

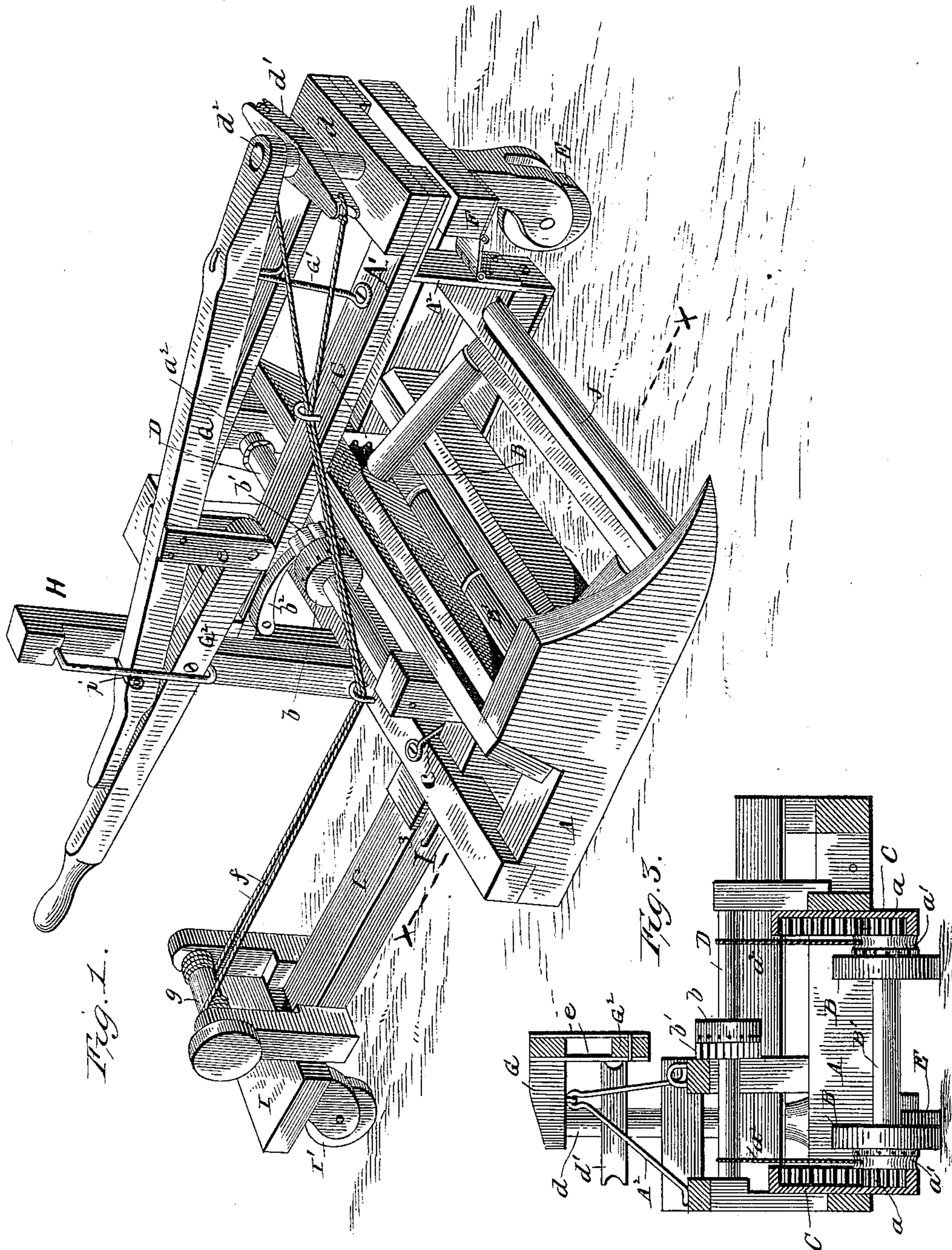
(No Model.)

2 Sheets—Sheet 1.

J. GILES.
HARVESTING MACHINE.

No. 362,887.

Patented May 10, 1887.



Witnesses
Edwin T. Jewett,
James Sheehy.

Inventor
James Giles
By his Attorney
Frank Sheehy.

(No Model.)

