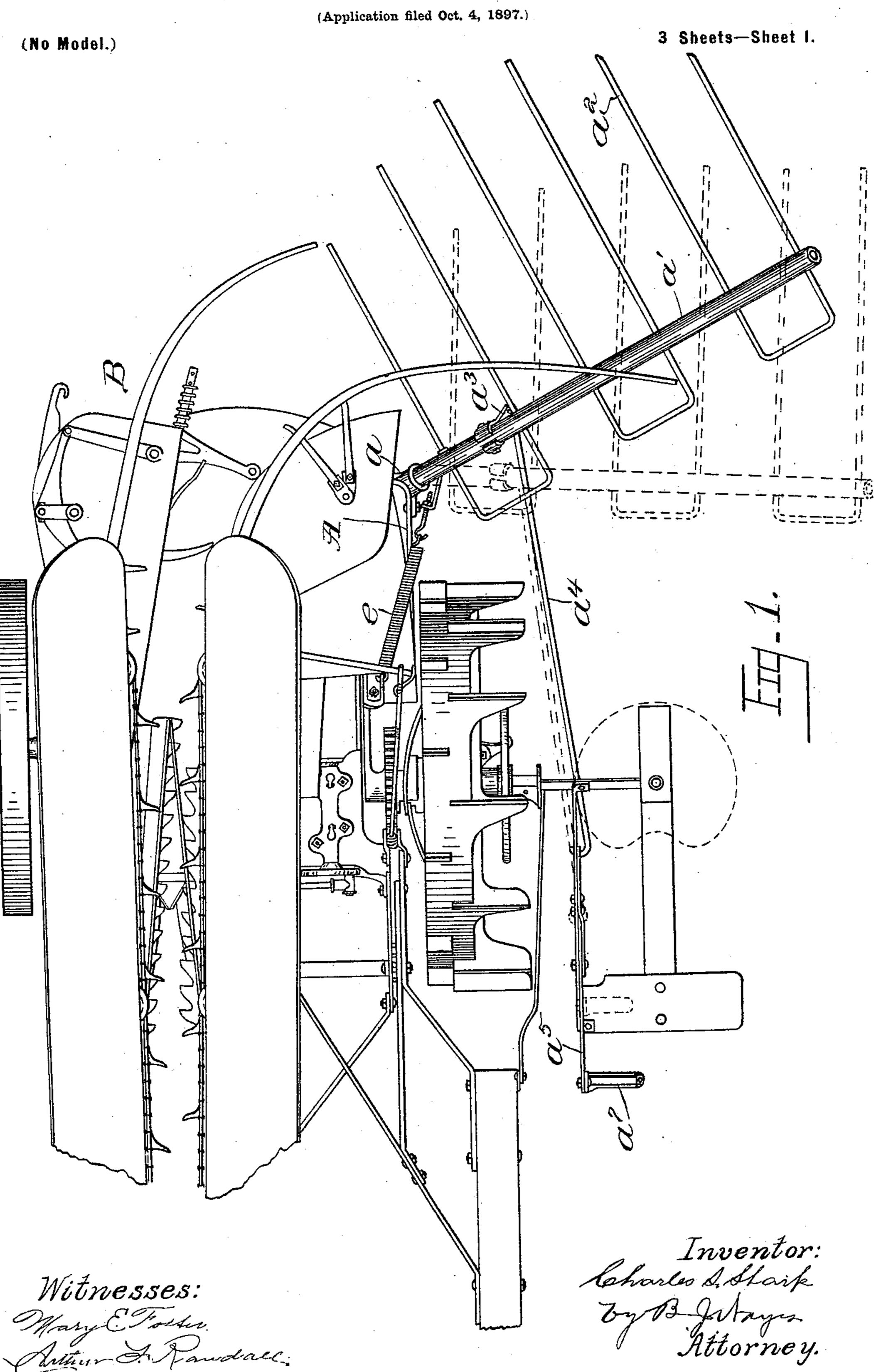
C. S. SHARP.

