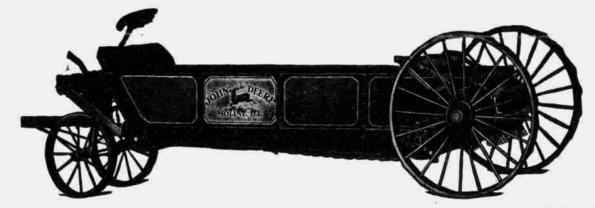
# JOHN DEERE

**OMAHA -- SIOUX FALLS** 



## THE "JOHN DEERE" LOW DOWN STEEL FRAME MANURE SPREADER

No Clutches No Chains No Adjustments THE SPREADER WITH THE BEATER ON THE AXLE
ALL DRIVING PARTS ON THE MAIN AXLE
Only 36 Inches From Ground to Top of Box

Roller Bearings Light Draft Easy to Load

# What Manure Will Do for You

By Dr. W. E. Taylor, Soil Culture Department, Deere & Co.

Do you know what the value of manure from live stock in the United States amounts to each year? Do you know that it amounts to more than two and one-quarter billions of dollars and that more is wasted in value than the taxes of all the farms in the United States?

Manure is just as essential to the life and growth of plants as bread, meat and potatoes are to you,, or corn, oats and hay are to live stock.

Manure contains the essence of fertility of the soil. Take it away from your land and you rob it of its food. You disorganize its physical body and the crop pays the penalty.

Manure contains nitrogen, phosphorus and potash. These are the essential elements that enter into plant food compounds and they have a greater value than the same elements in commercial form, for the reason that they carry with them organic matter undergoing the process of formation into humus, a substance necessary to make available the plant food elements.

Why use a manure spreader? Let me ask you a question: Why does a cook distribute seasoning into the food and then thoroughly work it evenly throughout the mass until every particle of the food is seasoned? If a cook should carelessly throw a handful of rock salt into a kettle of porridge, would the seasoning be properly distributed and would the porridge be palatable? For the same reason the farmer should evenly distribute the manure over his land, a top dressing being preferable, and then, by using a disc, work it into the seed-bed until the distribution is thorough. By this means the plant food and the organic matter comes into contact with all the particles of soil, and it must be remembered that the food-gathering roots secure

their nourishment from a coating which forms around each particle of soil containing moisture and plant food.

If the manure is carelessly spread by hand, it is left in lumps. One place has too much, another not enough, and often it does more harm than good.

If manure is carelessly spread and plowed under in bunches, the bunches form air spaces at the bottom of the furrow, preventing a compact contact, thereby preventing capillary attraction. In such cases, much of the essence of the manure leaches into the deeper subsoils and is lost, and because of the insulation preventing capillary attraction, the seed-bed dries out and the crop perishes.

If the manure is evenly spread and thoroughly disced into the seed-bed, the plant not only procures food contained in the manure, but because of the even distribution of the organic matter, the soil is warm, mellow, and readily receives and retains moisture.

It has been repeatedly demonstrated that if manure is used as a top dressing on a plowed field, that the crop is increased 25 to 30 per cent.

Repeated trials extending over a series of years has demonstrated the fact that a manure spreader used on 40 acres of land will more than pay the cost of the machine by increasing the crop, to say nothing of the great saving of labor.

The experiments of Mr. Chesney Hatch, of Newton county, Indiana, are strictly in keeping with hundreds of other like trials. Mr. Hatch experimented by spreading manure on 20 acres and at the same time compared the results with crops raised on similar land without manure. I give herewith the results of his experiments, which should cause the farmer to seriously consider the great value of the manure spreader.

### MANURE SPREAD WITH A SPREADER.

Kind of Grain	No. of Acres	Time Planted	Amount Harvst'd	Loadsof Manure per Acre	Value of Crop	Value of Crop per Acre
Corn Oats Clover	10	Apr. 6	620 Bu. 560 Bu. 30 Tons	5 5 4	\$248 00 156 80 125 00	15 68

### MANURE SPREAD BY HAND.

Corn	10	May 4	500 Bu.	5	\$200 00	\$20 00
Oats	10	Apr. 6	420 Bu.	5	117 60	11 67
Clover.	10	Apr. 6	21 Tons	4	105 00	10 50

### CROP RAISED WITHOUT MANURE.

Corn	5	May 6	200 Bu. 190 Bu.	None	\$80 00 53 20	\$16 00 10 64
Clover -	5	Apr. 9	190 Bu. 71 Tons	**	37 50	7 50

The manure spreader secures a gain over the hand spreader in the corn crop of \$4.80 per acre, or \$192.00 on forty acres. In oats the spreder has a credit of \$4.01 per acre over the hand spreader, or \$160.40 on forty acres. In clover, the gain was \$2.00 per acre. The gain made in all the crops where the spreader was used over land where no manure was applied was so marked that a farmer cannot be without one. In fact, spreading manure with a hand fork is as crude and unprofitable as the old cradle would be at this age as a harvesting machine. The writer has carried on for a number of years experiments which have demonstrated that where manure is used as a top dressing, evenly spread with a machine, gives an increase of from 10 to 15 per cent over land which has been plowed /30 after the manure was applied with a spreader, / and double the increase if spread/ with a hand fork before plowing.