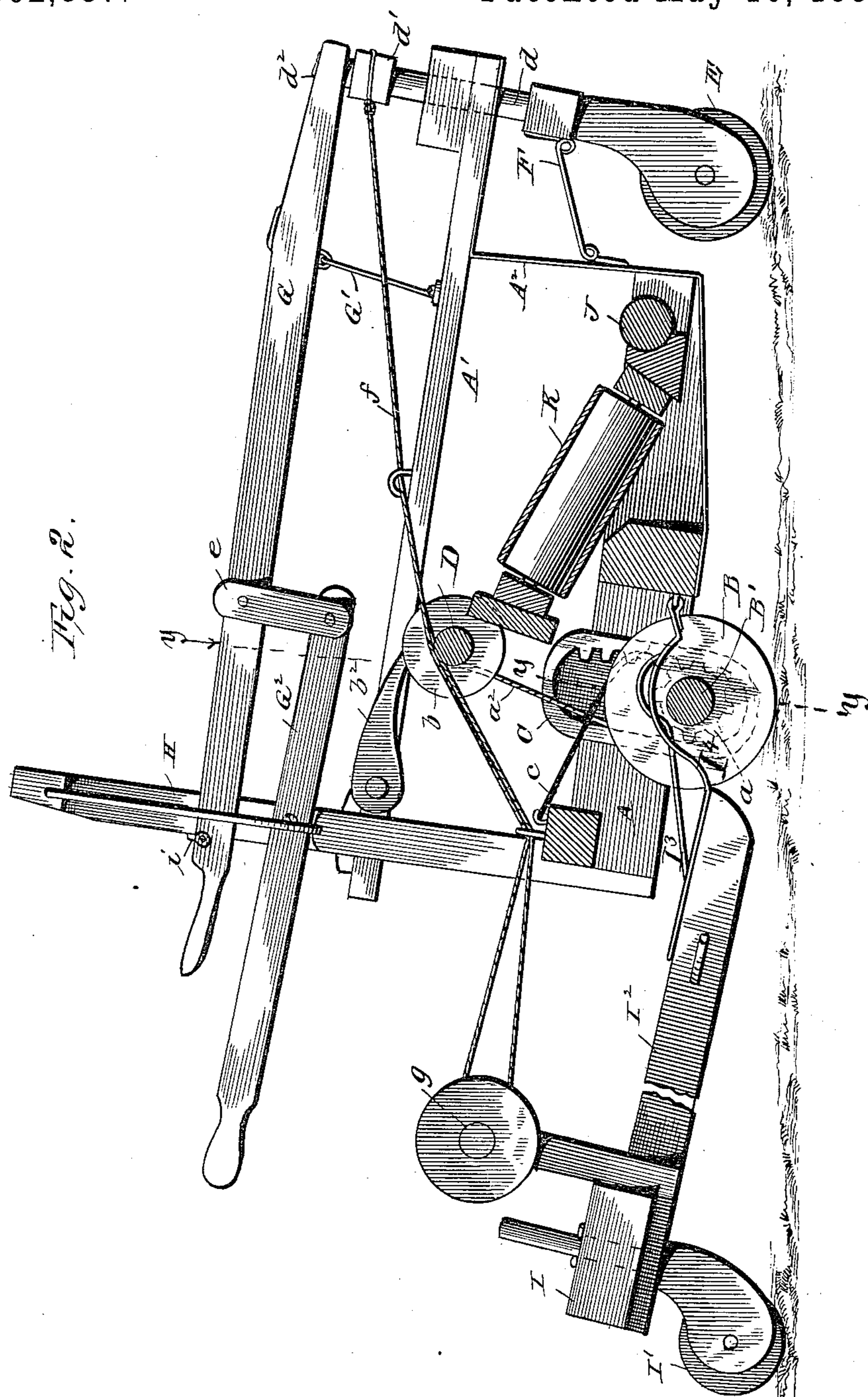
2 Sheets—Sheet 2.

J. GILES.

HARVESTING MACHINE.

No. 362,887.

Patented May 10, 1887.



Witnesses
Edwin T. Yewell,
Jos. A. Ryan

Inventor,
James Giles
By his Attorney
Frank Sheehy

UNITED STATES PATENT OFFICE.

JAMES GILES, OF PLEASANT VIEW, ASSIGNOR OF ONE FOURTH TO FRANCIS ASBURY JACKSON, OF CRESTLINE, KANSAS.

HARVESTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 362,287, dated May 10, 1887.

Application filed January 4, 1887. Serial No. 223,400. (No model.)

To all whom it may concern:

Be it known that I, JAMES GILES, a citizen of the United States, residing in Pleasant View township, in the county of Cherokee and State of Kansas, have invented certain new and useful Improvements in Harvesting-Machines; and I do 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.

This invention relates to certain novel improvements in low-down harvesting-machines, which are especially constructed for carrying binding mechanism, which improvements will be fully understood from the following description and claims, taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of my improved grain-harvester. Fig. 2 is a vertical longitudinal section through the machine in the plane indicated by dotted line *x x* on Fig. 1. Fig. 3 is a vertical transverse section indicated by dotted line *y y* on Fig. 2.