BUNDLE CARRIER FOR CORN HARVESTERS.



Patented Nov. 8, 1898.

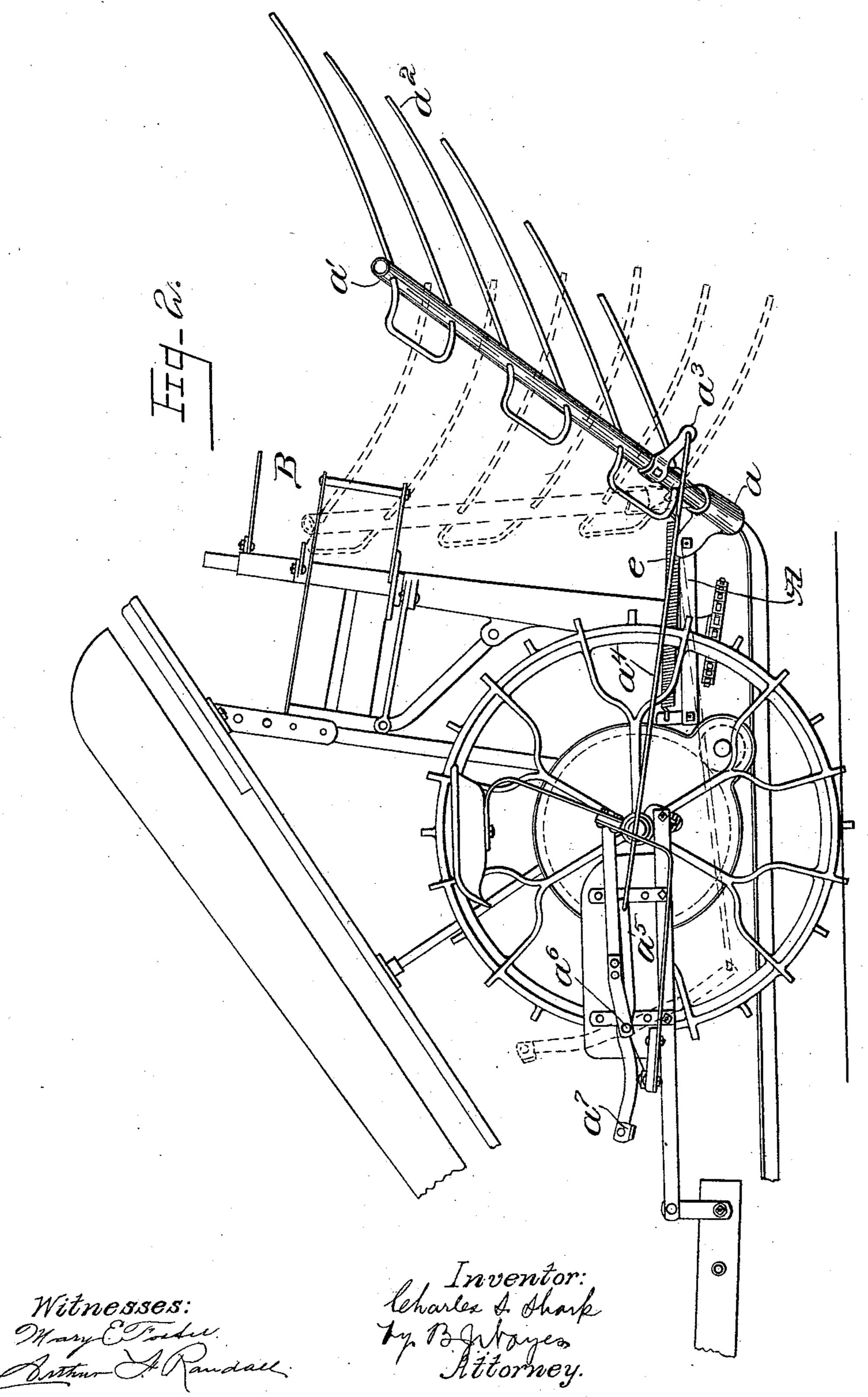
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(Application filed Oct. 4, 1897.)

