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

XVI.—By Keeping More Live Stock to Graze the Idle Lands.

Farmer territory, any one familiar with the best farming sections of this country, cannot fail to be impressed with our large areas of waste lands which yield no revenue to their owners. The total area of the States of North Carolina, South Carolina, and Georgia is 91,000,-000 acres. Of this vast area, only 63,000,000 acres, or 69 per cent, is classed by the Census Report as "in farms," and of these farms only 24,-000,000 acres, 39 per cent, is classed as improved lands. That is about 27 per cent of the total area of these States is improved land. The balance, or 73 per cent, is, under present conditions, of practically no value from an agricultural standpoint.

That only 39 per cent of the area included in our farms is improved land is the most significant fact brought out by these figures; for in other words, 61 per cent of even our farms is land yielding little or no revenue to the owner. It is apparent that if anything can be done to make these idle lands yield some profit, it should be done.

The lands which are yielding no agricultural revenue may be divided into three classes: (1) Woodlands that are too rough or too wet for cultivation. (2) The so-called worn-out lands, and lands on which all the valuable timber has been cut or destroyed. (3) Small and irregular areas or patches in and between the fields—spots too wet for cultivation, patches that are washed and gullied, and areas covered with briers, bushes, pines and other scrubby and worthless growths.

The first class, or the timber lands, will be discussed later in article No. 42 of this series. It is believed that these can be made to yield a much larger revenue than at present. The last class has already been incidentally referred to in several articles, but will soon receive special consideration in article No. 24 of this series.

The second class of unproductive farm lands the worn-out or turned-out, and the cut-over lands -are the ones which we desire especially to consider in this article.

Why Stock Have Not Paid Us.

IGHT HERE we wish to call attention to the chief cause of our failure in the past to make live stock husbandry profitable. We have procured live stock without first having made provision for feeding them; and in this connection it cannot be stated too positively that the majority of our idle lands are now in no condition to, and will not furnish sufficient grazing to make the live stock business profitable to us. Before we get live stock, to make believe at grazing bese lands, they must receive some attention.

pasture is not a piece of poor land with a fence wund it. An agricultural writer recently described a Southern pasture as "a place where grass does no grow," and, it must be confessed, the description accurately fits too many so-called Southern pastures. Much of our idle land can be made to pay a fair income on its present value plus the cost of putting it in condition for growing feed for cattle and other live stock to graze.

If any land is so poor, or so wet, that four or five acres cannot at a moderate cost be put in condition to furnish sufficient feed during the entire grazing season for an animal weighing 800 to 1,000 pounds, then such land is not suitable for grazing purposes. By sufficient feed we mean enough to produce during a six to eight months' grazing period, a growth of from 150 to 200 pounds on fairly good cattle. To do this there must be sufficient feed to satisfy the animal with-

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 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. May 20.—By Selling Dairy Products.

three acres of average land should do this.

A gain of 200 pounds, worth say four cents a pound, or \$8, is not a large return from three acres of land, but it is at least \$4 net, more than most of our idle lands are now bringing. Moreover, it must be remembered that land of a quality that takes three or four acres to support one steer is not high-priced land. These idle lands now have a nominal value only, and the higher that value, the worse it is for the owner who makes them yield nothing. The owners of such idle lands should certainly do one of two things: dispose of them for what they will bring, or put them in condition to yield interest on their value, whatever that may be.

If we estimate the steer worth \$25, which he will not be unless of better quality than those we now have; charge 10 per cent on this amount to cover interest on investment and insurance against

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

HE CHIEF reason we have failed to make live stock profitable is because we have made no provisions for feeding them. A pasture must have grass in it, if it is worth anything to the stock.

We must enclose our pastures, because we can not hope to improve either them or our stock while the latter run at large, and because we cannot get rid of the cattle tick or control hog cholera unless we have fenced fields.

We must depend on Southern grasses and clovers to make our permanent pastures; but there are plenty of these, Bermuda grass being the most generally available and the most valuable.

Good pastures, once established and then taken care of, will be become more valuable and feed more stock year after year, and by making such pastures the lands now unproductive can be made to add largely to our income.

loss by death, for the eight months; and add \$1 for care of the pasture, we have a total charge against three acres, or the \$8 gross earnings, of \$3.50. This leaves \$4.50 net income from three acres. Four and a half dollars is 10 per cent on \$45, which permits an investment of \$15 an acre. If this land is now worth \$5 an acre, we have left \$10 for putting it into condition for growing feed for live stock.

