

Fig. 26.—Rear view of six bottom plow showing one bottom turned back for travelling on the road, and another lifted up showing amount of vertical movement.

"Newe apte, or compendious formes or kindes of engines or instruments, and other profitable invencions, wayes and meanes, for the good of our Commonwealth, as well as to plough grounde without horses or oxen and to enrich and make better and more fertill as well barren peate, salte and sea-sand, as inland and upland grounde, within our Kingdomes of England and Ireland and our Domyonyon of Wales; as also to make boates for carriage of burthens and passengers runn upon the water as swifte in calmes and more saff in stormes than boates full-sayles in great wyndes."

It was left, however, to one Jos. Parker, in 1836, to construct a plow, which on being tried, performed admirably, this being the first time known at present of land having been plowed by steam. It has been said by many who saw this machinery

There are several outfits at work in California, and at present there are two in Canada.

In this country, however, with its broad fields and long furrows, the direct traction system has been found to be most satisfactory. About 1885 what was perhaps the first engine gang to be manufactured on the American continent was built by the Geiser Manufacturing Company, of Waynesboro, Pennsylvania. It was a real engine gang, but was slow in coming into use because of the fact that there were

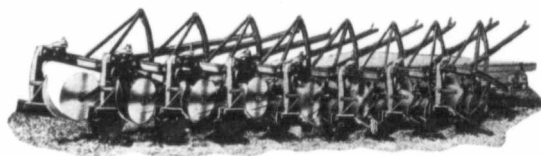


Fig. 28.—Eight bottom Big Dutchman engine gang.

no engines really suitable for plowing purposes and as traction plowing was in more or less of an experimental stage at that time, the farmers hesitated to pay the price of an engine gang and then fall down.

The period between 1900 and 1905 is marked as the time when attention was really diverted towards the traction plow. This period marks the real beginning of development in the Northwest, which created a demand for larger farm tools, and where there is a demand it is generally always met. It is a rather difficult matter to trace the developments of the traction plow in anything like chronological order as the idea seemed to have been working in the minds of several people at about the same time. Reeves and Company and the Avery Company both brought out steam lift engine gangs about 1905 or 1906, and in 1905 the Cockshutt Plow Co. brought out their since famous engine gang. We wish to say a word or two about this gang before passing on as it really marks the beginning of traction cultivation in

Western Canada. The idea of this plow originated in the West. It was the natural result of an insistent demand. That it was not a mere theory is best evidenced by the fact that the Cockshutt engine gang of today is practically the same in general design that it was in 1905. At that time it was carried on skids instead of wheels, and certain parts have been improved and strengthened, but in general appearance it is the same implement. This merely shows that the men who first designed it knew the requirements of such a machine and built accordingly.

The next plow to make its appearance in Canada West was the John Deere engine gang. This came about 1907, although it had been in the experimental fields for some time previous. This plow differed from the Cockshutt in that two bottoms instead of one was and still is operated by one lever and curved steel standards were used instead of straight cast ones.

Both of these plows have been very successful in traction cultivation on both sides of the line, and have served the traction plowmen in Western Canada to the tune of thousands of plows. Others have followed in quick succession, but the majority have

wonder just how much of this decrease in cost is due to the traction plow. Certainly some credit is due on this score. It is an implement in itself and requires careful study and attention. The other day the writer was reading an article by W. T. Paull, of the Oliver Company, on "How the Plow Hitch Affects Draft;" and while the point itself might seem a minor one, the article itself was three or four pages long, going to show that the engine plow is a subject for serious study. It takes power today to handle these plows, and power, either oil or coal, is measured in terms of dollars and cents.

The traction plow has enabled the farmer to measure work done in teams of draw-bar pull. At the Winnipeg Motor Competition in 1911, six different makes of engine gangs were represented and the competition in low draw-bar pulls per plow was keen. Western Canada has as yet about 150,000,000 acres of virgin prairie to turn over, a very large portion of which will be handled by the traction plow. Its importance is, therefore, unquestioned. It, together with the tractor, must perform a large share of the work, and in the years to come the old land will more and more be subjected to the leavening influence of the properly operated traction plow.

It is with the idea of showing just what there is to this big factor in modern farming that we give our readers details of most of the engine gangs on the market today. Merits or demerits will not be discussed. It is for the reader to so thoroughly study the plow itself that he can choose the plow best suited to his purpose by a careful analyses of the various parts. For most of the illustrations we are greatly indebted to the American Thresherman, who have gone to considerable pains and expense to get them together.

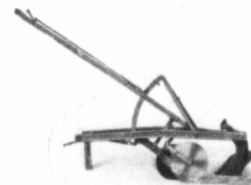


Fig. 27.—Arrangement of individual in Big Dutchman gang.

at work that if these men had adapted their invention to plowing on ordinary land instead of to the reclamation and cultivation of bog lands they would have succeeded. As it was, however, after spending some \$60,000 they abandoned their scheme. The machinery consisted of an engine travelling along the headland one side of the field, and an anchor on the other, the method of working being somewhat on the lines shown in the illustration.

The early traction plows were all of the cable type, and these are still in use today in England and many foreign countries.

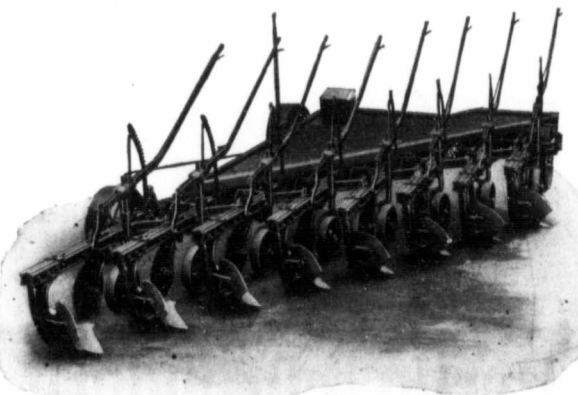


Fig. 29.—The Rumely engine gang plow.