

(No Model.)

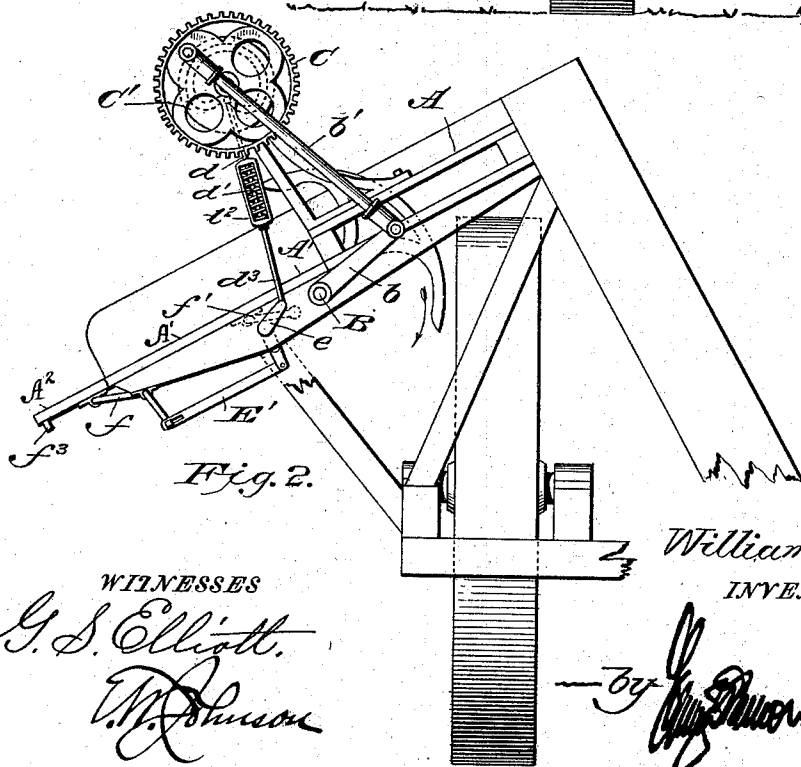
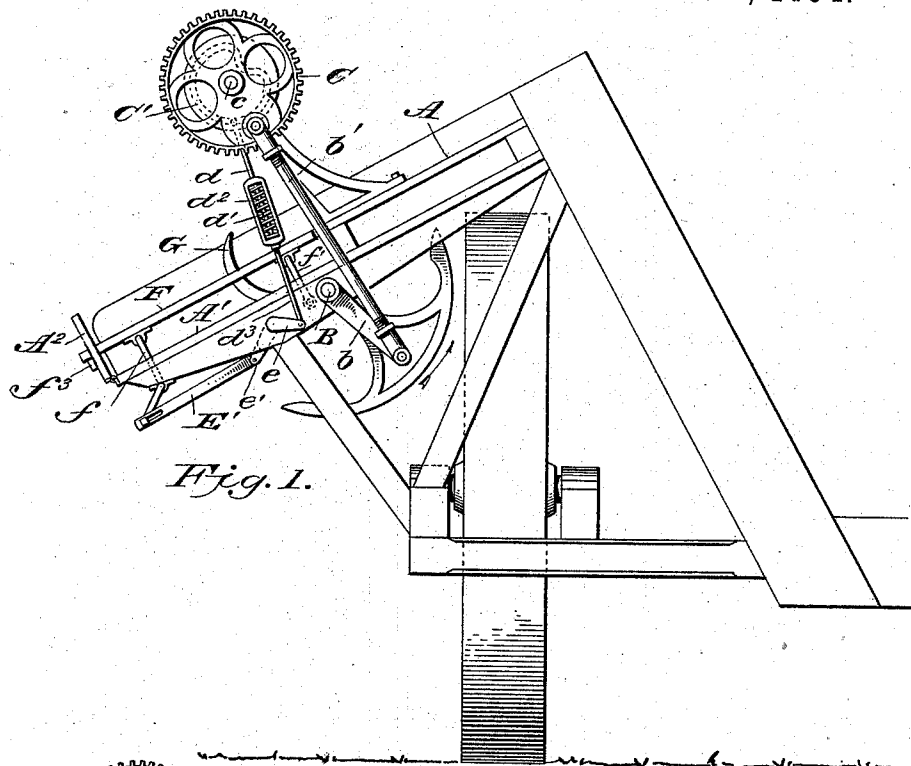
2 Sheets—Sheet 1.

W. A. WILSON.

ATTACHMENT FOR SELF BINDING HARVESTERS.

No. 530,376.

Patented Dec. 4, 1894.



