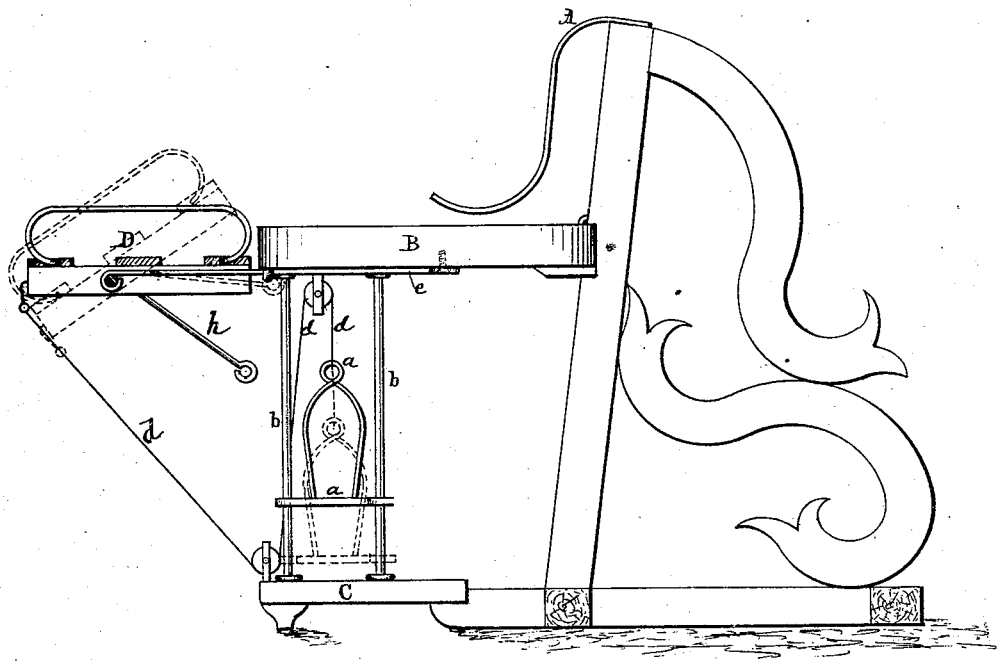
S. G. KING.

Sheaf-Dropper for Harvesters.

No. 160,270. Patented March 2, 1875.

Fig. 1.



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SMITH G. KING, OF ROUND GROVE, ILLINOIS.

IMPROVEMENT IN SHEAF-DROPPERS FOR HARVESTERS.

Specification forming part of Letters Patent No. **160,270**, dated March 2, 1875; application filed December 18, 1874.

To all whom it may concern:

Be it known that I, SMITH G. KING, of Round Grove, in the county of Whitesides and State of Illinois, have invented certain Improvements in Sheaf-Gatherers, of which the following is a specification:

My invention relates to a device to be attached to grain-harvesters of that class upon which the binding of the grain is done, so that by means of my machine the sheaves, as bound, may be carried with the machine until a number of sheaves sufficient for half a shock is collected, and that such number may be deposited together out of the way of the next passage of the team, and convenient for shocking.

Figure 1 is a side elevation, looking a little forward, of a machine embodying my invention.

The parts A, B B, and C are the ordinary and usual parts of the class of harvesters referred to, and are here shown merely to illustrate the method of the attachment of my invention. A is an inclined plane, down which the grain is discharged from an elevator (not shown) running from behind the sickle to the summit of such inclined plane. This inclined plane is provided with a spout at its lower end, in which the unbound grain collects, and from which it is taken by the binders to the tables B B and there bound. It is at this point that my invention attaches, which is designed to deposit the sheaves in numbers convenient for shocking; and I will now proceed to describe it.

D is a platform, extending from one of the binding-tables B to the other, and at about the same altitude as the tables B B. Two rods, *e e*, having eyes at each end, and about five-eighths of an inch in diameter, are provided. One end of the rods *e e*, respectively, is placed on an iron pin inserted horizontally into the outer sides, respectively, of the end cross-pieces of the platform D, and at a point on such cross-pieces two-thirds out from the inner side of the platform D. These rods, respectively, are then passed through a staple on the under side of the tables B B, and fastened by a bolt passing through the other end of such rods up through the tables B B, the staple being driven in after the rod is fastened to the table B. The pins in the cross-pieces fit loosely in the eyes of the rods *e e*, and thus allow of a rotary movement to the platform D. The platform D is supported on the pins thus inserted in the eyes on the rods *e e*, respectively, and such support is placed out two-thirds of the width of the platform D, so that when the latter is tilted or partially rotated outward it may return to its horizontal position by its own gravity. A strong cord, *d*, is attached to the outer end of the forward cross-piece of the platform D. This cord is passed down to and through a stationary pulley fastened on the upper side and near the front end of the lower platform C. The cord is then passed up to and over a small stationary pulley fastened on the under side of the front table B, and from thence the cord is passed down and fastened in an eye in the top of the stirrup *a*. The two perpendicular rods *b b*, extending from the lower platform C to the under side of the front table B, pass, respectively, through a hole in each end of the plate forming the bottom of the stirrup *a*. This cord is of such length that when the platform D is in the horizontal position the bottom of the stirrup *a* is suspended about six or eight inches from the upper surface of the lower platform C. The binders, two in number, standing on the lower platform C, and binding, respectively, back to back on the tables B B, as they bind, place the sheaves on the platform D until they have accumulated on the platform D sufficient sheaves for half a shock, when the front binder places his foot in the stirrup *a*, and, forcing it downward by means of the cord-connection, tilts the platform D outward, and discharges the sheaves that were on it in a pile on the ground, and the platform returns by its own gravity to the horizontal position. The stirrup *a* plays vertically on the perpendicular rods *b b*. An iron rod, *h*, is attached to the front cross-piece of the platform D, so as to strike the front table B and prevent the platform D from being tilted so far outward as not to drop back to its original position. The cord may be attached in the eye of this rod, dispensing with the lower pulley. As the platform D falls back to horizontal position it draws the stirrup *a* also up to its first position. The plat-

form D is provided with guards at either end to prevent the sheaves from dropping from the ends of the platform. The platform D may be supported on long strap-hinges placed under the cross-pieces; but the advantage of the rods consists in the fact that they may be sprung sufficiently laterally to be taken off the fixed pins, and thus the platform be readily removed and thrown on the harvester in passing through gateways or bars. My attachment is placed, of course, on the side of the harvester, and the table B, to which the rods *b b* are attached, designates the front end and the direction in which the harvester moves. The stirrup is placed under the front table, because the binder at that table rides with his face in the direction in which the machine moves, and he can readily see when to discharge the sheaves, so as to have two discharges, or enough for a shock, at one spot.

The harvesting-machines of the kind referred to—that is, upon which two men ride and do all the binding—are rapidly superseding all other species of reapers; and my invention is intended to save the labor of one man in gathering sheaves. A still further advantage consists in the fact that this method obviates the old plan of dragging the sheaves through the stubble, thereby shattering out the grain, disarranging the sheaves or breaking the bands, and spoiling the sheaves for shocking and stacking, and leaving scatterings wherever a sheaf was thrown off or was dragged through the stubble. There is a necessity in having the platform tilted with the foot, as when but two binders do what was formerly the work of five or six, their hands are busily and constantly employed in binding or making bands.

I do not claim the inclined plane A, the tables B B, nor the lower platform C, as these are parts of harvesters now in use; but

I claim as my invention—

The stirrup *a*, perpendicular rods *b b*, and cord *d*, in combination with the tilting platform D and stop-rod *h*, as and for the purpose specified.

SMITH G. KING.

Witnesses:
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