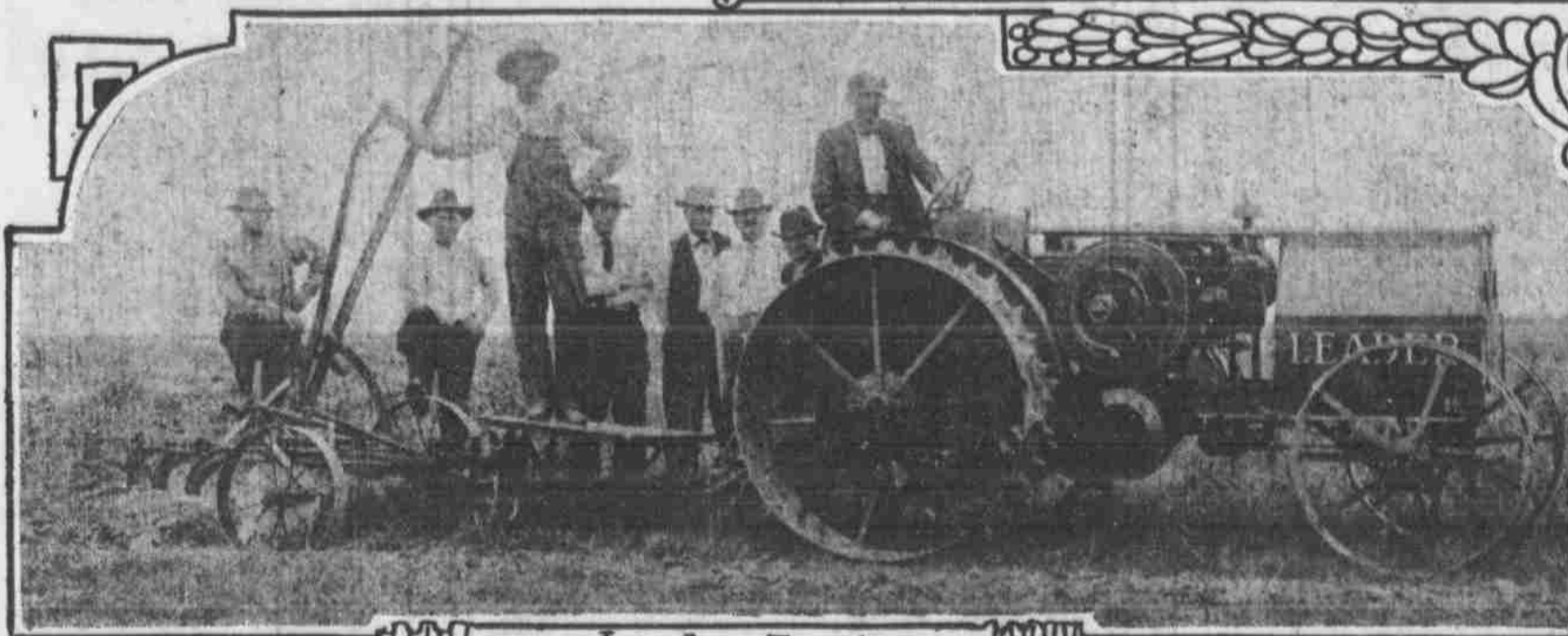


Modern Farm Efficiency Demands Better Power Plants



Leader Tractor



Avery Farm Tractor



Plowing, Seeding and Harrowing with a Rumely Oil Pull Tractor

Holt Caterpillar Tractor owned by R.B. Schneider, Fremont, Neb.

MOST people are so much occupied with the life immediately about them that they fail to notice the broad movements that are beginning to take form under their very eyes. This is an age of progress and development. We are just entering upon an era that is almost revolutionary in the commercial, industrial and agricultural conditions that it will develop. We have already fairly entered upon one of the greatest changes wrought out under the compelling force of the law of evolution.

Perhaps there is no field of human endeavor that is more slow to take on the spirit of this new age than agriculture. But agriculture itself is beginning to respond to the breath of this new era. Within the next twenty years agriculture will have laid aside most of its outworn methods and will have adopted new methods more in harmony with the spirit of the age, better adapted to economic and industrial conditions, and more certain to bring to the agriculturist the reward of his labor. Under the old agriculture the farmer earned his bread by the sweat of his brow. He is beginning to see that more bread may be earned with less perspiration; that greater efficiency may be attained with less effort; that rewards may be secured with less muscular toil.

