

## COMMERCIAL DEVICES USED IN LARGE SCALE

### FERTILIZER APPLICATIONS

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On the western slope district of Colorado in the spring of 1940, we began using Nitrogen fertilizer by side dressing beets with it after thinning and just before the first irrigation. By the time we were able to go into this work extensively we found (because of conditions due to the War) that it was impossible to buy machinery with which to carry on this work so we were forced to devise a machine of our own. We needed something that could be passed on from one grower to another and also something that would not lose us time in putting on and taking off of equipment as would be necessary if we used a Tractor or a beet cultivator. On the western slope most alfalfa fields are furrowed for irrigation and this is done with a machine known as an alfalfa creaser. So after giving it a great deal of thought and taking the matter up with a local blacksmith this (the alfalfa creaser) was the machine we decided upon.

We were able to purchase several of the machines and started in assembling them with fertilizer cans and the clutches and gears off of old Moline beet drills. The machine was set to put fertilizer in every other row of beets and at the same time to furrow out every other row for irrigation. And I advised immediately following this side dressing with a light irrigation also recommended using 150 to 200 pounds of the fertilizer per acre and that as soon as the beets need another irrigation-repeating this operation on the in between rows which have not already been touched.

This machine can be purchased and assembled for a total cost of about 160 dollars. It can be used also for applying phosphate to alfalfa when cleaning out the furrows in the spring of the year.

We also converted Dixie Beet Thinners into 4 row side dressers. For these we used International parts, I have these parts listed by number and they may be purchased through your local dealer. I have two sketches which would be helpful in setting up the conversion bundles.

The complete conversion, including the parts I have listed, amounts to approximately \$56.00 plus tax. The price may be slightly higher now.

If the Dixie is not equipped with rubber tires, you will need to include wheels at \$6.00 per pair and tires and tubes at \$16.00 per pair. These may be obtained from the Dixie Company at Dallas, Texas.

The International Harvester Company makes a fertilizer attachment which may be used for side dressing. This attachment is made for their Farmall A and B tractors. The fertilizer cans are mounted on the side of the tractor and are driven by a gear which fits on the rear axil. The shoes or shovels for putting the fertilizer in the ground are attached to the cultivator the same as any other tool. They make about the same equipment for the H and M tractors. These attachments will cost from your local dealers between 65 and 70

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dollars (\$65 to \$70) depending on your freight charges and sales tax.

Up-to-date the John Deere Company has been unable to furnish us with any side dressing equipment but when I visited their factory at Moline, Illinois this past month they advised me they would have attachments for their tractor cultivators and have them on the market some time this year. They didn't have any printed material at that time to show me but since then have sent me pictures of this attachment for their 4 row tractor cultivator. The cost of this 4 row attachment is to be \$137.00 and \$172.00 for the 6 row FOB Moline.