MAN AND THE FARM MACHINE.

Fifty years ago, when we were first actively engaged in farming, the man was spelled with a capital "M" and the machine with a small "m," says Henry Wallace. The man did most of the work; the machine comparatively little. The outfit for cutting grains of all kinds in those days on a quarter section farm cost about about the same amount. The outfit for harvesting grain now costs $100 or more, and for making hay considerably more than that but the efficiency of the man's labor meanwhile has increased in about the proportion of the increased cost of the machine, and the wages of the man have about doubled. A higher type of man is now required to handle the machine than the farm laborer of fifty years ago. It is the high price of labor that has developed the machine and also developed the character of the laborer himself, and this will go on indefinitely, the farmer requiring less of the man so far as muscle is concerned and more so far as his brains are concerned, and a great deal more machinery. We have now reached a point when the farmer must do exactly as the manufacturer does, get the machinery that will turn out a unit of product at the smallest cost and count the price afterwards.

Fifty years ago, the farmer on land worth $40 per acre could not afford to sell wheat at less than $1.00 per bushel. Now, with land at the same price he can sell wheat at 50 cents per bushel at more profit than his father could at $1.00. Why? Because the human power has been multiplied by machinery; that is, a day's labor will produce more than twice the actual results in the shape of bushels of wheat, corn, oats, or tons of hay.

It is important for the farmer to buy only the best machinery, and the best machinery for him is that which will turn out the unit of product at the cheapest price. The best machine for him must be determined by the character of the soil, the size of the farm, and the crop that can be grown on it with the greatest profit. Hence, there is no absolutely best machine; that is, no best implement for all kinds of farmers on all kinds of land. What is the best for him under his conditions and circumstances, every man must find out for himself. For example, if a farmer can use a disk plow; that is, if he finds by experience that it works well on his soil, turning over five acres a day with the same horse power that a stirring plow requires to turn over three acres, and leaving it in as good or better condition, he is certainly foolish to keep on plowing three acres per day when he might as well be plowing five. He had better sell his stirring plow and buy a disk.

If a farmer is fooling away his time with an eight-foot harrow and can use a 16-foot, the quicker he gets the larger and more efficient implements the beter.

If a farmer finds from experience that he can cultivate thirty acres of corn per day with a Hallock weeder, what is the use of his using a cultivator with a capacity of eight acres when the weeder is practicable?

In short, if he gives his hired hand an inefficient machine and fails to get efficient work out of him, he is paying him too much wages; not too much for the hired man to get but too much for the farmer to give. Give the man a machine that will develop his highest efficiency.

We stated above that the amount of machinery required to run an average farm will increase indefinitely as a result of the constantly increasing scarcity of farm labor. The more manufacturing interests are developed in the United States, the greater will be the drain of labor from the farm to the cities and the fewer there will be left to do the farm work. To illustrate: The time was when a man with forty acres of corn could easily hire enough hands to put it in shock. He can not do that now, and he is compelled either to waste his fodder or buy a harvester. It does not necessarily cheapen the cost of harvesting, but it enables the farmer to get the work done.

The farmer who is hauling out his manure and spreading it with a fork is simply fooling away his own time or the time of his hired hand and team. The same man and team with a manure spreader will do the work in a little more than half the time and do it twice as well.

The farmer can not afford to thrash his grain with an old time thrasher, much less with a flail, although in our boyhood the contract could be let for threshing the wheat with a flail for the tenth bushel. It can not be thrashed with the most aproved machinery for less than that today.

He can not afford to cut his grain with the cradle, although in our boyhood grain could be put in shock with the cradle for less than it could be put in shock with any machine prior to the invention of the twine binder.

We are compelled to buy or hire machinery and will be thus compelled evermore. The point is to get machinery that will do the work at the least cost per bushel, per shock, or per ton. In other words, farmers will be compelled to do just what we are compelled to do in our office, buy machinery that will produce the result at the minimum of a cost per unit, no matter what the cost may be and less matter what we can get for the old machinery we have to sell. Carnegie attributes the success of his great manufacturing enterprises to the fact that he always bought the machinery that produced a ton of steel rails at the cheapest price, no matter what it cost and even if he had to throw a new and less efficient machine into the junk pile.