We Must Keep the Pastures Clean.

HE MOST important point regarding the preparation of these waste lands for growing grass is the removal of the useless plants which now occupy them. The space occupied by weeds, briers and bushes cannot be occupied by grass, nor can the plant food used in the growth of these useless plants go into the growth of plants that live stock will eat and thrive on. Our pastures must be cleared up and kept clean. Cheap or poor lands which are growing timber of value should be left to grow that crop. but lands which are now growing nothing of value should be made to furnish grazing for live stock if it can be done and come out even.

The first cost of cleaning up the land for pastures is considerable, and must be regarded in the nature of a permanent investment, but when once cleaned up and set in grass, the cost of maintaining them clean is small. This small expense, however, is none the less necessary. We are so sure that cotton and corn, for instance, will not grow profitably on land occupied by other plants that we spend large sums on cultivation, to keep down weeds and grass, but we seem never to have realized that grasses and other grazing crops must if a full crop of feed is expected.

N TRAVELING OVER The Progressive out too great effort on his part to find it. About also be protected from more vigorous and rapid growing plants in order to produce the most profitable returns.

Lands Must be Fenced and Live Stock Controlled.

HAT the pasture lands must be fenced and the live stock controlled, must become a parent to any one giving even casual consideration to the subject. Even if this were no necessary in order to protect the pasture and keep the live stock where it may receive the personal attention necessary, the necessity for the eradication of the cattle tick, the control of hog cholera and the prevention of other infectious diseases would make it imperative. In fact, it is beyond understanding why any people in this day and stage of agricultural enlightenment will permit live stock to run at large at any time or season of the year.

The cattle fever tick, the greatest obstacle to successful cattle growing, and hog cholera, the cause of the heaviest losses sustained by hog raisers, cannot, and never will, be controlled until cattle and hogs are controlled; and so far as the eradication of the cattle tick is concerned, allowing the cattle to run at large during the winter, is practically as bad as allowing them to range freely at all times. Moreover, cattle running at large during the winter do much more damage to winter growing crops and by tramping the land than the feed gathered is worth.

Pasture or Grazing Plants.

FTER THESE waste lands have been fenced and cleaned up, the next question to be solved is the selection of plants to be sowed or planted for grazing. It is plainly impossible to suggest a combination of plants that will best suit all soils, sections and conditions in our territory; but in all, except possibly the most northern part, Bermuda is unquestionably the best general permanent pasture grass available. It has objectionable features, the chief of which are, it starts late in the spring, is early killed by frost in the fall and is difficult to eradicate in case the land is ever desired for cultivation, but it will furnish more grazing during the hot weather, from May to September, than any other pasture plant that does well generally throughout the South. It is essentially a hot weather grass.

But no one plant should generally be depended upon for making a permanent pasture, and when Bermuda is used a variety of other plants may be used to furnish grazing early in the spring before the Bermuda has made sufficient growth. For this purpose bur clover, white clover, and some of the earlier-growing cultivated grasses are used. Where lime is abundant in the soil, sweet clover or melilotus is a valuable crop for this purpose, and where bluegrass will grow, it is one of the best of all pasture grasses.

If we roughly divide the soils of our territory into three large classes—(1) clay and loam soils; (2) alluvial and rich river bottom soils, and (3) sandy soils, the following plants are suggested as worthy of a trial for pasture purposes.

Clay and loam soils: Bermuda grass, lespedeza, bur clover, white clover, orchard grass, the brome grasses, rescue grass, and, if the soil be damp, alsike clover, red-top and water grass.

Alluvial and river bottom soils: Bermuda grass, rye grasses, large water grass, red-top, lespedeza, alsike clover, bur clover, and white clover.

Sandy soils: Bermuda grass, rye grasses, carpet grass, lespedeza, and bur clover.

It is frequently stated that for permanent pas tures, it is safest and best to depend on the native plants of the locality rather than attempt to introduce cultivated or foreign plants. When weeds. briers and bushes are kept down, the native plants may yield considerable grazing, but they can usually be supplemented by others, and from no permanent pasture in the South should Bermuda be omitted. No matter what pasture plants are used, weeds, briers and bushes must be kept down