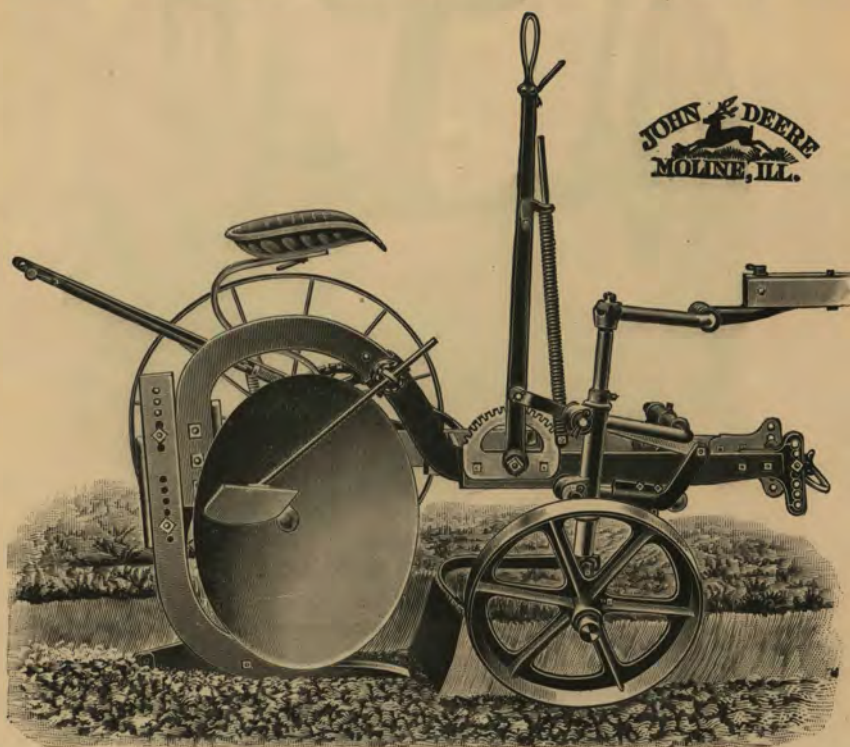


JOHN DEERE PLOWS



ecretary of Agriculture says:

I am inspired to allure the inventive genius of all interested to study the possibility of a plow which shall loosen and tear up the bottom of the furrow to a depth of say two or three inches below the cut of the plow. I do not mean to have the ground turned up, but simply to have it loosened, so that the rains may percolate below the depth of the furrow, instead of being forced to run off as though the furrow were an eave trough. The object that I seek is to stir and separate the earth at a greater depth with the same plow than it is possible to stir or separate it with the contrivances or implements for plowing now in use.



THE SECRETARY—SINGLE

A Revolution in Plowing. A new invention. Everywhere pronounced the improvement of the Century in agricultural implements. A departure from the wedging principle as embodied in the plow. Better pulverization and stirring of the soil. Better penetration. A breaking-up of the present system of impact and glazed furrow bottoms, retaining the moisture where it falls and preventing washing of the plowed ground. Has only to be seen in operation to commend itself. Made as a single sulky or a double gang.

AN ENTIRELY NEW SYSTEM OF PLOWING



SECRETARY—SINGLE—REAR VIEW.

For a quarter of a century the revolving disk has been known as the best means of cutting and turning the soil, but the difficulty of keeping it at a uniform depth in the ground and in a straight line of progression, setting as it does at an angle to the furrow, has prevented any general success of it as a plow for opening up and turning the furrow.

We have been experimenting in this line some years, and have at last hit upon a hook-shaped tine, which penetrates the soil, pulling the disk any desired depth and holding it to a straight furrow line.

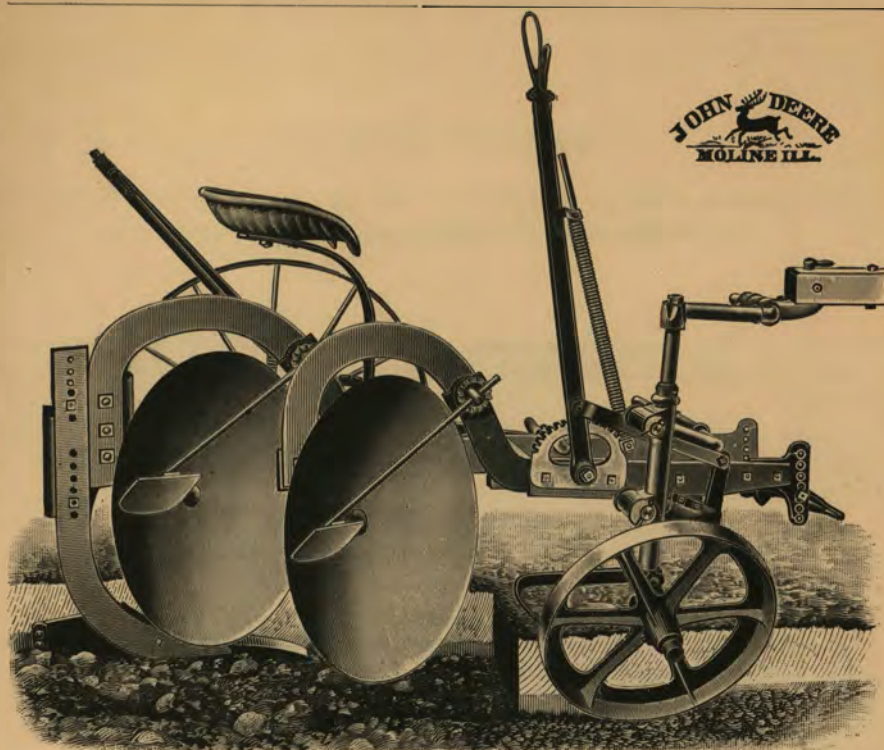
In this we claim an invention of rare merit, and its operation has only to be seen to commend it.

