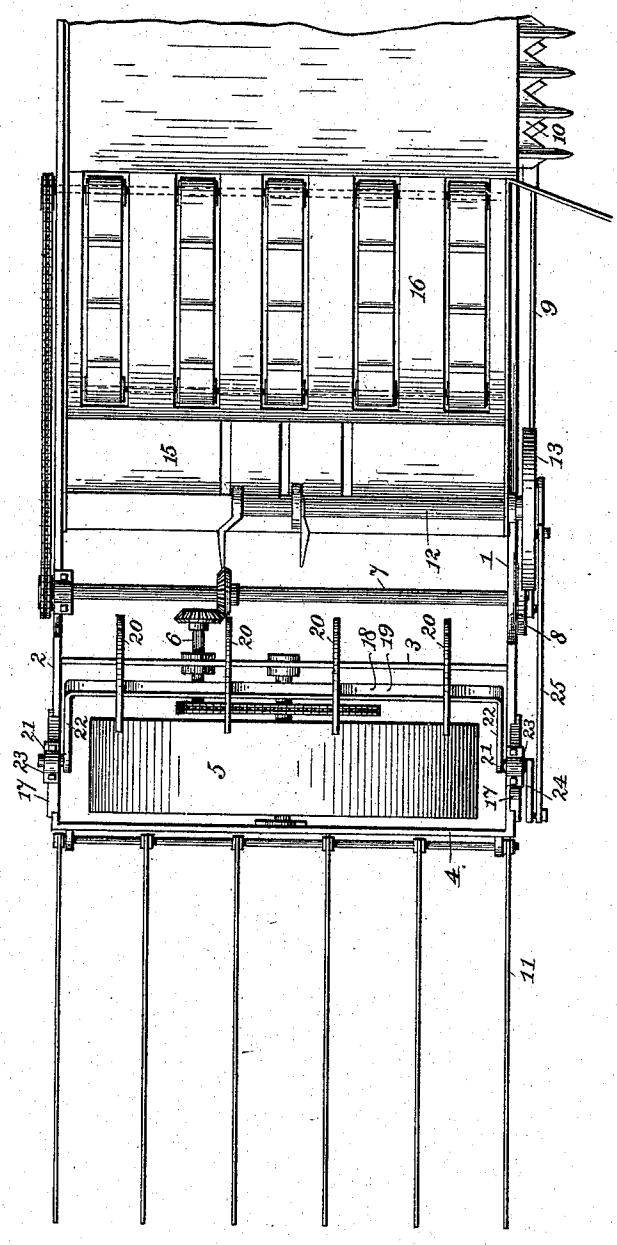
(No Model.) 2 Sheets—Sheet 1.

W. D. MARKLEY.

HARVESTER.

No. 535,169. Patented Mar. 5, 1895.

Fig. 1.



Witnesses
Chas. H. Durand

Inventor
William D. Markley

By his Attorneys.
C. A. Snow & Co.

(No Model.) 2 Sheets—Sheet 2.

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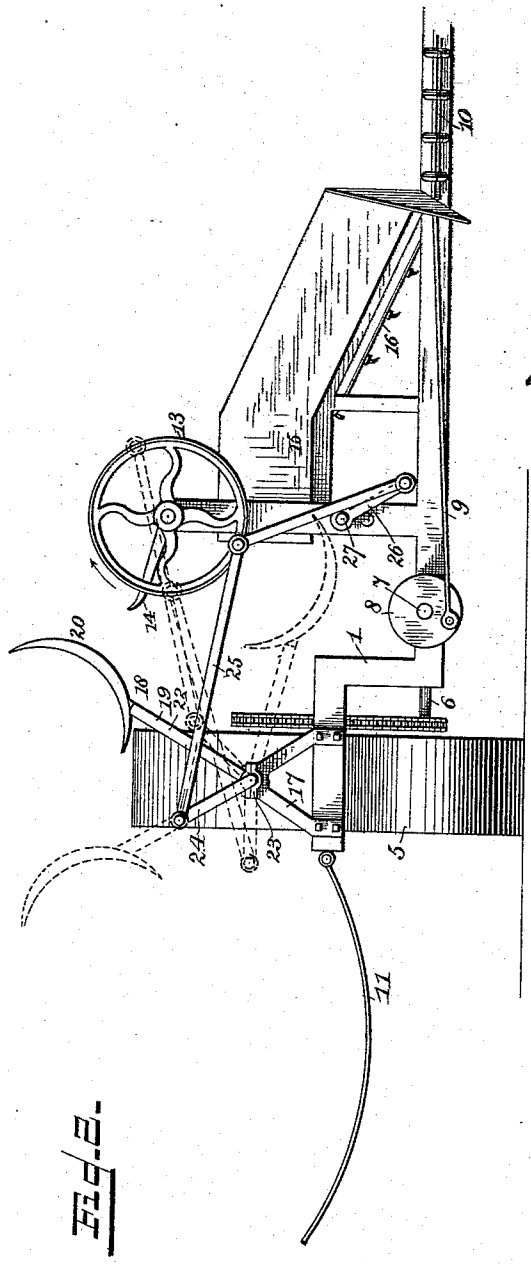

Fig. 2.

