CROPS REQUIRE TO BE FED AS WELL AS ANIMALS.

(From the Ohio Cultivator.)

In the first settlement of this country, the domestic animals found food growing spontaneously, in the prairies and forests, and they lived almost entirely without the aid of their owners. As the country became more populous, and the animals had greatly increased, this spontaneous food became exhausted, and they had to be fed by the hand of man.

When the soil was first reclaimed from the forest, the *crops* obtained *their* food, for a number of years. from the abundance of *vegetable* matter which had been accumulating in the soil, as well as from the inorganic substances, which had been brought there by natural causes. But in a few years, by a constant drain upon the soil, without making any recompense, this spontaneous food, which nature had provided, has become principally exhausted; and it is now as much the interest of the farmer to feed his crops, as it is to feed his animals.

"I do feed my crops," says the *Practical Farmer*, "I haul out stable manure and straw, and I sometimes plow in clover, and put my land in first-rate order, before I sow my crops."

"Very well," says *Science*, "this is all right, so far as it goes, and I grant one in a hundred may do this; but I should like to be able to make this statement in "inverse proportion," that there shall be but one in a hundred who does *not* do it."

"But, *Mr. Practical Farmer*, there is another matter connected with feeding your crops, that I wish to press upon your attention, which is this, —It is as important to feed your *crops* with the kind of food *most suitable* to their "digestive organs," as it is that of animals. Did you ever think of this? We do not feed hogs on hay; neither do we give pork to our horses; but we are, nevertheless, careful to give *enough* to keep them alive, and to cause the animals to thrive and increase, and, at the same time, we avoid giving them so *much* as to surfeit or founder them."

"After all the pains I take," says the *Practical Farmer*, "I cannot raise good wheat; when I sow it on my land without manure, it is struck with rust; the berry shrivels, and I do not get half a crop. And then I go to carting on manure, and my wheat all goes to straw, falls down flat on the ground, and has no grain worth the labour of saving; and so I turn my hogs into the field to get what few grains they can find. It is useless for me to try to raise wheat on my farm; it is either too rich or too poor. If I put on manure, the straw grows too rank, and is too weak to stand up; if I sow without manure, the *heat* and *moisture* makes it with rust. I must go to raising some other crop."

"Stop, neighbour," says *Science*," here I have a book that will tell you something about raising wheat. I think it probable that you have been feeding your hogs on hay, or else you have been giving pork to your horses."

Prac. Far. Och! go away with your *book*. Do you think I want any of your *book farming* about me? I have been a *practical farmer* all my life, and in *early times* I used to raise the best wheat in the country, without *manure* or *books* either. Do you think that I don't know how to raise wheat?

Science. Will you read it?

Prac. Far. No. It is so seldom I read, that it is quite a task for me to read a book.

Science. Well, will you listen while I read?

Prac. Far. I have not time to stay long, but I have no objection to hearing you read a little; it won't *cost anything*, will it?

Science. If you will listen attentively, I will read you a few lines with pleasure:—From each acre yielding 25 bushels of wheat, there is extracted from the soil, in the grain, 3.3 pounds of *potash*, and in the straw, 0.6 of a pound.*

Prac. Far. What! does wheat contain potash?

Science. Yes. And the 25 bushels of wheat will also take from the soil, in the grain, 3.5 pounds of *soda*, and the straw, 0.9 of a pound.

Prac. Far. Ah! Does wheat contain soda too?

Science. Such an acre of wheat will also take from the soil, in the grain, 1.5 pounds of *lime*, and in the straw, 7.2 pounds.

Prac. Far. Oh, yes! I have heard of people putting lime on their land, but I never thought enough of it to try it myself.

Science. The 25 bushels of wheat also take from the soil, in the grain, 1.5 pounds of *magnesia*, and in the straw, 1 pound.

Prac. Far. Why, I have heard it said that magnesia is injurious to crops, and that when farmers apply lime to their land, they should be careful to use that which does not contain magnesia! But go on; is there any thing else in wheat? I can't stay much longer.

Science. In an acre of wheat yielding 25 bushels, there is in the grain 6 pounds of *Silica*, and in the straw 86 (eighty-six) pounds.

Prac. Far. Now I'm stumped! What on earth is *Silica?*

Science. The book says it is the substance of *flint*, or pure *sand*.

Prac. Far What! the substance of flint or sand in wheat! Pray, Mr. Science, how does it get there?

Science. You know that sand can be melted, as is done in the manufacture of glass, by the application of heat with soda and other chemical substances; and this book tells us that it becomes soluble in water, by the aid of the potash and soda before mentioned; and when thus dissolved,

* NOTE.—The weights here given are in pounds and decimal fractions. thus, 3.3 is three pounds and three-tenths of a pound, and 0.15 is fifteen-hundredths of a pound. It may also be remarked, that the language here used is not taken from the book alluded to by the writer; only the substance is obtained therefrom.