WITNESSES

G. S. Elliott.
T. M. Johnson

William A. Wilson
INVENTOR

—by [Signature] Attorney

(No Model.)

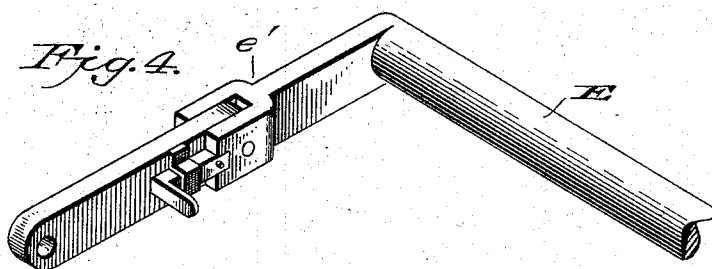
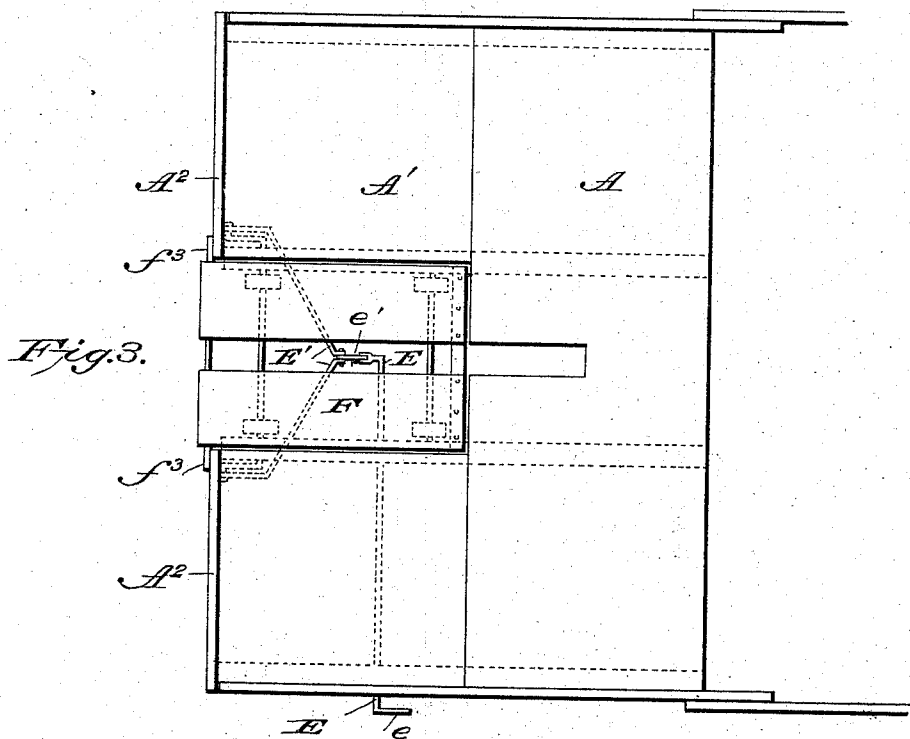
2 Sheets—Sheet 2.

W. A. WILSON.

ATTACHMENT FOR SELF BINDING HARVESTERS.

No. 530,376.

Patented Dec. 4, 1894.



WITNESSES

G. S. Elliott.
T. W. Johnson.

William A. Wilson
INVENTOR

Wm. A. Wilson
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM A. WILSON, OF NIOTAZE, KANSAS.

ATTACHMENT FOR SELF-BINDING HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 530,376, dated December 4, 1894.

Application filed August 9, 1894. Serial No. 519,905. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. WILSON, a citizen of the United States of America, residing at Niotaze, in the county of Chautauqua and State of Kansas, have invented certain new and useful Improvements in Attachments for Self-Binder Harvesters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a self-binder harvester with means for dropping the sheaf upon the sheaf-carrier, said means embodying a table or platform which is adapted to be lowered after the sheaf is formed and thus provide an increased space below the tying or binding mechanism which permits the sheaf to pass freely therefrom without liability of choking or clogging.

In carrying out my invention I provide a grain receiving table or platform which is supported by the frame of the binder so as to have an oscillating movement, the table being connected to the tying mechanism so that the movement of said table will be governed thereby, the connection being such that the table operates in unison with the needle.

My invention also consists in connecting the hinged boards at the lower end of the main platform to the grain receiving table or platform so that said boards will rise and fall therewith, and in combining the table or platform with the usual trip-arm so that both operate in unison.

