

**BLACK HEAD IN TURKEYS.**

Editor "The Farmer's Advocate":

I have a number of full-grown turkeys. Nearly every day one or two of them are found dead. They begin by drooping and sitting down, the wattles turning black. Upon opening one, the liver was found in a diseased state, and covered with yellow spots. Can you tell me what the trouble is, and a treatment for the same? I may say that the turkeys have the run of the farm.

Ans.—I would say the trouble with the turkeys is the common trouble, or epidemic, known as black head, for which there is no cure that I know of. The disease is spread from the birds running over ground upon which diseased turkeys have previously pastured or fed. The best precaution is to lime the ground thoroughly over which the turkeys run, and to feed no food whatever from the ground. Either feed the grain direct from the hand or from clean troughs, and be careful about the drinking water.

O. A. C.

W. R. GRAHAM.

Well, that may be true, so far as quantity of fertilizer is concerned, though the principle is universally right. But if you can make fifty acres grow as big crops by intensive methods as you are now receiving from your hundred acres, wouldn't it be better from every point of view? And would not prosperity be the gainer in vast degree? There is no mystery about this, and there is no genius required to keep up the fertility of the land. Over in France are farms that were under cultivation when Cæsar and his armies overspread the land. By practical methods of fertilization—the careful saving and intelligent use of every particle of fertility available—the thrifty farmers of ancient Gaul, and their patient and faithful successors, not only maintained, but positively increased, the fertility of the soil, until to-day these lands are yielding the most bountiful crops known to history.

possible. When high enough, hand thin to 1½ inches apart, and keep clean and the soil frequently stirred. This is about the best suggestion I can make to help the young man to get his driving outfit, but some other reader can probably offer a better one. I wouldn't put all my cash in a rubber-tired buggy, though. His head and a good savings bank are better places for some of it.

G. ARDEN.

**GARDEN & ORCHARD.**

**SOIL FERTILITY IN HORTICULTURE.**

Shall we meet the demand for more cotton, or shall it be grown in the valleys of the Nile and the Congo? The soil will answer. Shall we grow wheat for our increasing population, or shall we import from Canada? Soil conditions will determine. Is meat to be found on the tables of our working people in the future, or will the price be beyond their reach? Ask the question, of the soil.—Secretary Wilson, at Syracuse.

This is the world's future—its strength, its happiness—dependent upon the soil, and by the soil we mean here the capacity of the soil to produce. All plant life and animal life depend upon the amount of plant food contained in the soil. Deplete the soil of its fertility and the world goes hungry and mankind degenerates. Keep the soil full of life-giving substance, and the world goes on in the march of progress to ever greater triumphs.

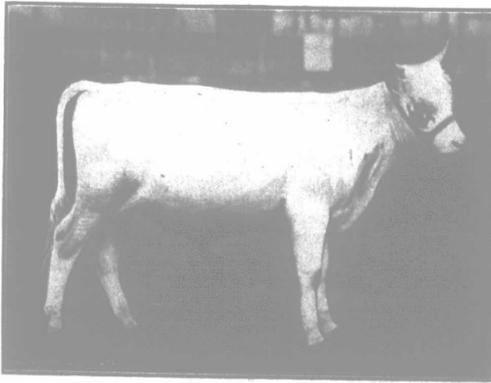
To keep up the fertility of the soil; to increase the fertility of the soil, then, is the most important material consideration in the world—one in which every man, woman and child in the world has direct personal interest. Important as it is, nature has made it a problem most simple of solution. A striking example of its simplicity is furnished by the case of the R. M. Kellogg Company farm, at Three Rivers, Michigan. Recently, a local lawyer declared that "when R. M. Kellogg bought that farm, the land was so poor that it wouldn't raise an umbrella in seven years!" Today, it is one of the most fertile and productive farms in the world.

This extraordinary result has been accomplished in two ways: (1) Rotation of crops, in which legumes have alternated yearly with strawberry plants; (2) the application of fertilizer, principally barnyard manure. The farm comprises approximately 225 acres of land. Of this area about one hundred acres are set each year to strawberry plants. Because of its great area, this place is called a "farm." As a matter of fact, it is a vast garden, cultivated as intensively almost as the hundred-foot square, comprising the garden of a Japanese husbandman, and the crop produced is, in point of commercial value, greater than that generally obtained from twenty-five farms of equal size. No intelligent horticulturist longer doubts that plants grown under such intensive methods far surpass all others in producing big crops of strawberries.

When, in the spring, the hundred acres of plants are set out, they are placed in earth so soft and friable, and so filled with plant food, that growth, strong and vigorous, begins at once, and continues throughout the season, so strong and so vigorous that the plants are enabled to stand up and make headway during weeks of drought through the simple protection of the dust mulch created by constant stirring of the soil. The year before the land in which these plants were set, grew an enormous crop of cow peas, or field peas, as the case may be. Taking it year by year, it is the experience of the Kellogg Company that the field pea gives the better results, the cow pea leading, however, in seasons of extended drought. This mass of green manure was rolled, disked, covered with about eighteen tons of Chicago Stock-yards manure, and plowed under the previous fall, and in the spring the land was again plowed, and then harrowed until it was as fine as an ash-heap.

