when he says that keeping stock will impoverish the soil, as scores—yes, hundreds—of Ontario farmers have been making wealth for years in that way, and their farms are becoming increasingly productive. Has Mr. Prophet never heard about the Western farmer's method of getting rich by feeding more hogs to grow more corn to buy more land, etc.?

I quite agree with the observations in your foot-note, Mr. Editor, that often pastures are overstocked, and thus injured so that they will not produce anything like what they would have produced had they been properly handled. Certainly, crop rotation and the proper application of stable manure are essentials to success. T. G. RAYNOR.

THE DAIRY.

CARE FOR THE COWS.

The prospect is that milk and butter will rule even higher in price the coming winter than in the past year or two, and that is saying a good deal, the market for butter having been at a pretty high mark, at least so think those who have to buy. It pays well at all times to be good to the cows, because they give in proportion to what they get. And it is false economy to attempt to save by stinting the cows in their feeding, for if allowed to fall off in their milking for a time it requires more feed to bring them up to the former standard of work, if indeed it can possibly be done in the same year, than would have been required to keep up a steady flow, for what was lost of condition must be made up before progress can be recorded.

The welcome fall rains have proved a great relief to the minds of many farmers short of feed, and have so stimulated the milk flow as to greatly increase the revenue from that source, but in the usual order of things we may soon look for frosty nights, which will lower the feeding quality of the grass, and for chilling winds, which check the working capacity of the cows. It will be the part of wisdom to prepare for these contingencies, and commence in good time to stable at night the cows that are milking, and supplement the food they get on the pasture with a little hay, or some cornstalks, or ensilage, or a light ration of meal and bran to keep them in good heart and keep up the production of milk. In no branch of farming is it more true than in dairying, that what is worth doing is worth doing well, and the management of the cows as to careful or indifferent feeding may make all the difference between a profit and a loss in their keeping. Under present and prospective conditions of demand and market prices there is no more profitable or promising branch of farming than the milking of good cows. They pay their own way, and provide a little surplus every day if well managed, therefore it pays to be good to the cows.



Tamworth Boar.

Winner of first prize in class, Canadian National Exhibition, Toronto, 1906. Owned and exhibited by R. O. Morrow, Hilton, Ont.

two or three hundred years, at least (and there are soils, still very productive, which have been cropped over 1,000 years), but it must be unlocked from time to time through nature's forces, which may be assisted by good tillage. Good tillage implies no easy snap or short-cut to production, as the writer implies is the modern trend of the advocates of good farming. It is true that crops like clover, plowed down, add very materially to the soil's wealth, but the advantage of plowing down such crops does not by any means consist solely in the addition of plant food. It effects the soil mechanically, by adding humus, by opening the soil and allowing nature's forces to do their work in the soil laboratory. In the second