Mind to Supplant Muscle.

Heretofore the work of the farm, arduous and severe as it always has been, has been performed not by mind but by muscle. To be sure, the farmer no longer uses his own muscles to the extent that he used them when he used to mow his hay with a scythe, harvest his grain with a cradle and tend his corn with a hoe. But it is muscular effort still to a large extent, as he tills his ground with the power furnished by the muscles of horses. There is a better, more efficient, more economical, more productive method in sight. With the engine, the product of man's brain, doing men's and horses' work for them, the new era is opening.

It will be found upon examination that at the present time horse power is uneconomical; that is, it costs the farmer more to do his work with horse power than it would cost him to do it with mechanical power. In the Missouri valley territory it is estimated that it costs \$72 a year simply to keep a work horse. This does not take into account the fact that the horse is liable to become injured or disabled through his work, is liable to contract disease which will take him away, or is so subject to physical conditions that the maximum of effort and work may not at all times be secured from him. If the horse were not subject to all these conditions, he would still be more expensive than the engine. The engine consumes fuel only while it works. The horse must not only be fed three times a day, but must receive shelter and care in many ways that mean just so much additional cost, or so much additional care, and care in the last analysis is cost, so that if a farmer wishes to secure the cheapest power for his farm operations he will have to choose mechanical power.

Efficiency the Demand of Age.

Mechanical power is much more efficient. The time for the old shiftless, haphazard method of

cultivation has gone never to return. If the maximum of production is to be secured, there must be deeper plowing, plowing to a depth double what is ordinarily done with horse power, more thorough cultivation. This will require extra power. If such work is to be done as it should be done to secure the best results, horses will be found inadequate to do it. No man can work more than a certain number of horses on a single implement. The cultivation of the soil in the future will demand more power than can be furnished by any number of horses that may be practically and efficiently handled in the field. More power, then, in this case, means different power, concentrated power, power that will be adequate to all demands that may be made upon it. This means mechanical power.

The use of mechanical power also means economy of time; that is, the doing of more labor, the cultivation of more soil in the same time. The horse is limited to ten hours of work a day. He must have his hour of nooning. He cannot profit-

ably begin work before 7 in the morning, and it will not pay in the long run to work him later than 6 at night. The engine requires no such consideration. It is always ready for work, day or night. And one engine can do much more work, figured at less than \$10 additional per month, do it in a much better manner, do it in less time, than can possibly be done by horses.

Where Engine Saves Money.

The employment of mechanical power upon the farm will help to solve the problems connected with farm labor. If a man has an engine that can pull six plow bottoms, he is doing the equivalent of work performed by three four-horse teams, each in charge of a man paid by the month. By using the engine, the farmer avoids the necessity of hiring the additional men to run the plows, and this is no little saving. The wages paid to hired men in the Missouri valley, where they begin in March and end at corn harvesting, is \$30 a month with board. No one would think of boarding a

hired man at an expense of less than \$10 per month. The additional equipage for a hired man, when additional breakage is taken into account, and in many cases the care of a driving horse for the hired man must also be considered, cannot be This would make the gross cost at \$50 a month per man. The man that uses an engine, and is thereby released from the necessity of employing so much help at large wages, with so much cost, will make a very noticeable saving.

Here, then, in a nutshell, are the arguments in favor of mechanical power. First, when everything is considered, it will be found to be less expensive in the matter of mere current expense of horse power. In the next place, the engine will be found capable of doing much more work and doing it much more efficiently, of complying more nearly with the demands of enlightened, modern agriculture than is possible with the use of horses. In the third place, it assists the farmer in solving the ever pressing problems connected with farm labor, and makes a great saving in the expense of

farm labor, provided the labor were always to be had and were always of a satisfactory character.

Engine that is Needed.