This new implement, which we now place on the market, is the outcome of a demand emphasized by the Secretary of Agriculture, who asks that a plow shall be invented that shall not leave the earth over which it passes so impacted by pressure as do the plows now in use.

In shallow tillage, with a cut say four inches in depth, the leverage of the plow point against the earth, the whole weight or power of the team producing a downward pressure at the cutting edge of share, leaves the base of the furrow that is turned over smooth and hard. In fact, it renders it almost impervious to water. Therefore, when a torrential rainfall comes upon land thus plowed and lying upon a land slope, the wash is enormous, and all the good surface earth is carried away. Furthermore, the water being unable to percolate through the subsoil, drains off and leaves the subsoil dry and hard.

By the use of the "Secretary" the ground is left in an entirely different condition. The disk scoops out the furrow, and in throwing it over thoroughly pulverizes it. The bottom of the furrow is left by the disk in its thoroughly natural condition; that is, there has been no downward pressure on or sliding over of the surface to make it hard and smooth. The penetrating point, which runs under the disk, thoroughly breaks and stirs up the subsoil, and leaves it in the best possible condition to receive and retain moisture. The result is that in very heavy rains, the water, instead of running off, will sink down into the subsoil, and when the dry weather comes on will be drawn up to supply moisture to the plants.

A REVOLUTION IN PLOWING



SECRETARY—DOUBLE.

Patented October 22, 1895.

So novel is this departure from the present style of plowing, that we have approached it with some caution. After giving exhaustive trials, experiments and adjustments, reaching over the entire country that our trade covers, we have arrived at the point of placing it upon the market with our unqualified endorsement and warranty. We believe it the greatest improvement in plows yet made since the day of the forked stick, and invite the attention of the advanced farmer.

By the disk we save the friction and wear of the soil running over the plow surface, the impacting of the earth so turned, and the hard glazed furrow bottom left by cutting and wedging the furrow as with a plow.

A greater depth of penetration than with any known system. More thorough pulverization and loosening up of the soil. In fact a riding plow doing all the work on wheels, eliminating the wedging principle as embodied in the plow.

It turns an even and uniform furrow, breaking and loosening up the bottom.

Covers weeds and trash, pulverizes the ground thoroughly, requiring but little, if any, harrowing.

It runs steadily and scours where no moldboard will work.

It is very strong, simple and easily handled.

Anybody can work it, and the cost of wearing parts is reduced to the minimum.

It is adjusted to the latest improved sulky attachment.

It will increase your crops.

It affords the best known means for controlling moisture in the soil, and is the key to successful crop raising.

The lightest draft plow made for the work done

The Single Disk will cut a furrow of from thirteen to fifteen inches at will. The Double Disk will do twice the work of the single.

We have what the farmers want and should have—a money saver—a money getter.

PRONOUNCED THE INVENTION OF THE CENTURY IN =====PLOWS=====

THE FOLLOWING

ARE COMMENTS MADE AT A TRIAL OF THE SECRETARY AT THE INTER-STATE
CONVENTION HELD AT GARDEN CITY, KAS., OCTOBER, 1895.

One of the principal members of the State Irrigation Association said :
"One plow built like that is worth four windmill plants to the farmers of this
country."

Prof. C. C. Georgeson, of the State Experimental Station at Manhattan, Kas.,
said : "That is just what we need for this state, and I want one of them at our
college. We can do wonders with such a plow."

Prof. A. C. Magruder, of the Territorial Experimental School at Stillwater,
Ok. Ter., said : "That is what I am looking for. I think, without doubt, it is
the best plow ever produced."

Mr. John Gilman, of Worcester, Mass., and Gilman, Idaho, publisher of the
United States Farm Register, Worcester, Mass., and founder of the town of Gil-
man, Idaho, and who farms 3,000 acres in Idaho, said : "After fifty years of ex-
perience in farming and agricultural implement business, that is the best plow I
ever saw, and will bring more results to the farmers than anything they have yet
used."

Judge Sutton, of Russell, Kas., a member of the State Experimental Board,
said : "That is the best plow I ever saw."

Mr. Cowgill, of Topeka, Kas., editor of the Kansas Farmer, said : "That is
a fine plow, and is what we need."

Many more favorable testimonials might be added, but the above, springing
from the sources they do, tell the universal verdict.

Comparative Test Made by Self-Registering Dynamometer, October 17, 1895.

GAZELLE GANG PLOW.

First Test—Ninety lineal feet; indicated draft, 600 to 900 lbs.; registered draft, 725 lbs.; aver-
age depth, 6 9-10 inches; average width, 25½ inches; amount of soil removed, 110 cubic feet;
average draft per cubic foot, 6¼ lbs.

Second Test—Ninety lineal feet; indicated draft 600 to 1,000 lbs.; registered draft, 730 lbs.;
average depth, 6½ inches; average width 24 8-9 inches; amount of soil removed, 101 cubic feet;
average draft per cubic foot, 7¼ lbs.

DISK GANG PLOW.

First Test—Ninety-two lineal feet; indicated draft, 600 to 1,000 lbs.; registered draft, 795 lbs.;
average depth, 7 3-10 inches; average width, 24 inches; amount of soil removed, 112 cubic feet;
average draft per cubic foot, 7 1-10 lbs.

Second Test—Ninety two lineal feet; indicated draft, 500 to 1,000 lbs.; registered draft, 760 lbs.;
average depth, 7 5-18 inches; average width, 24 inches; amount of soil removed, 111½ cubic feet;
average draft per cubic foot, 6 8-10 lbs.