What Professor Massey Says

MY Amoor River privet hedge has given me an abundance of seed. Can the seed be used to get new plants?" Doubtless, by sowing the seed now they will grow very well in spring. But there is no sort of advantage in using the seed, for the plants can be so rapidly grown from cuttings set where the hedge is to be, that it is far less trouble to grow the hedge in this way.

HOW would you prevent the killing of corn in low ground in the spring?" It depends on what kills it. If it is late frost, the only thing to do is to replant it. If it is bud-worms, then the best thing to do is to plow the land this fall and let it lie all winter, and in the spring use kainit heavily in a fertilizer with phosphate. This is the best remedy I know for bud-worms.

LEFT-OVER seed of crimson clover may, under some climatic or local conditions, be worthless another season, but here they may keep very well and show a good percentage of germination. There will be a good many seed kept over this fall, and next fall it would be well to get samples and test their vitality before buying, for I know that seedsmen are carrying over a good many bushels.

WILL cotton cloth answer for sweet potato beds in spring, and how is it made water-proof and more transparent?" Yes, the cloth will do very well for sweet potatoes. Stretch it on a frame and then take 3 pints of linseed oil, 1 ounce of lead acetate, and 4 ounces of rosin. Rub the lead acetate up in a little of the oil and then add the rest and heat it over a slow fire and apply to the cloth with a brush, and it will dry in twenty-four hours.

PLEASE always give your correct address in writing for information. It is not pleasant to have a letter returned, "uncalled for"' after I have taken the trouble to reply. Mrs. Eva Morris gave her address as New Hermon, La., and the postoffice people returned it endorsed, "No such office in the State." W. E. Weatherly gave his address, Route 1, Columbia, S. C., and the letter came back, "Not found." I reply at once to all letters sent me, and want the writers to get the reply. If the above parties will give their correct address, the letters will be forwarded.

I HAVE a garden nearly an acre in size," writes a subscriber, "and well shaped to plow well. It has been covered with stable manure for years, but the collards are affected with the big-root. Planted it in cotton four years ago, and now the big-root is back. Have set Wakefield cabbages. Will these have the big roots?" They will, in all probability. The best preventive of the big or club-root is heavy liming of the soil. You are in a section where shell marl can probably be had, and this will be a good application to make to the garden, for it has been found that land near the coast where there are plenty of oyster shells in the soil is seldom infected with the big-root. Then practice a good rotation and do not plant cabbage or any of its relatives, kale or turnips in the same soil continually. Add a heavy application of acid phosphate and potash to the stable manure, and with the liming and a good rotation I think you may get rid of the trouble.

WHAT is the best to use with stable manure to preserve the same? Would there be enough phosphoric acid become available to make it pay to use pulverized phosphate rock or land plaster for this purpose?" Land plaster, the sulfate of lime, will largely prevent loss in manure, if well mixed with it, but there will be no increase in phosphoric acid from this, since the plaster contains none. The pulverized phosphate rock will greatly increase the efficiency of the manure, if mixed with it, but I do not think it would have much tendency to preserve the manure from waste. Acid phosphate and kainit will both tend to prevent loss of ammonia. But the best way to preserve manure from loss is to get it out and spread on the land as fast as made. Mixing phosphate and kainit will help it in the production of crops, but manure is not an article to keep on hand profitably. Get it out and spread it, and there will be less loss than in any other way.

I HAVE twenty acres of crimson clover, sowed with oats, and had intended to apply 1,000 pounds of lime an acre, and to dress with manure in the spring. But am told that the lime will injure the manure?" In the first place, you seem to assume that the lime will be a fertilizer on the oats and clover. It will to a very slight extent. Lime is used mainly as a means for sweetening an acid soil, and releasing plant food in the soil, and promoting the thrift of the bacteria that get nitrogen from the air. But liming this fall or winter and spreading manure in the spring will do no harm, for if the lime then did affect the manure, any ammonia set free would be absorbed by the soil. The clover does not especially need the manure, as it will get nitrogen from the air; but if you intend the clover to be turned under in spring, the manuring will be all right for a hoed crop following. But as the clover is with oats, I assume that you intend the crop for hay. The clover will do more fixing of nitrogen without the manure than with it, for it will take the abundant supply at hand in the manure, and you will get a larger growth of hay, but not so much extra nitrogen fixed in the soil.

READ ON PAGE 17 WHAT SECRETARY WILSON SAYS ABOUT THE NEED OF MORE SHEEP.

