

From Chaos to Order in Small Tractor Design

By F. A. VALENTINE

MUCH has been written, much will be written about the tractor, its development and future. Many of the articles have been written by men who know, and are full of hard sense, but many others of nonsense, and perhaps this article will belong to the latter class; however, the writer feels qualified to write intelligently as he has had long experience both in the manufacturing and sales end of the tractor business, but let the reader be the judge by what follows.

Who killed "Cock Robin" in the large tractor game? Two causes contributed but the one that contributed by far the largest share was the greed of the manufacturers for quick profits which resulted in the placing on the market crude, and in many cases untried machines.

This same condition confronts the future of the smaller tractor, and the writer could mention names and refer to several cases in point. The small tractor has limitless possibilities if safe and sane methods are used by those who are designing and preparing to place tractors on the market, and if not the results will be in a way the same as in the case of the large tractor, but with this hopeful feature, that the purchaser will not be stung to the tune of from \$2,500 to \$3,000 so that he may recover and come back. We sincerely hope that this condition will not prevail for it is too great an industrial possibility to spoil.

At this writing the small tractor is in absolutely a chaotic condition relative to design, number and location of the drive wheels, type of motor; in fact, nothing is standard with any

other machine except in minor details.

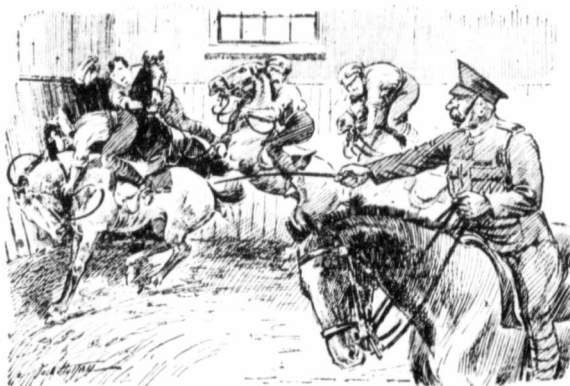
Let us briefly at this point enumerate, and consider some of the tractors either in the process of building, or already on the market, and I am in position to write intelligently, as I am located in the gas tractor centre of the world, as this city (Minneapolis) has shipped, and is shipping, more tractors than any other city, or perhaps all others put together.

There is the regulation four wheel type with differential, both rear wheels driving; the four wheel with one wheel driving, eliminating the differential; the four wheel machine with all wheels driving. This covers the four wheel machines.

Then we come to the three wheel type which far outnumbers all of the others at the present time, and are of four classes: One wheel driving either in the furrow or on the land; two wheels driving with guide wheel either front or rear, making two in this class. Then we have the truck type, as it may be called, with automobile steering gear and one wheel in the rear as the driver. There is still another class, the caterpillar, of which there are two types, single and double creeper.

This only covers the types that have been actually built, and in most cases quite a number sold, and excludes a lot of freaks which if Barnum were still alive would be in captivity, under tent with the white elephant, to which class they belong, as the buyer finds to his sorrow but too late. This gives a fairly accurate canvass of the situation that confronts the buyer at the present time.

Conditions are very much the



TOO SARCASTIC BY FAR

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No. 124

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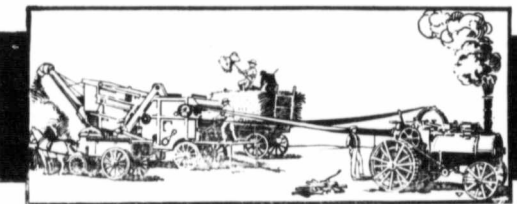
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