

The Place of the One Bottom Tractor Plow in Power Farming

By W. R. HEILMAN

THE one-bottom plow for tractors has not received very much attention and yet there are times and places where it may be used to fine advantage. For heavy gumbo, for virgin sod, for hilly fields, for very deep plowing, the one-bottom plow is in demand.

With small tractors, the one-bottom 14- or 16-in. plow often may weigh down the balance on the right side as between success or failure with the tractor. In plowing at a good speed with light tractors in heavy soils, what is more logical than to lighten the load in order to favor the tractor? This applies to all two-plow tractors just as forcibly as similar exceedingly heavy load conditions makes it advisable to use a two-bottom plow instead of a three on larger machines, which generally pull three.

The one-bottom plow for tractors is furnished with the regular equipment as for two- and three-bottom plows. It has the same type of power lift with the clutch operated by pulling a rope. The hitch is like those supplied on larger plows and is made

especially for tractors. In fact it is just the same plow throughout as the two-bottom tractor plow, except that the second beam and bottom have been removed and the rear wheel has been switched over to the first beam. A forging has been put in to take the place of the second beam in carrying a bearing for the axles at the front of the plow. The rear end of this forging runs across to the first beam and is bolted to it. The plow works perfectly.

The width of the furrow is determined by the setting of the hitch to the right or left, just as is done to get the first bottom of a gang plow to cut the desired width.

The one-bottom plow is convertible into the two-bottom, or the two into the one, by the addition of a few parts.

With a 14-in. general purpose bottom having a fairly large moldboard, the plow may be set to cut any desired width from 12 in. on up to 16 or 18 in., just as is so often done with a 14-in. sulky plow. And by using the one-bottom plow instead of the two, the lighter load will permit of main-



Angus McVicar with his well thumbed Titan and the family gang did splendid work till the last lap

taining the speed of plowing, so that what is apparently lost in the smallest width of cut will be largely offset by the gain in speed and by eliminating stops and trouble from overloads.

A further advantage of the one-bottom plow is that the lighter load allows the pulling of a harrow or a pulverizer with the plow. Doing this is a profitable operation, because working the ground down immediately after plowing is more easily done than after the ground has dried out. It also does away with the running of the tractor over the plowed ground. The practical application of this combined plowing and harrowing depends upon the kind of soil and its condition, as to whether or not a finished job of working down can be done. With the section of harrow taking in two or more times the width of the furrow, the ground will get a pretty thorough working.

The one-bottom plow hitch is best adapted to tractors on which the hitch point on the tractor comes somewhere ahead of and between the first and second beams of a two-bottom plow. That hitch point will work nicely with a one-bottom plow, as has been proved beyond a question in actual plowing.

When these one-bottom plows are built with extra heavy tractor plow beams as they are constructed, they are fit for heavy duty in fields where there are stumps and rocks. With the added protection of a release

hitch, the one-bottom plow will stand a lot of punishment. For the operator's carelessness in this respect. A new tractor may, or it handling excessive trash, the one-bottom offers less trouble from clogging than the larger gangs.

The point may be brought up that when it comes to pulling one-bottom the farmer might just as well stick to his team and sulky, because he could do as much work. The error in this line of reasoning is quickly pointed out. He may plow just as wide a furrow, but when it comes to speed and endurance, the machine wins. With the one-bottom plow the tractor will yank it along at a speed and depth that will make a team look like it was tied to a post.

Thus the one-bottom plow has its place behind the tractors which usually pull two bottoms, whenever the load of the two is more than the tractor should pull. It is no fault of the tractor that certain field conditions make the load on one-bottom a reasonable drawback pull for a tractor, known as a two-bottom plow machine in usual field work. And when the heavy load conditions are there and have to be met, it is far better to acknowledge from the start that the one-bottom plow is the proper one to use rather than to claim that the tractor will pull two and then have trouble doing it. Pull two where the tractor can, but keep in mind that the one-bottom plow is available when needed.



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