My invention further consists in the construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification, Figure 1 is a side elevation with one of the side boards of the deck removed, showing the application of my invention to a self-binder harvester; the grain receiving table being elevated and the needle represented as having commenced its upward movement toward the table. Fig. 2 is a side elevation showing the table lowered the needle

being represented as having commenced its downward movement away from the table to release the sheaf. Fig. 3 is a plan view of the grain receiving table, and Fig. 4 a detail view.

A designates the platform with which self-binder harvesters are provided, and in carrying out my invention this platform is cut away at its lower end adjoining the needle-arm of the tying mechanism to provide a step or lower platform A' to the outer end of which the boards A² are hinged in the usual manner. The oscillating table or platform moves above the lower platform or step A' as hereinafter described.

B designates the shaft which operates the needle-arm of the tying mechanism, said shaft being provided with an arm b which is connected by means of a rod b' to a wheel, disk, or plate, C, according to the type of binder. The wheel or disk C carries a cam-wheel C' which is attached thereto or to its supporting shaft c and with which engages a rod d encircled by a helical spring d' within a frame d² connected to the shaft d³, the shaft d³ being attached to the crank-arm e of a rock-shaft E and the said rock-shaft having another arm, e', which is jointed and connected to one end of rods E' the other end of said rods being connected to a projecting end of one of the looped bars f and f' which support the movable grain receiving table or platform F. The movable grain receiving table or platform is connected to the loop portion of the bars f and f', and said bars are pivoted to the frame of the harvester below the platform A', the platform being provided with slots or openings through which the bars pass. The grain receiving table or platform F is provided at its outer end with projections f³ which are adapted to engage with the hinged boards A² so as to raise said boards when the platform or table is elevated and permit them to fall when the table F is lowered to discharge the sheaf.

In operation when the grain receiving table or platform F is elevated the grain or gavel is deposited thereon against the compressing and tripping finger G which is of ordinary construction and is connected to the binding mechanism in the usual manner and after it is bound into a sheaf by the usual compressing and tying mechanism the rota-

tion of the wheel or disk C will draw upon the rod *d* which will rock the shaft E and cause the grain receiving table or platform to fall, through the interposition of the connecting-rods E', the compressing and tripping finger G moving in unison therewith, as well as the hinged boards A². This operation presents a space of increased size beneath the tying mechanism which will permit the sheaf to be positively discharged and obviate any liability of the machine clogging by reason of the sheaf not being discharged at the proper time. It will be noted that the very weight of the sheaf upon the table or platform assists in lowering the latter so that as a matter of fact less power is required to successfully operate a binder with this attachment than one in which it is absent. After the table has been lowered and the sheaf discharged, as hereinbefore described, the table will be returned to its normal position by means of the same connections employed for lowering it.

Should it be desired at any time to disconnect the operating rod E' of the movable grain receiving table from its connection with the binding mechanism the lock-joint in the arm *e'* of the rock-shaft may be broken by means of a lever or other suitable device, and this lock-joint is for the purpose of providing means whereby the table can be permitted to fall independent of the binding mechanism when it is desired to thread the needle and for other purposes.

It will be noted that the movable table or platform F, compressing and tripping finger G and boards which are hinged to the lower end of the part A' of the platform all work in unison with each other and in unison with the needle, knoter and twine cutting mechanism of the binder.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein described discharge mechanism for the sheaves of self binder harvesters,

comprising a movable grain receiving table carried by the platform of the harvester so that it will be when elevated on a line with the platform, bars *f* and *f'* pivotally connected to the grain receiving table and to the harvester platform, the bars *f* having bent ends which engage with the bars E' and the bars E' being connected to a rock-shaft which is actuated by the binding mechanism, substantially as shown.

2. The herein described discharge mechanism for harvesters, comprising a platform and binding mechanism, a grain receiving table F supported so as to have a downward movement in the direction in which the sheaf is discharged, the movement of the table being parallel with the face of the platform, substantially as shown and for the purpose set forth.

3. In a self binder harvester, the combination, of a movable grain receiving table or platform, its parallel supporting arms and operating mechanism, of a connection forming a part of the operating mechanism, said connection having a lock joint substantially as shown whereby the grain receiving table or platform can be moved independent of the operating mechanism which connects with the grain binding mechanism, for the purpose set forth.

4. In combination with the platforms A and A', the platform A' having boards A² hinged to the lower end thereof, of a movable grain receiving table or platform which is adapted to be brought on a line with the upper platform A, the movable grain receiving table having projections *f*³ for engagement with the inner ends of the hinged boards A² so that they will be operated by the movement of the grain receiving table substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. WILSON.

Witnesses:

EUGENE W. JOHNSON,
HORACE S. BEALL.