(No Model.)

3 Sheets—Sheet 2.



No. 614,065.

Patented Nov. 8, 1898.

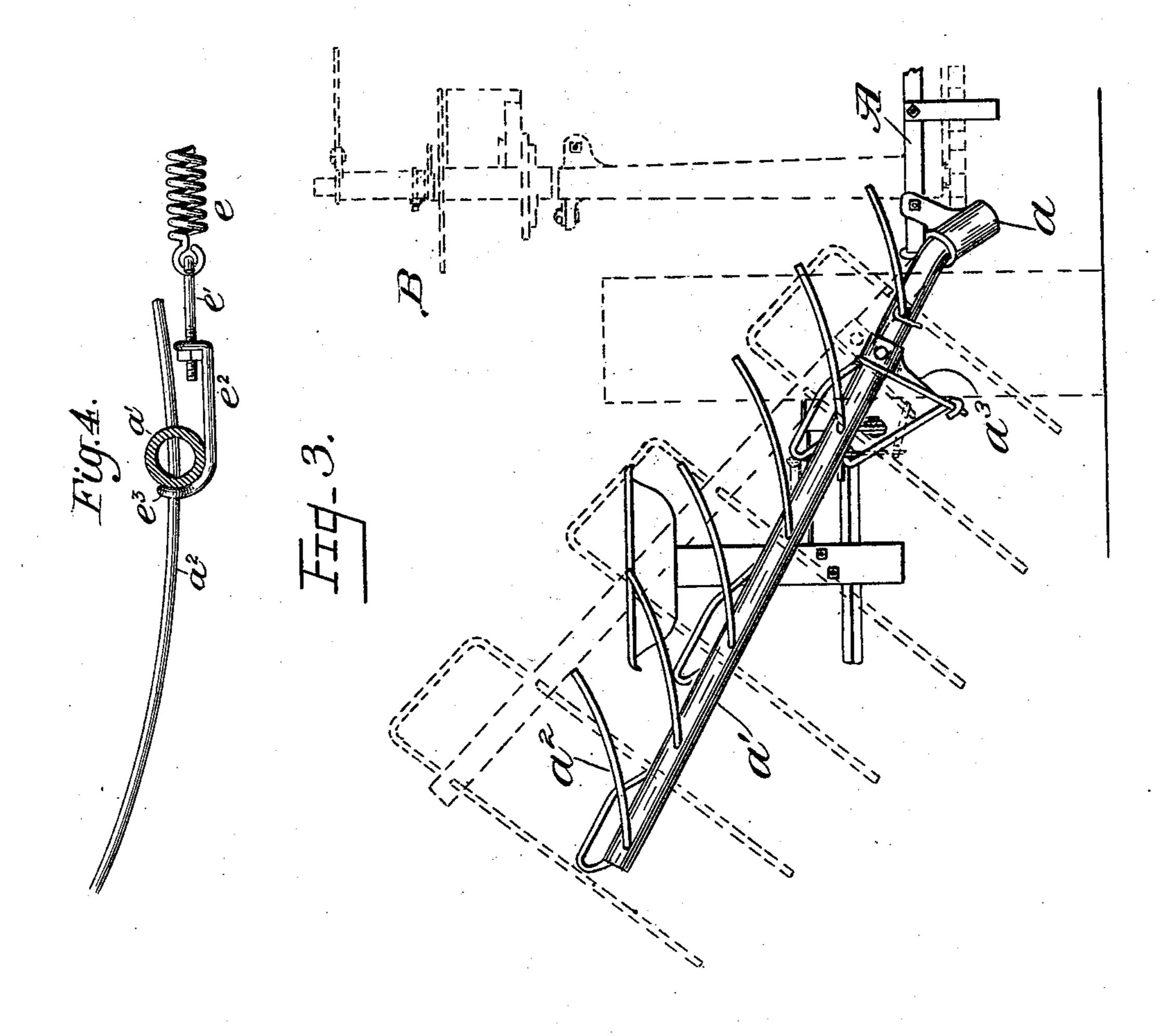
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3 Sheets—Sheet 3.