We have referred to this matter before, and we do it again not for the purpose of advertising any man's machinery, or advertising machinery in general, but simply to set the farmer to thinking along the line in which manufacturers have been thinking these many years. Labor is high and scarce and as long as good times last will be higher and scarcer; therefore, what he needs is first efficient machinery, and second and not least, a good place to take care of it when not in use.

THE X I T RANCH.

Some land sales recently recorded in Texas direct attention to the mag nitude of the operations of some of the ranch owners in the newer portions of our country and suggest that this generation need not worry over a possibility that it will not have all the land it can cultivate well. The story, which for the present ends with these sales, though composed of accounts of business transactions, reads like a romance:

About twelve years ago, when Texas needed a new state capitol, the legislature adopted a novel plan to get it. A promise was held forth that a vast tract of unappropriated land would be given in exchange for a suitable granite building at Austin. Among those who were tempted by this offer were Chas. B. Farwell, the merchant prince of Chicago, who, with his brother and some other capitalists, formed a syndicate known as the Capitol company, which in due time built the capitol and came into possession of the land, which was known as the X. I. T. ranch. The tract is about 25 miles wide from east to west and more than 200 miles long, and is situated in the extreme northwest corner of the Panhandle of Texas and comprises a part of nine counties. It is larger than the state of Connecticut, or Rhode Island and Delaware combined. The soil is mostly of a black or chocolate color and covered with a thick coat of buffalo or mesquite, grama and other grasses, which cure on the ground and furnish winter as well as summer pasture for stock of all kinds. At the southern end of the tract the altitude is about 2300 feet, and at the northern end about 4700 feet. The climate is pronounced to be delightful, the air being bracing, though dry.

When the Farwells obtained the land they inclosed it with a substantial barbed wire fence. There are many cross fences upon it, separating the territory into from twenty to thirty large divisions, besides many small ones. To make these fences it required 1500 miles of barbed wire. The syndicate also buolt ranch houses, bored and dug wells, of which there are now about 350, averaging 120 feet in depth, and having earthen or wooden reservoirs and drinking attachments, erected windmills over the wells, built dams across arroys to conserve the rainfall, and in various other ways made tne place suitable for a successful ranch on a large scale. They placed cattle upon it as fast as it could be put in safe condition to receive them, and have since continued to add to the herd from time to time by purchase and breeding until they have at present about 125,000 cattle, besides 1,600 horses. The calves branded in 1899 exceeded 50,000 head. The whole property is valued at $10,000,000.

One of the surprising things in connection with this huge enterprise is the fact that all the duties are performed by a force of about 125 men, or, on an average, only one man for every 24,000 acres. There are houses, barns, etc., at the seven divisions as well as the line camps, where there are small buildings. The men assigned to the camps repair the fences, oil the hundreds of windmills and busy themselves in other work of this sort. Some of the squads have no houses in which to stay, but are provided with a "chuck" wagon to carry their food and beds as they move from place to place. All are fed by the company, each division having freight wagons to haul supplies from points on the rialroad where they are bought.

Having developed the property thus far the Capitol company has concluded to put it into the market and has sold to the Reynolds Land and Cattle company 18,000 acres; to L. T. Clark, 40,000 acres; to William J. Todd, 50,000 acres; to the Matador Land and Cattle company, 210,000 acres; to F. D. Wight, 70,000 acres, and about 40,000 acres in smaller tracts to various purchasers. Other sales are pending.

Later on these tracts will be again sold, divided and subdivided until they are cut into individual farms, on which hundreds of thousands of people will live and from which there will go vast supplies of farm products to meet the ever increasing demand.

DON,T SELL THE OLD FARM.

God speed the day when home will be too dear and sacred to be considered as mere merchandise. A man who is continually selling, buying and moving is teaching his children to be as reckless as himself. What does this all tend to? To dissolution of statehood; to dissolution of home ties; the banishment of all the beauty of home life; the breaking up of Americanism; the dissolution of energy and the robbing of life of its aims.

Life without an object is life that fails. Every young man should have in his mind's eye an ideal home; let him think, plan and toil day by day to build it, to perfect its loveliness and enhance its usefulness. What matter how high or low the price of land, somewhere he must have a home; "not merely four square walls;" but a place beautiful; a place where his children will gladly turn in from the weary town; always permanent where they will always know the road home;