IS THOMAS basic slag the same thing as Thomas phosphate? I have been told to use half Thomas phosphate and half agricultural lime for wheat. How would this do for wheat or oats?" Yes, basic phosphate and Thomas phosphate and basic slag are all names for the same thing. It is a by-product in the basic method of making steel, the lime being used to extract the phosphorus from the iron so that steel can be made. The slag from the furnace contains the phosphorus and is ground up and sold as a fertilizer. It carries about forty pounds of free lime in each 100 pounds. As I have often written on this page, we do not use lime as a fertilizer. The Thomas phosphate alone will make a fairly good wheat and oat fertilizer on lands that have a sufficient amount of nitrogen and potash. On sandy soil, which is never a first-class wheat soil, you should use some potash with the phosphate, say 400 pounds of the Thomas phosphate and twenty-five pounds of muriate of potash per acre. If your land is acid and needs lime, buy the fresh unslaked lime, and never the so-called agricultural lime, which is simply the slaked refuse from the kilns. Get fresh lump lime in bulk in car-loads, and slake it for yourself, and you will have more than twice the bulk that you paid freight on. Freighting slaked lime, you are paying freight on the water.

NOTING what you say about pea threshers," writes a friend, "I assume that you prefer the Koger machine to the one made by Tharp & Sexton, of Salisbury, Maryland. Am I right?" That depends entirely on the purpose of the farmer in growing peas. If you want to make hay, then the best machine I have ever seen used for threshing the peas from the cured hay is the Koger. If you want to grow peas solely for seed, and return all else to the soil for its improvement, the Tharp & Sexton harvester is the best I know of. This machine is now manufactured on royalty by the Keystone Company of York, Pennsylvania, for the Salisbury Company, and they now call it the Keystone pea harvester. With peas planted in rows and let stand till ripe, it will gather them as fast as a pair of mules can draw it, and will thresh and fan the peas as it goes. I have seen both these machines work. I went to Tennessee especially to see the Koger machine in operation, and I saw it thresh peas from the hay at rate of half a bushel a minute by my watch, and hardly a broken pea in the measure. I have followed the pea harvester in the field, and I know that it will do all that the makers claim for it. The difference between the machines is that one is a thresher of the mown hay, while the other is a harvester and gathers and cleans out the peas as fast as twenty darkies could do it by hand. Which will be best for any particular buyer, will depend, as I have said, on whether he wants to make hay or merely to raise seed and leave all the rest on the land. The thresher and gasoline power cost more, of course, than the machine pulled by a pair of mules. Both are excellent in their way.

The Inevitable Result of One-Crop Farming.

WALLACE'S Farmer prints a good story of the one-crop wheat growers of North Dakota. The bankers in a certain section had put up a considerable amount of money for extension work among the farmers and at one of the meetings a professor from the agricultural college urged diversified farming and feeding of livestock, instead of growing wheat only.

He was interrupted by one of the audience.

"Hey there, you college fellow; what are you giving us? Do you think we are going to work all summer? We work a couple of weeks in the spring and put in our wheat, and then go fishing. We come back and spend a month or six weeks in harvesting and marketing the crop, and after that do as we please." Then turning to the banker, he said, "Say, Mr. Banker, do we owe you anything?"

"No."

"Have we got money in your bank?"

"Yes."

"Now, see here, you college fellow, just get out of this neighborhood as soon as you can. Don't you think we know what is good for us? Don't we understand our business? What do you know about farming anyway? We don't want any book farming in ours."

And, like the all-cotton men of the South, they have been growing wheat and only wheat, till the average yield of wheat has run down far below the average in the good winter wheat-growing sections of the east, and only a demonstration farm before their eyes can show them their error. The same thing occurred, when at a farmers' institute in eastern North Carolina, I urged more diversification and the feeding of livestock. One large cotton planter said: "I don't want to be pestered with stock. I work fifteen mules in cotton, and make $500 to a mule, what do I want with more stock?"

It is these one-crop men in every section that are hindering the real advancement. With unusually fine cotton land, this man, thru a lavish use of fertilizers was making money growing cotton, while he could have made it at less expense on less land by a good rotation of crops, and would have increased the productiveness of his land and helped those who were not as fortunately situated as he was. The single croppers in the wheat districts of the Northwest are on the road to old fields just as the all-cotton men of the South. Their land will stand it longer because of its greater natural fertility, but the time will come when they will have to consider "book farming," just as the farmers in the South must, and when their land is finally run down it will be harder to reclaim it than in the South where a greater variety of legume crops can be grown. They sacrifice the future welfare of their soil to present profit, just as has been done in the South. The South, however, is learning "book farming" rapidly. The Demonstration Work and the Boys' Corn Clubs have opened the eyes of the farmers to the advantage of a different course of farming. and the South is coming to the front in improved farming. North Carolina today is making nearly as large an average in corn as Kansas, and if the State increases in production as she has done in the last twenty-five years, the average corn crop will soon be ahead of that of Kansas.