Referring to the annexed drawings by letters, A designates a rectangular platform-frame, mounted on two rear transporting-wheels, B B, which are applied to a horizontal transverse axle, B'. On this axle are spur pinion-wheels *a a*, which are secured to grooved wheels *a'*, having perforations in their peripheries. The spur pinion-wheels *a a* engage with racks C C, rigidly secured to the frame A, and the grooved wheels *a'* have chains *a*² secured to them, which are attached to a rotative shaft, D, journaled in standards secured to the frame A. On this shaft is a drum, *b*, having perforations in its periphery, and a ratchet-wheel, *b'*, with which latter engages a pawl, *b*², pivoted to an elevated frame, A'. By turning the shaft D the rear part of the frame A can be raised or lowered, and by means of hooks *c*, attached to the rear sill of frame A and engaged with the wheels *a'*, the frame A can be sustained at any desired height from the ground.

The front part of the frame or platform A is mounted on a caster-wheel, E, the spindle *d* of which passes freely through the transverse bar of a hinged frame, F, and also through the front transverse bar of the elevated frame A', and has a cross-head, *d'*, secured to it. The

passage for the spindle through the front of frame A' should be large enough to allow the said frame freedom to be adjusted vertically without binding. The upper end of the caster-wheel spindle *d* is attached by a swivel, *d*², to the front end of a lever, G, which has its fulcrum on a standard, G', and extends back alongside of a standard, H. By means of a link, *e*, lever G is connected to a lever, G², having its fulcrum on the standard H and extending back within reach of a person located on a platform, I. This platform I is mounted on a caster-wheel, I', and connected rigidly to a longitudinal beam, I², the forward extension of which is arched over the axle B', and hinged to the middle transverse beam of the frame A and sustained against lateral displacement by arched braces I³, which are also hinged to the said transverse beam.

The ends of the cross-head *d'*, above referred to, have ropes or chains *f* attached to them, which are carried back through suitable guides, and are secured to a winding-drum, *g*, mounted in standards secured to the beam I² in close relation to the platform I. By turning the drum *g* to the right or left an attendant can guide the machine, and by vibrating the levers G G² the attendant can raise or depress the front of the machine, according to the height of cut required. By means of a catch, *i*, the said levers can be secured to the standard, so as to hold the platform at the desired height from the ground.

J designates a roller, which is recessed into the front beam of the platform A in rear of the proper location for the cutters, which are not shown in the drawings. In rear of this roller J is an endless carrier, K, (shown in Fig. 2,) stretched over rollers, and slightly inclined downward toward the front of the machine. The roller J operates to move the cut grain backward so that it will fall evenly upon the endless carrier, which conveys the grain to a binding mechanism located in the space below the frame A', and directly in rear of the front angular standards and braces A².

The standard-braces are Z-shaped and sustain the front of the frame A', and also render very strong that part of the platform upon which I shall sustain and locate the binding mechanism.

By thus providing a location for the bind-

ing devices on the left-hand front corner of the platform A, I carry the grain directly from the endless apron or carrier into the binder, and can conveniently shield it from the wind.

5 After the grain is bound the bundles have but a short distance to fall.

If the team is used in front of the machine, the draft-tongue will be suitably attached to the frame F.

10 I have represented the carrier K inclined; but it may be arranged horizontally.

Having described my invention, I claim—

1. The combination, with the low-down platform-frame A and the elevated frame A', of the front caster-wheel, its swivel-standard, the hinged guide-frame F, the cross-head on said standard, connected by guiding ropes or chains to a winding-drum, and the levers G G², linked together, connected by a swivel to the caster-wheel standard and provided with a catch for securing them rigidly to a rear standard, all substantially as described.

2. The combination, with the platform-

frame, of the endless carrier, the front roller J, the elevated frame A, the angular standards A², the frame F, hinged to these standards, the caster-wheel supporting the front of the machine, the adjusting-levers G G², and the guiding devices, substantially as described. 25

3. The combination, with the platform-frame A, of the rear transporting-wheels, B, their shaft B', bearing pinions *a a* and perforated pulleys *a' a'*, the pinions engaging with the racks C C, secured to said platform-frame, the hooks *c*, adapted to engage with said pulleys, the shaft D, bearing a ratchet-wheel, and ropes *a²*, connecting this shaft with said pulleys *a'*, and a pawl, *b²*, all constructed and adapted to operate substantially as and for the purposes described. 30 35 40

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

JAMES GILES.

Witnesses:

WM. P. GILBERT,
I. P. GUTHRIE.