The accompanying illustration shows a field of cow peas being rolled preparatory to plowing under. These peas indicate the amount of nitrogenous matter and great quantities of humus supplied by such a field of legumes. Besides manure from the Chicago Stock-yards, fifty cars of horse manure, each containing thirty-five tons of this fertilizer, have been spread on the Kellogg farms this year, at a total cost of \$60 the carload. One hundred acres so manured will be set out in plants next spring.

Ask the soil on the Kellogg farms any question you may, and it will give you back a cheerful answer of the most substantial sort. And this is what every rod of arable land in this broad country of ours could do, and should do; and it would do it if the methods were followed that so faithfully are adhered to on this big strawberry patch. Impossible on a big farm?



Stonehouse Snow King —25308—

Ayrshire bull calf, under a year. First prize (senior), Canadian National Exhibition, Toronto, 1907. Owned and exhibited by Hector Gordon, Howick, Quebec.

Secretary Wilson has asked some pertinent questions. But the answer must come from the farmer himself. What are you doing, Mr. Farmer, to make your soil better, stronger, more productive of the world's necessities than it was last year? The soil will answer every question with a smile if you will do your duty.

W. H. BURKE.

Michigan.

**QUEBEC POMOLOGISTS TO MEET.**

The winter meeting of the Pomological and Fruit-growing Society of the Province of Quebec is to be held at the Macdonald College, Ste. Anne de Bellevue, on the 18th and 19th of December.

PETER REID, Secretary.



Plowing Under Cow Peas on R. M. Kellogg Company's Farm.

**SUGGESTIONS FOR "YOUNG FARMER."**

Editor "The Farmer's Advocate":

I see in your issue of November 7th, "A Farmer's Son" wants to know how to raise \$175 on an acre of land that his father is giving him the use of. Try onions. On a good clay loam, under hoe crop the year before, and well enriched with manure containing plenty of vegetable matter, he can grow five hundred bushels of Yellow Globe Danvers, that will sell, for town and city consumption, at from 50 cents to 75 cents per bushel, and perhaps more. About 3½ pounds of seed should be sown with drill for the purpose, in rows 18 to 20 inches apart, as early in spring as

the organization), I think they would be in a position to supply Ontario with all the feed required, if some concerted action for distribution was taken at your end. I understand that this company is at the present time handling a quarter of a million bushels of grain a week.

Frozen grain makes excellent feed. Some of the samples recently submitted to the Standards Board at Winnipeg weighed over 60 lbs. to the bushel. If it could be secured here at any reasonable figure, it might profitably be substituted for mill stuff as well as for barley, and would, no doubt, be largely used by farmers in this Province during the coming winter. Reports received from the Department's correspondents indicate that a good demand exists, but not at 70c.

**THE FARM BULLETIN.**

**THE AMERICAN FINANCIAL PANIC.**

It is extremely difficult here to realize the sudden panic that has seized on the well-to-do classes of New York, and it would require a volume to trace the train of antecedents that have led up to the catastrophe. Probably few honest Americans doubt in their heart of hearts that the highest Protective Tariff in the world, the mother of all the Trusts and most of the corruption, is the originating cause of all the mischief; for if that were removed, commercial morality would rise as the profits of commercial immorality declined. If, however, we search for proximate causes, we may find them in the action of Mr. Harriman and his associates a year or two back. That the directors of banking and other corporations should use the trust funds in their charge for the purpose of buying or selling stock-exchange securities, in the rise or fall of which the directors are personally interested, would, we hope, be impossible on a large scale in any other civilized country. Since the Harriman disclosures, speculators in American stocks have slowly lost confidence, and the artificial stimulus which produced last year's boom having been removed, a stream of liquidation, sometimes interrupted only to be renewed with increased volume and violence, has been going on in all classes of American securities, regardless of dividends, traffic receipts, speeches, interviews, and all the devices and machinations of the bull party. The fact is, the people have lost confidence in the honesty of their commercial and financial magnates. Law-breaking has become a fine art.—[The Nation (London, Eng.).

**HOW TO GET NORTHWEST FEED WHEAT.**

The Provincial Department of Agriculture, Toronto, Ont., is in receipt of a communication from the Secretary of the Manitoba Grain-growers' Association, Mr. R. McKenzie, Brandon, Man., which contains some interesting facts and figures in regard to the price of feed wheat. He points out that at the present time, frozen wheat is being sold by the farmers at various shipping points in Manitoba at from 25c. to 80c. less per bushel than is being quoted at Fort William. He states that while elevator owners were refusing to pay more than 22c. per bushel for wheat graded as No. 2 feed, the cash price at Fort William showed a margin to the buyer of 25c. per bushel, thus bleeding the farmers of Manitoba at one end and the farmers of Ontario at the other.

"We have," he says, "in Manitoba an organization called the Grain-growers' Grain Co., Ltd., Winnipeg, composed altogether of grain-growers, the underlying principle of which is co-operation in the disposal of our produce. They have now upwards of 2,000 shareholders, distributed all over Manitoba and Saskatchewan, all of them leading men in the district in which they reside. It would be safe to say that those shareholders produced eight or ten million bushels of grain this year, and though not being able to speak officially (not being a member of