In selecting the type of engine that will be best adapted to his use, the farmer must be governed by the conditions with which he is confronted. It is self-evident that the small farms of the Missouri valley will require a different type of engine from those specially adapted to the wide reaches of arable land on the big ranges of the west. Again, the character of the soil must enter into calculation, and the farmer must select such tools as will do the most efficient work in his particular type of soil. It is also self-evident that a general utility engine is better adapted to use upon the small farms of this territory than the heavier and more ponderous types. The average farmer in the Missouri valley will need an engine not only for the cultivation of the soil, but for the hauling of loads upon the roads, for driving threshing machines and corn shellers, for road grading, for silo filling, and for the delivery of whatever power may be required, for whatever purpose, upon the average farm. Such an engine must be flexible and adapted to this general utility purpose. It must be flexible in its uses so that a farmer at a moment's notice may turn from one kind of work to another and always find his engine adapted to the uses demanded of it. The farmer that sees only one type of engine, or listens to the persuasion of a single salesman, is in no position to judge as to what engine will best meet his needs.

Exhibition of Engines Planned.

For the purpose of affording the farmers of central Nebraska a chance to form an intelligent opinion with reference to this matter at first hand, the Commercial club of Fremont is promoting a Farm Power Tractor Exhibition and Demonstration. R. H. Woodruff of the Twentieth Century Farmer will have charge of the field work. This will in no sense be a contest. It will be simply an exhibition of engines for delivering power for all purposes. It will afford to the farmer the opportunity so much needed of seeing all classes of engines at work, and of judging from what they see as to what type of engine will best meet their individual needs. There will be held at the same time with this exhibition a four-county agricultural fair, participated in by Dodge, Douglas, Washington and Saunders counties. This will make an agricultural exhibit second in importance only to the state fair. The exhibition will begin on September 8 and will close on September 13. It will be one of the most notable exhibitions ever held in this part of the country. Winnipeg for years has had a plowing exhibition and contest that has drawn visitors from all parts of the world. It is time that the United States, which has such greater needs for farm power than have yet been developed in upper Canada, should have an exhibition of its own. The farmers of the middle west will have an opportunity at this exhibition such as has never been afforded them before. It is earnestly hoped that they will take full advantage of the opportunity so generously afforded by the city of Fremont.

Workhouse Preferable to His Wife's Views

By ADA PATTERSON.

A MAN appeared in the police court of Yonkers and told the judge he wanted to be sentenced for a term in the workhouse. "I would consider it a great favor, your honor," he said, "for I want peace. I've been married for twenty-four years and our married life has been one long battle of chatter."

The judge investigating found that what the man's wife had chattered about was the husband's failure to support his family. It seemed that the family life was one long song, with her as chief soloist, and that the burden of her song was, "Why won't you, an able-bodied man, work? Why won't you work? Why won't you work?"

The woman had no trouble in proving that her song was a true one, but Adam, like the man who wanted to go to the workhouse, made a counter move. He told the judge he was bringing home money for family comforts, but that without waiting to find out whether he had any she began the

refrain, "You won't work." No doubt most men and some women who read that news from Yonkers remarked to themselves, or the family audience—the only audience that can't escape—"Here's a man given to the workhouse by his wife's tongue."

Why shouldn't a woman tell plain home truths to a husband who won't support his family? Why should she sit silent while the head of the house is also sitting silent, and the butcher and grocer are clamoring at the outer gates? Why in a country where the press has the right of free speech, the preacher can tell a community it is going to perdition, a lawyer can tell a witness he is a liar and the person he is opposing that he is a menace to the public weal, should not a wife tell her husband he lacks energy if he does?

But as murder is justifiable as a means of self-defense, so nagging may be justified in extreme cases. There are some situations in life when patience is no longer admirable. The woman who stands at the washtub while her husband lies in a drunken stupor in the corner, and a brood of little

children pull at her skirts, is carrying the doctrine of non-resistance too far. Her family affairs would be better were she to submit less and energize more. If she had her unlordly lord arrested for drunkenness and nonsupport, or if she feared his reactionary violence and made a new home for herself and children far from his beastializing influence, she would be a far more admirable figure than as a tear-dripping-into-the-washtub-figure, and for it her children would be more prone to call her blessed.

But if her instincts and training, and what she deems her principles, all point away from this course, what else can she do but talk, talk to her husband, and talk very much to the point? Always in her heart is a hope that some argument of hers may finally sink into his soul and stir his conscience. Meanwhile she does all she can. She keeps on talking. And who that is fair-minded and wishes humanity well can blame her? If there is an alternative, let some male or female Solomon arise and announce it.