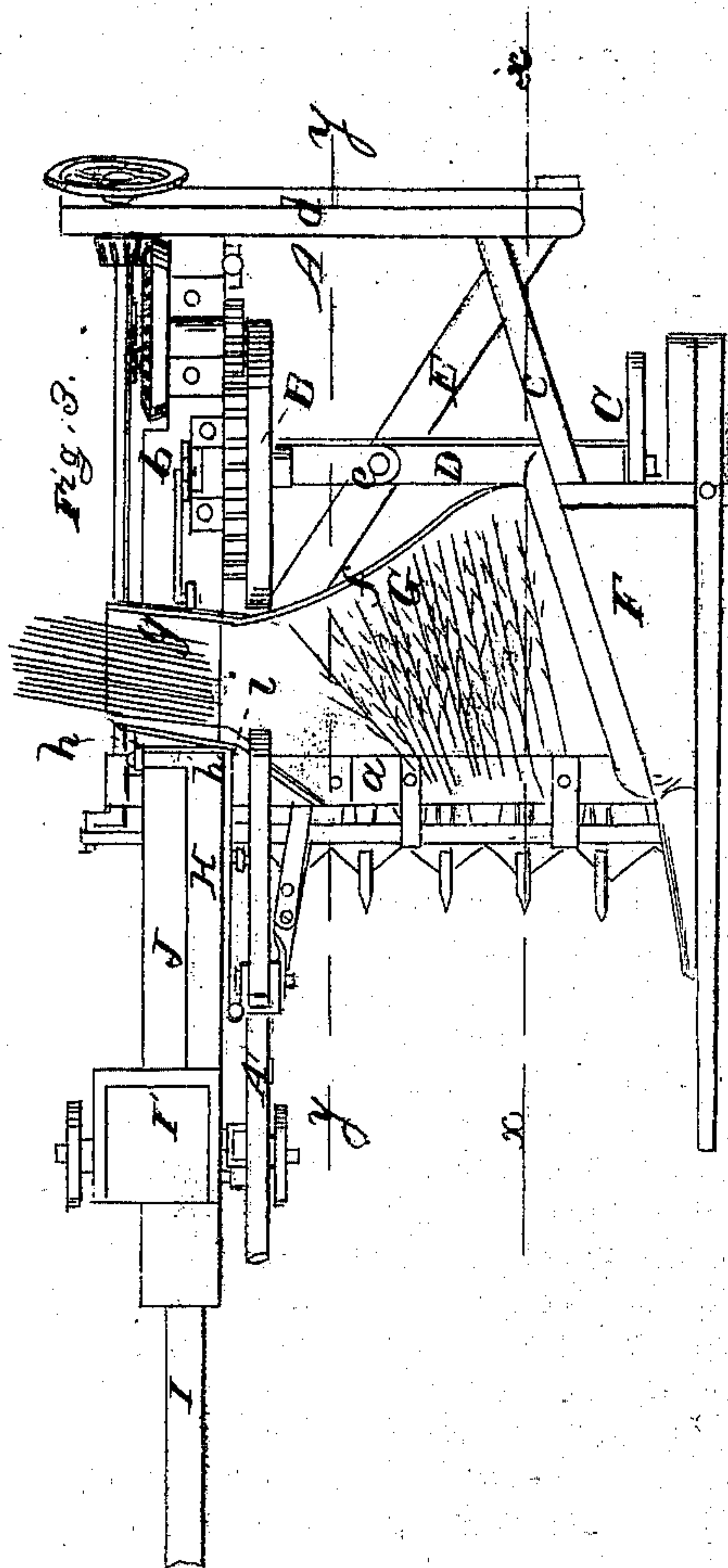
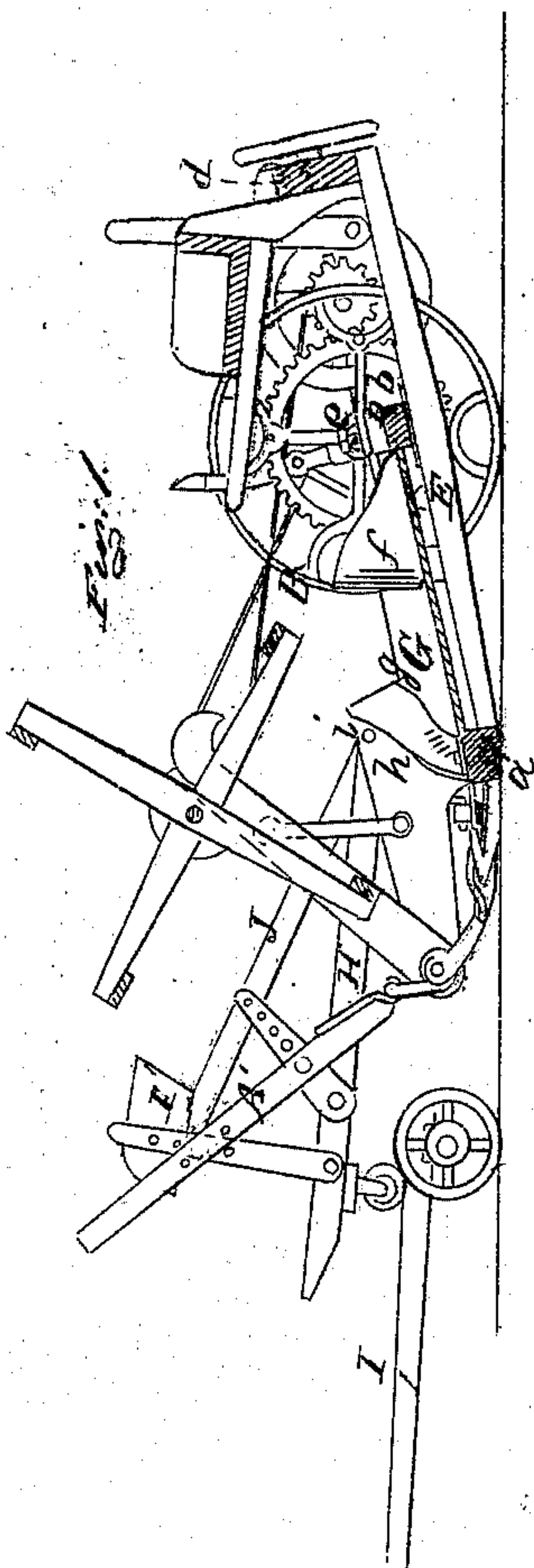