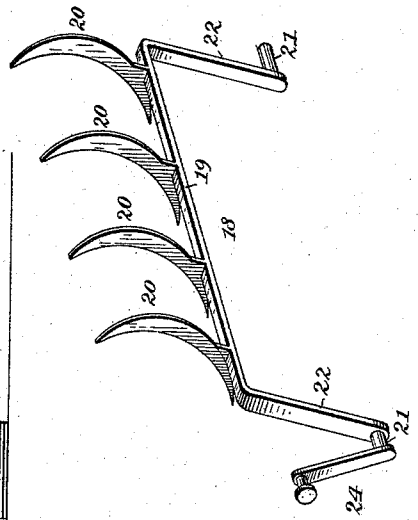

Fig. 3.

Witnesses

Chas. L. Ourand

O. E. Doyle.

Inventor

William D. Markley

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM D. MARKLEY, OF MENALLEN, PENNSYLVANIA.

HARVESTER.

SPECIFICATION forming part of Letters Patent No. 535,169, dated March 5, 1895.

Application filed March 22, 1894. Serial No. 504,718. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. MARKLEY, a citizen of the United States, residing at Menallen, in the county of Adams and State of Pennsylvania, have invented a new and useful Harvester, of which the following is a specification.

My invention relates to self-binding harvesters, and has for its object to provide a simple and efficient means for transporting the sheaves, after binding, to the sheaf carrier, said means, which I term a discharge mechanism, being operated from the main shaft of the harvester through the binder shaft.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings: Figure 1 is a plan view of a harvester provided with a discharge mechanism embodying my invention. Fig. 2 is a front view of the same. Fig. 3 is a detail view, in perspective, of the discharge-arm and immediate connections.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The main framework of the harvester comprises, essentially, the front and rear beams 1 and 2, and the side beams 3 and 4, of which the latter is arranged above the plane of the beams 1, 2, and 3, and is held in place by offset parts of the front and rear beams.

5 represents the ground or driving wheel which is connected to and drives the main-shaft 6, connected by gearing, of any preferred arrangement, to the cutter-bar driving shaft 7, having a crank-disk 8 which is connected by a pitman 9 to the cutter-bar 10.

11 represents the sheaf-carrier of any preferred construction and connected by any suitable mechanism with the main-shaft or with operating devices within the reach and under the control of the operator, (such connecting mechanism not being shown in the drawings for the reason that they form no part of my invention.)

12 represents the binder-shaft, provided at one end with a crank-wheel 13 and at the other end with arms 14 which are adapted to traverse the binder table 15 to push the sheaf from the table to the discharge mechanism hereinafter described. The needle, knotter, and other parts of the binder are omitted for the reason that they form no part of my invention, and may be of any preferred or approved construction. The grain is brought to the binder by means of the elevator 16 of the usual construction.

17 represents inverted V-shaped brackets which are secured to the off-set portions of the front and rear beams of the main framework, respectively in front and in rear of the ground or driving-wheel, and to their apexes are fulcrumed terminals of the discharge-arm 18. This discharge-arm consists of a bar 19, of approximately U-shape, to the horizontal or body portion of which are secured the cresent-shaped fingers 20. The trunnions 21 of this arm are arranged at the extremities of the angularly disposed terminals 22, and are mounted in bearings 23 at the upper ends of the inverted V-shaped brackets 17, and to one of these trunnions, at the front of the machine, is connected a crank-arm 24 which receives motion to operate the discharge-arm through the pitman 25 connected to the crank-wheel 13. The crank-arm 26 of the needle-shaft 27 is also connected to this crank-wheel by means of the pitman 28, whereby the binder and discharge mechanism operate in unison. The dotted lines in Fig. 2 show the several positions of the discharge-arm, and indicate the manner in which it operates to carry the sheaf from the binder-table to the sheaf-carrier after the binding and knotting operations are completed. The peculiar shape of the discharge-arm adapts it to swing over the ground or operating-wheel without interference therewith, and the arrangement of the various parts of the device make it possible to discharge the sheaf upon a sheaf-carrier located at the side of the ground or driving-wheel, as shown.

It will be seen that the device is simple in construction and is direct in its operation, and that it may be attached to an ordinary self-binding harvester without material change in the construction of said machine, and also that various changes in the form, proportion, and details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, I claim—

In a harvester, the combination with a supporting frame-work, a ground or operating-wheel, cutting, elevating, and binding mechanisms operatively connected to the ground-wheel, and a sheaf-carrier located at the outer side of the framework, adjacent to the ground-wheel of a U-shaped arm provided with crescent-shaped fingers and adapted to receive a sheaf from the binder-table, and carry it over the ground wheel to the sheaf-carrier, the axis of said arm being parallel with the direction of movement of the harvester, and the parallel arms thereof being adapted to pass respectively in front and in rear of the ground-wheel and means for operating the same, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM D. MARKLEY.

Witnesses:
H. F. HOLLER,
J. T. REMSBURG.