Home-Made Header Attachment

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In certain sections of Montana where the grain crop is too short to be cut successfully with the ordinary binder, there is a demand for headers, since they save short grain. No twine is required. A larger crop acreage can be cut and the grain goes directly into the stack. Much of the straw is left in the field which tends to maintain fertility. The chief disadvantages are found in the high cost of the header and a larger crew to operate the outfit. Grain should be somewhat riper for heading than for binding.

Many farmers in Montana who had binders felt that they could not afford headers, and adopted a home-made idea which enables them to use their binder as a header with the addition of a home-made elevator. The scheme has been tried and has been found successful. One day’s time and about $10.00 is the cost to make this change. The binder can cut as short grain as a header but cannot bind it, because the grain becomes scattered. When this attachment is used, three men with an eight-foot binder are able to cut about 15 acres a day of short grain. Some use hay racks fixed up similar to a header box, others recommend the use of the regular header box. One person is needed to drive the header box team, another man is needed to take care of the grain as it comes into the header box, while the third drives the binder. When the header box is filled the man driving the binder builds the stack as the other two unload the headed grain. The horses are resting during this brief time that it takes to unload. Stacks should be located so as to avoid long hauls. Some farmers recommend the use of two header boxes with a crew of five people, thus enabling the binder to run continually. Where labor can be obtained or exchanged this is the better practice.

MAKING THE HOME-MADE ATTACHMENT

Remove all of the binding apparatus from the binder, including bundle carrying attachment, as illustrated in Figure 2. Roller “A” is the one which will act as pulley for the elevating canvas of the attachment. Roller “A” in the ordinary binder is bare. At point “B” the elevator boards will be attached. The elevator will be braced from point “C” at frame, to the outside of the elevator board. This is done at both front and back sides. The work of a blacksmith may be necessary to make the irons that fasten the elevator boards to the binder frame. After each board is fastened
securely at point “B” of Figure 2, it should then be braced at the exact angle desired. What this angle shall be depends somewhat upon the height of the wagons to be used under the header boxes. Too steep an angle is to be avoided, since the grain will not be carried out by the canvas if made steep. The boards used are 1"x10", the lengths of these boards may vary somewhat; for low wagons, boards may not be over five feet, for high wagons they may well be six feet long. Before setting the elevator at the desired angle,
be moved up and not be broken. While this home-made apparatus might be made flexible we have found no farmers making it that way yet. After both elevator boards are braced at the proper angle it is then well to next brace the two boards with each other by the use of diagonal strips of iron as illustrated in Figure 1. These braces between the boards must be placed so as to allow the canvas to surround them and not catch the canvas and tear it. Cross rods are required near the upper end of the elevator to prevent the boards from spreading. After the elevator is securely braced you are ready to put in the uppermost elevator roller, labeled roller “D” in Figure 1. This roller must be equally distant at both ends from roller “A.” No boxings are required in this board. Simply drill the holes the size of the roller pins. The length of roller “D” should be the same as the length of roller “A.”

The elevating canvas most generally used is made at home from 20-ounce canvas. It is doubtful that an old platform canvas can be used. If the elevator is not too steep strips will not be necessary. When necessary, thin slats must be attached to canvas. The slats must be thin because roller “A” fits quite closely to the adjoining roller and since these two rollers have their adjacent edges going in opposite directions they must not strike each other.

To make this heading attachment for the common binder requires but an ordinary farm knowledge of machinery. There is no absolutely fixed way. No extra gears of any kind are required. Materials that may have to be purchased are the two boards; the smooth canvas, the uppermost roller and the iron braces. The average farmer need have no fear of this matter being complicated. However, information regarding this will be gladly given by the Experiment Station at Bozeman, Montana.