$500 More a Year Farming: How to Make It.

XV.—By Raising Your Own Horses and Mules and a Few to Sell.

THE FACT that we do not raise our own horses and mules has an important and direct bearing on our agricultural production, both as affecting its quality and cost.

It is not merely to save a part of the money paid out for the mules we are each year compelled to buy, nor for the profits that would come from raising a few horses and mules to sell, that we insist on the absolute necessity of raising our farm work stock; but because the question is of fundamental importance in determining the amount and cost of our agricultural products. **The amount of our products per agricultural worker will be increased and their cost decreased in direct proportion as we increase the number of horses and mules used.**

If any reader wishes to convince himself of the fact that the number of horses used is a direct and accurate index of the earnings of the farm worker, let him take the last Census Report and compare these three classes of facts for each State: (1) The number of farm workers. (2) The number of horses and mules. (3) The earnings of each farm worker.

The relationship which he will find invariably present, is not a coincidence, but is simply cause and effect. A careful and comprehensive study of the whole question of the relation of farm work stock to agricultural production reveals the fact that not only the past history of agriculture, but also present facts give unmistakable assurance of the accuracy of the following statements:

(1) **We must double or treble the number of our farm work animals and increase their individual efficiency before we can raise the earnings of the average farm worker to anything near the maximum.**—We have about one-fourth as many horses and mules and earn less than one-fourth as much money as some other farming people.

(2) **No farming country ever had sufficient farm work stock for economical production that bought it.**—We buy ours and have on an average .77 of a horse to each farm worker, whereas we should have at least 3.

(3) **No farming country ever bred sufficient farm work stock to supply its need that bought feed on which to raise that work stock.**—We are buyers not sellers of feed stuffs.

In other words, there are, among many others, two inseparable problems which we must solve in order to get that "$500 More a Year Farming" for the average farm worker; the breeding of our farm work stock and the production and intelligent use of feeds for live stock.

We Need Heavier Work Stock.

AS LONG as the negro is largely the farm laborer of this section the mule will be a popular and well nigh indispensable farm work animal; for he not only fits well our conditions, but is also an animal of moderate efficiency at comparatively low cost. The mule has, therefore, won and will probably maintain a permanent place in our agriculture, and since mules cannot be had without horses, the question may be promptly settled that both horses and mules shall be used as farm work stock.

The next problem is, What sort of horses and mules do we need for farm work? Any one who has kept in close touch with market conditions during the last fifteen years has not failed to observe the gradual and certain tendency towards heavier farm work stock in the South. There are more 1,100-pound mules now sold for farm work than ever before, and there are more 1,200-pound mules sold now than there were 1,100-pound mules ten to fifteen years ago.

When human labor was abundant the hoe and the other small implements were used. With light, narrow-working implements speed was a prime necessity if the mule was to do sufficient work; but when cultural and labor conditions changed so as to necessitate larger and heavier implements in order to do more work and thereby economize human labor, increased weight, rather than speed, became the most important factor in determining the usefulness of a mule for farm work. The markets have responded to these conditions, for to-day anywhere in the South 1,200-pound mules bring from $50 to $75 more per head than do 900- to 1,000-pound mules.

If we are to do farm work most economically, and raise high-priced mules weighing from 1,100 to 1,300 pounds each, we must have mares weighing from 1,250 to 1,400 pounds.

It is not claimed that a 1,200-pound mule is as fast as a 1,000-pound animal, nor that a 1,300-pound mare is as good a roadster as a 1,050-pound horse; but **the work of the farm horse is chiefly at the walk, and the horse that will do the most at that gait is, therefore, the one needed for farm work.**

This Week's Guide Post to "$500 More a Year."

BEFORE we, the farmers of the South, can raise our average earnings to anything like they should be, we must double or treble the number of our farm work stock.

The only way for us to get this work stock is to raise it, since no farming country which depended on buying its work stock ever had enough for economical production.

There is nothing in our soil, water or climate to prevent us from growing mules of the best quality and of the highest market price.

To grow such mules, however, we must have good 1,300- to 1,400-pound mares and 1,000- to 1,050-pound jacks of good quality. Then we must feed properly, using the legumes to balance our corn, fodder, and grass.

The direct profits from raising horses and mules will help us on toward our "$500 More a Year," but a greater profit will come from securing in this way sufficient work stock for economical crop production.

How to Breed Heavier Work Stock.