Witnesses:

Many Coster Standale.

Inventor: Charles S. Sharp by Butayess. Attorney.

United States Patent Office.

CHARLES S. SHARP, OF AUBURN, NEW YORK, ASSIGNOR TO THE D. M. OSBORNE & COMPANY, OF SAME PLACE.

BUNDLE-CARRIER FOR CORN-HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 614,065, dated November 8, 1898.

Application filed October 4, 1897. Serial No. 653, 936. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. SHARP, of Auburn, county of Cayuga, and State of New York, have invented an Improvement in Bun-5 dle-Carriers for Corn-Harvesters, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide a corn-harvester of that type wherein the corn is severed and fed rearward along the cornpassage to an upright binder and bound on end with a dumping bundle-carrier of im-15 proved construction which is adapted to receive the bundles from the binder and to hold them more or less erect and to dump them

whenever it may be desired.

The corn-harvester to which my improved 20 bundle-carrier is applied may have a vertical binder or a rearwardly-inclined binder at the rear; but in either case the bundle will be bound on end, and hence such a binder may be herein referred to as an "upright" binder.

The bundle-carrier embodying this invention consists, essentially, of an upright bar movable in a conical plane and having bundle-supporting fingers attached to and projecting laterally from it, and when said bar is 30 in one position said fingers will cross the discharge-opening of the binder, being at such time in receptive position, and when said bar is in its other position the bundle-supporting fingers will be moved to dump the bundles. 35 A foot-lever or other device is provided, which is connected with said upright bar and adapted to operate it.

Figure 1 shows in plan view the rear end portion of a corn-harvester having a bundle-40 carrier embodying this invention; Fig. 2, a side elevation of the corn-harvester and bundle-carrier shown in Fig. 1; Fig. 3, a rear elevation of the bundle-carrier; Fig. 4, a detail

to be referred to.

45 A represents the rear end portion of the main frame of a corn-harvester of that type wherein the corn is severed and fed rearward in upright position to the binder and bound on end, and B represents a sufficient portion 50 of an ordinary binder mechanism for the purposes of illustrating my present invention.

A bracket a is secured to the main frame at the stubbleward side of the machine, it being formed or provided with a socket which receives within it the lower end of an upright 55 bar a'. The lower end of the bar a' is disposed oblique to the bar, as best shown in Fig. 3—as, for instance, the bar may be bent to thus form an oblique end portion, and said oblique end portion is set obliquely in the 60 bracket a. The upright bar a' inclines rearwardly relatively to the binder, as best shown in Fig. 2, and is projected more or less to one side, as best shown in Figs. 1 and 3, thereby occupying a position oblique to the vertical 65 or upright shaft of the binder. The upright bar A', having its lower end formed oblique to the bar and being end-supported in or by the bracket a', is thus supported as by or upon a pivot.

The upright obliquely-disposed bar a' has secured to it a number of bundle-supporting fingers a^2 , which are or may be composed of wire, as usual, although in the present instance, for simplicity of construction, said 75 fingers a² are made in pairs of single pieces of wire bent U-shaped. The bundle-supporting fingers a^2 are in this instance rigidly secured to the upright bar a', being passed diametrically through said bar, and said fin- 80 gers project laterally from the bar at substantially right angles relatively thereto, and when said bar is in the position shown in full lines said fingers cross the discharge-opening of the binder.