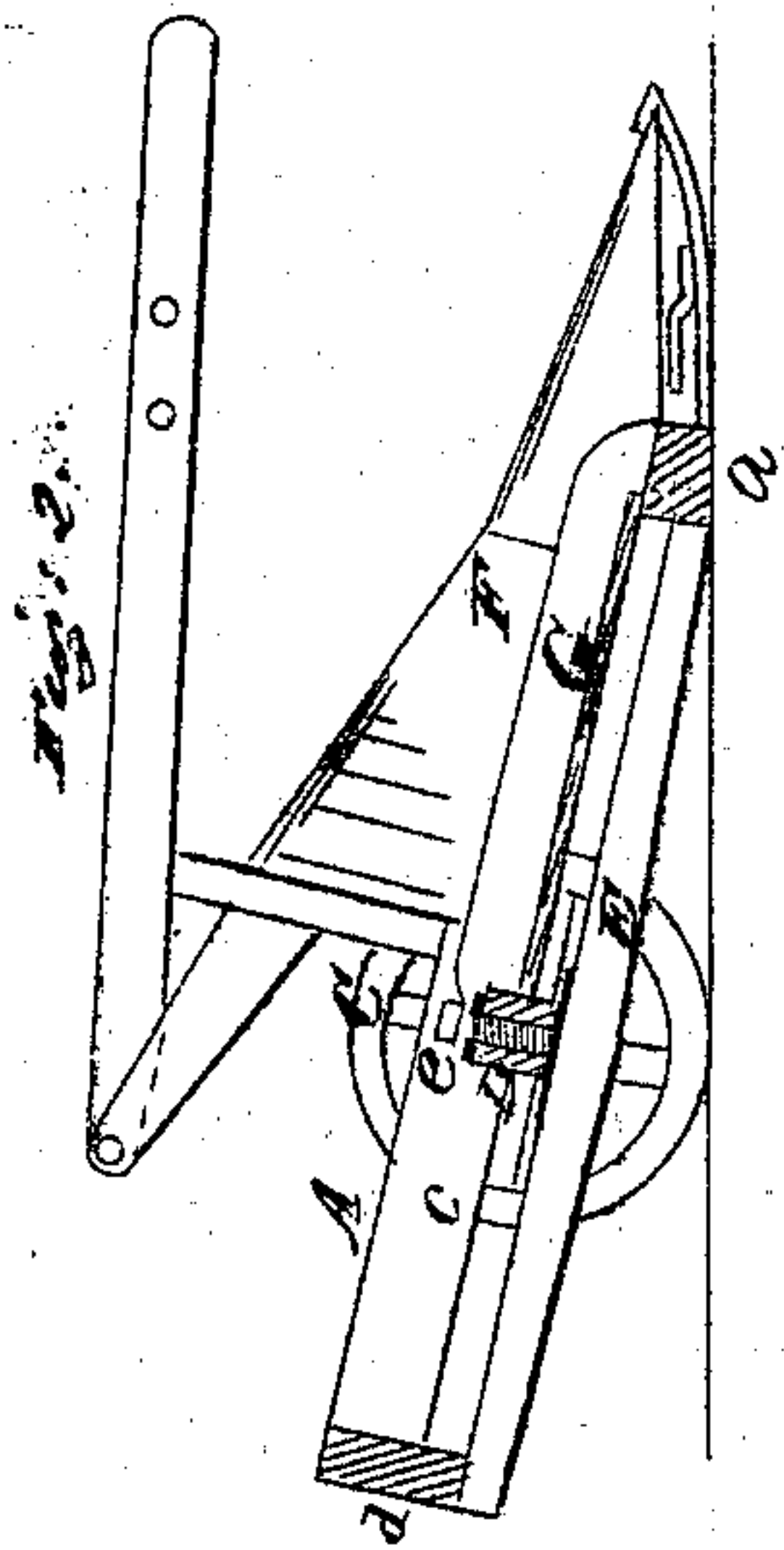