TO produce mules of good quality weighing 1,200 pounds, will require 1,300- to 1,400-pound mares and 1,000-to 1,050-pound jacks and, in addition, liberal and intelligent feeding. In the past we have too often sought to increase the size of our mules by the use of extra large jacks. These extra large jacks are almost certain to lack quality. A good foot and leg are essential to a good mule, and he inherits these largely from his sire; therefore, since a large jack is almost certain to be weak in these points he transmits these weaknesses to his progeny.

A weight of 1,100-pounds is about the extreme limit in jacks of good quality, and is, therefore, rarely seen. It is much easier to purchase a jack of good quality weighing 1,000 pounds, but a 1,000-pound jack, or even a 1,100-pound jack, crossed on our small mares weighing from 900 to 1,000 pounds will not produce a 1,200-pound mule. In fact, with our methods of feeding, such a cross will usually produce about a 1,000-pound mule. We must, therefore, have larger mares if we are to produce these 1,200-pound mules. To get these mares there are two methods open to us: we may buy mares weighing from 1,200 to 1,400 pounds, or we may breed them. The first method has the advantage of being quicker, but the second may be otherwise equally satisfactory and has the strong point in its favor of requiring a smaller investment to start with. If mares are to be purchased, we strongly advise the purchase of mares having an infusion of draft blood, and of the draft breeds, our preference for mule breeding is the Percheron. Experience seems to have demonstrated that grade Percheron mares are superior to the grades of the other draft breeds for mule production. This is probably because of the fact that the Percheron is the smallest of the draft breeds and consequently usually of better quality. The clean, hard legs of the Percherons are also another strong point in their superiority for the breeding of first-class mules.

If mares of sufficient size to produce large, high-priced mules are ever to be had by the Southern farmer, he will probably have to breed them. To purchase such mares would cost too much. To breed these mares it will also probably be necessary to use the small mares now here as their mothers. If this be done it is again apparent that the sires must be of the draft breeds.

The use of draft stallions for breeding on our native mares would not only produce a class of mares that would give sufficient size to their mule colts, but it would improve immeasurably the value of our farm work horses.

For crossing on our native mares we would again select the Percheron as unquestionably the best of the draft breeds for this purpose. We do not need stallions weighing more than from 1,500 to 1,600 pounds to breed on our native stock. It is always easier to get the best quality in the smaller members of the large breeds, therefore, stallions of this weight of the very best quality may be bought because too small for use where high-priced draft horses are bred.

On page 3 of this issue is presented an illustration made from a photograph of a Percheron stallion of this type. If he had weighed a ton with his quality and conformation he would have sold for $3,000 or $4,000, but since he weighed only 1,600 pounds, he was bought for $1,000. He is a good specimen of the type of stallion needed to breed on our native mares for the purpose of improving our farm work horses and the raising of mares for mule breeding.

Why We Must Have More Horses.

WE ARE WELL aware that in our territory the mule is generally regarded, and probably is, the most satisfactory farm work animal when the driver is a negro, especially if the owner does not directly supervise the farm work; but the mule does not reproduce, and we must either continue to buy our farm work stock, which also means an insufficient supply for economical farm production, or we must keep sufficient horses to produce the mules required. The saving on the purchases now made, or the profits on the breeding of good mules, or the greater profits on the crops resulting from cheaper production through the use of better and more farm work stock, will either one compensate for any inconvenience this may cause.

With proper management all the farm work stock may be horses, even though the drivers be negroes, and we are not sure that the mule is in any sense the superior of the horse in the performance of economical farm work. He may stand abuse and hardships better, but, as we have stated before, that is not what live stock is kept for, and when farm work stock is subjected to such, no matter whether horses or mules be used, it is a losing business.

If two mules are needed, three mares will do as much work and raise two colts. If three mules

According to the last census each farmer in the NORTH Atlantic States earned $984 a year, and each farmer in the SOUTH Atlantic States only $484—or exactly $500 a year less for the average farmer in The Progressive Farmer's territory than for his brother farmer just north of him. The object of these articles is to set forth the plans by which we may bring up our Southern farming to Northern profits, the next four articles in this series being as follows:

April 22.—By Keeping More Stock to Graze Idle Lands.
April 29.—By Feeding the Products of the Farm to Live Stock.
May 6.—By Learning the Difference Between Scrub and Good Stock.
May 13.—By Learning How to Make a Balanced Ration.

The Beginning of Wisdom—in Farming—is a Two-Horse Plow.