Owing to the fingers being supported by an upright obliquely-disposed bar, the bundles which are discharged from the binder will be held in a more or less erect position until dumped—that is to say, they do not lie pros- 9°

trate in a substantially horizontal position. To operate the bundle-carrier so as to dump the bundles, I provide means for moving the upright bar a' in a conical plane in a direction toward the front of the machine, and as 95 the bar is thus moved the bundle-supporting fingers are brought into parallelism with the corn-passage, which leads to the binder and into alinement with the travel of the machine, as represented by dotted lines, Fig. 1, 100 and they are also turned to release or let fall the bundles. To thus move the upright bar

a', an arm a^3 is rigidly secured to said bar at or near its lower end, which projects laterally therefrom a short distance, and the extremity of said arm is connected by a rod a^4 to the 5 rear extremity of a foot-lever a^5 , which is pivoted at a^6 to the frame and is provided with a foot-piece a^7 . When the foot-lever is depressed, as shown by full lines, Fig. 2, the upright bar a' of the bundle-carrier will be swung rearward or moved in a conical plane, so that the bundle-supporting fingers will occupy their receptive position, and when said foot-lever is raised, as indicated by dotted lines, Fig. 2, the bundle-carrier will be oper-15 ated to dump the bundles.

It will be observed that the rod a^4 is connected with the foot-lever at a point which is brought above a straight line intersecting the points a^6 and a^3 when said foot-lever is 20 depressed, as shown by full lines, Fig. 2, and when it is desired to dump the bundles a slight pull of the driver's foot upward depresses the point where the rod a^4 is connected with the foot-lever, crossing the dead-25 center, and then the weight of the corn depresses the carrier. The carrier is thereafter returned by pressure of the driver's foot, and as the point of connection of the rod a^4 with the foot-lever at such time occupies a posi-30 tion above the aforesaid straight line, or, as

it is commonly spoken, "above the center," then the weight of the bundles assists in holding the carrier in such position.

A relief-spring e is connected at one end to 35 a hook e', adjustably or otherwise connected to a link e^2 , which is herein shown as formed with an eye e^3 at its extremity, which embraces or encircles one of the fingers a^2 and bears against the upright bar a', (see Fig. 4,) 40 and at the other end to the main frame, which assists the driver in lifting the foot-lever.

I claim—

1. In a corn-harvester having an upright binder, an upright bundle-carrier located be-45 side said upright binder comprising essentially an upright bar movable in a conical plane, having laterally-projecting fingers, substantially as described.

2. In a corn-harvester having an upright 50 binder, a bundle-carrier comprising an upright end-supported bar movable in a conical plane, and bundle-supporting fingers projecting laterally from it, and means for operating said bundle-carrier, accessible to the driver, substantially as described.

3. In a corn-harvester having an upright binder, a bundle-carrier comprising an upright bar having its lower end oblique to the bar, a bearing or support for said oblique end, and bundle-supporting fingers project- 60 ing laterally from said bar, and means for operating said bar to move said fingers into receptive and dumping positions, substantially as described.

4. In a corn-harvester having an upright 65 binder at the rear, a bundle-carrier comprising essentially an inclined bar disposed obliquely to a vertical plane in which lies the binder-shaft, and having fingers projecting laterally therefrom and stationarily secured 70 thereto, and means for moving said bar in a conical plane whereby its fingers may carry

and dump the bundle, substantially as described.

5. In a corn-harvester having an upright 75 binder, a bundle-carrier comprising an upright bar having its lower end oblique to said bar, a bearing for said oblique end, a laterally-projecting arm on said upright bar, a foot-lever, a connecting-rod connecting said 80 foot-lever and arm, and bundle-supporting fingers secured to and projecting laterally from said bar, substantially as described.

6. In a corn-harvester having an upright binder, an upright bundle-carrier located be- 85 side said upright binder comprising essentially an upright bar movable in a conical plane, having fingers projecting laterally from it, a laterally-projecting arm on said upright bar, a pivoted foot-lever, a connect- 90 ing-rod connecting said foot-lever and arm, whereby the upright bar may be held with its fingers in receptive and dumping positions, a spring e attached at one end to the frame and at the other end to a lateral projec- 95 tion on said upright bar, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES S. SHARP.

Witnesses:

FRED. M. EVERITT, C. F. BALDWIN.