*P. Manny,
Harvester Blade.*

No. 15927

Patented Oct. 21. 1856



UNITED STATES PATENT OFFICE.

P. MANNY, OF WADDAM'S GROVE, ILLINOIS.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 15,927, dated October 21, 1856.

To all whom it may concern:

Be it known that I, PELLIS MANNY, of Waddam's Grove, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in the Construction of Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification, and in which—

Figure 1 represents a longitudinal vertical section of my improved machine fitted with a platform to adapt it to the mowing of grain, the line *x x*, Fig. 3, indicating the plane of section; Fig. 2, a horizontal vertical section of the same, but looking in the opposite direction, and the plane of section being as indicated by the line *y y* in Fig. 3; Fig. 3, a plan or top view of the machine in part.

My invention relates to a straining arrangement connected with the frame to prevent the frame from sagging, and to correct any deviation of the cutter from its proper or horizontal position. A triangular arrangement of frame has been used in which the one side of the frame has occupied a diagonal position, connecting the cutter-support with the back portion of the frame and resting on the axle of the carriage as a fulcrum; but this necessarily peculiar shape of frame has long been abandoned as impracticable, and what is known as the "square" frame been adopted, of which latter description is the one represented in the drawings; and as applied to it my invention, or the one part of it, consists in the use of a loose (or it may be fast) straining stirrup or brace, which forms no part of the frame proper, as will be explained in the following description.

In the machine represented in the accompanying drawings, the frame A is formed of four pieces, the front piece, *a*, being the finger-bar, with which are connected the two side pieces, *b c*, tied together by the back cross-piece, *d*. The outer side piece, *c*, is not parallel with the other side piece, *b*, but approaches nearer to it at its back end so that the front end of the frame is broader than its back end, as plainly shown in Fig. 3. The frame A is represented as supported by two wheels, B C, the one wheel, B, being the driving-wheel, or the one from which motion is communicated to the sickle and reel. The axle D of these wheels is secured transversely in the frame A.

My straining stirrup or brace consists of a bar, E, which is secured diagonally underneath the frame A. The one end of this bar is attached to the inner end of the finger-bar, *a*, and the other end to the back cross-piece, *d*, on the opposite side of the machine; or it may be loosely connected with these parts at these points. A screw, *e*, passes through the center of the axle, D, so as to bear upon the bar E in such a manner that upon suitably adjusting the screw *e* the bar E is depressed in the center, by which means the finger-bar *a* may be kept perfectly horizontal, and this is the object of the bar E, which serves as a straining-bar, and in its depression, as described, by raising the side piece, *c*, which joins the outer end of the finger-bar to the back cross-piece, *d*, elevates the outer front end or corner of the frame, and stiffens it to avoid sagging; but the stirrup or straining-bar E, though bracing, is no part of the frame proper, and it may be firmly secured to the axle and loose at its ends where joining the framing, and where a screw or wedge may be applied to produce a like adjustability and stiffening of the finger-bar as is obtained by the adjusting-screw *e* in the axle.

Attached to the outer side of the frame in front is an inclined wing or guide-board, F, standing at an angle, say, of fifty or sixty degrees, so as to guide the cut grain properly upon the platform G, the wing or guide-board being at the side of the platform. The platform G is placed, as usual, directly back of the finger-bar *a*. The back end of the platform G is provided with an upright or slightly-inclined flange, *f*. The width of the platform is gradually contracted from its outer to its inner side, and terminates in a spout, *g*, turned up or flanged on either side, and the end of which projects over the side piece, *b*, of the frame A, as shown in Fig. 3. By this arrangement it will be seen the grain may be raked off the platform in gavels or bundles of a more close or body form, and which will in the act of raking be turned with the head of the grain outward, as shown in red in Fig. 3, no extra attention or particularity being requisite to turn the grain on the platform, which is done by the inclined wing or guide-board F and back flange, *f*, in combination, the back flange, *f*, preferably being curved in direction of the taper of the platform.

The spout *g*, as shown in Fig. 3, is represented as set inclining backward from its connection with the platform to its delivery end or mouth, so as to avoid the formation of an obstructing angular projection at the junction, or thereabout, of its raised side or flange in front with the front delivery end of the platform, and to facilitate the discharge of the grain therethrough—that is, into and through the spout.

To the front end of the one side piece, *b*, of the frame two upright plates, *h*, are attached. These plates form a socket to receive a bar, *H*, to which the draft-pole *I* is connected. In a line crossing these plates *h* behind the sickle and finger-bar, though nearly in line over the latter, or over the back portion of it, or thereabout, and as regards altitude on a level, or thereabout, with the axis of the driving-wheel, is where the flexible joint of the machine is formed by the joint-pin *i*, on which or with which the bar *H*, to which the draft-pole is connected, swivels or sits between the plates *h*. By this arrangement, while the flexible joint performs its legitimate function with every required ease, a sufficient amount of weight is thrown on the finger-bar to keep the sickle

steady and prevent its unduly rising on entering heavy grain, and a good leverage or purchase is afforded the driver to raise the sickle, when required, by means of a hand or foot bar, *A'*, formed with a hook at its inner end catching into a cleat attached to a projecting elbow or arm of one of the plates *h*, to or between which and the other plate *h* the bar *H* of the draft is hinged or hung, the one plate *h* thus serving a double purpose.

The driver's seat *I'* is attached to an elastic bar, *J*, which is attached to the main bar *H* at the rear of it.

What I claim as my invention, and desire to secure by Letters Patent, is—

The straining-stirrup or brace-bar *E*, arranged diagonally beneath the frame and fitted so as to secure the ready and effectual adjustment of the frame or finger-bar portion thereof, as shown and described.

In testimony whereof I have hereunto subscribed my name.

P. MANNY.

Witnesses:

J. F. CALLAN,
A. GREGORY.