R. Morris,
Harvester Dropper.

No. 57549 Patented Aug. 28 1866

Fig. 1.

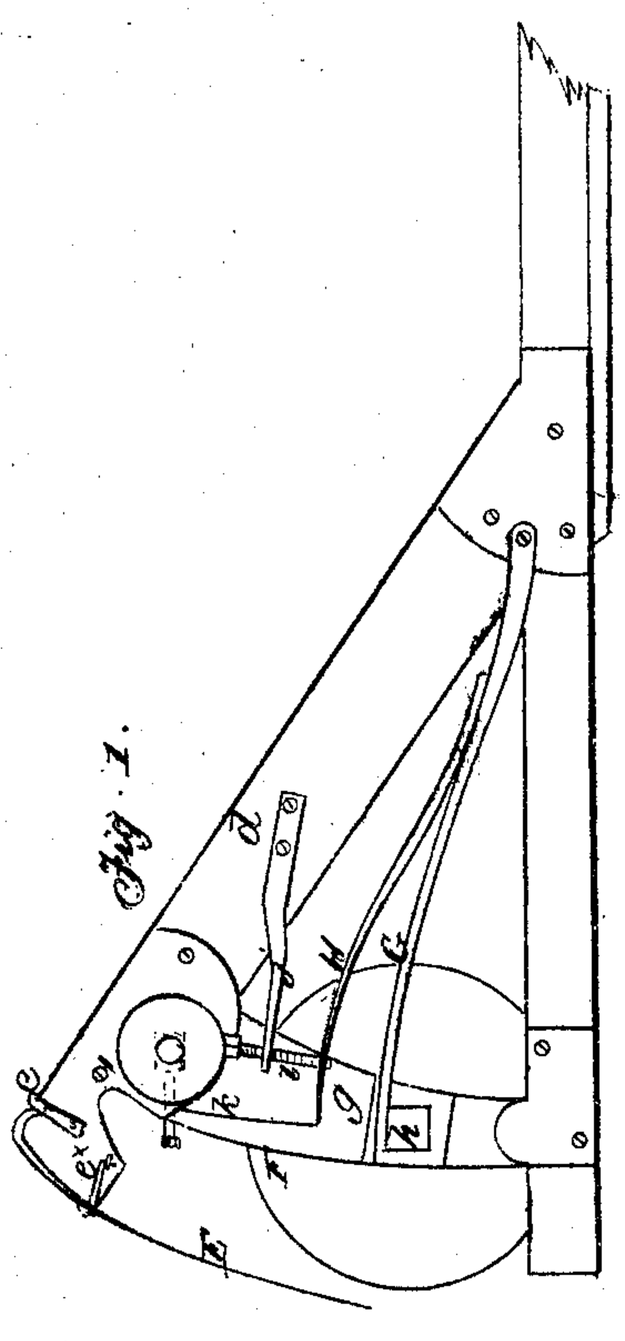


Fig. 2.

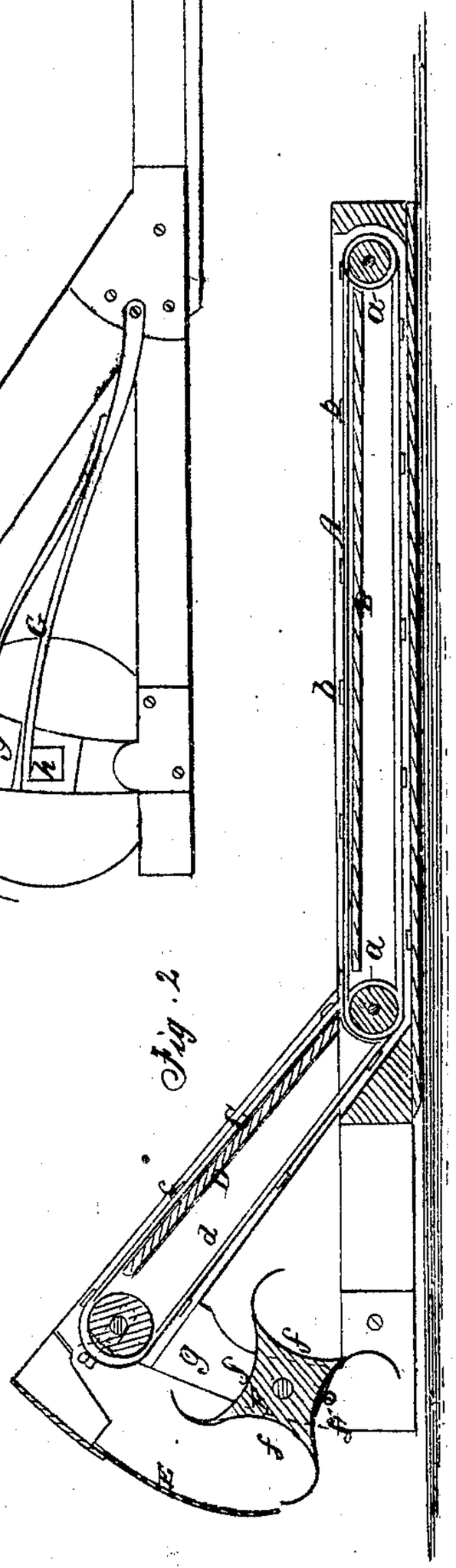
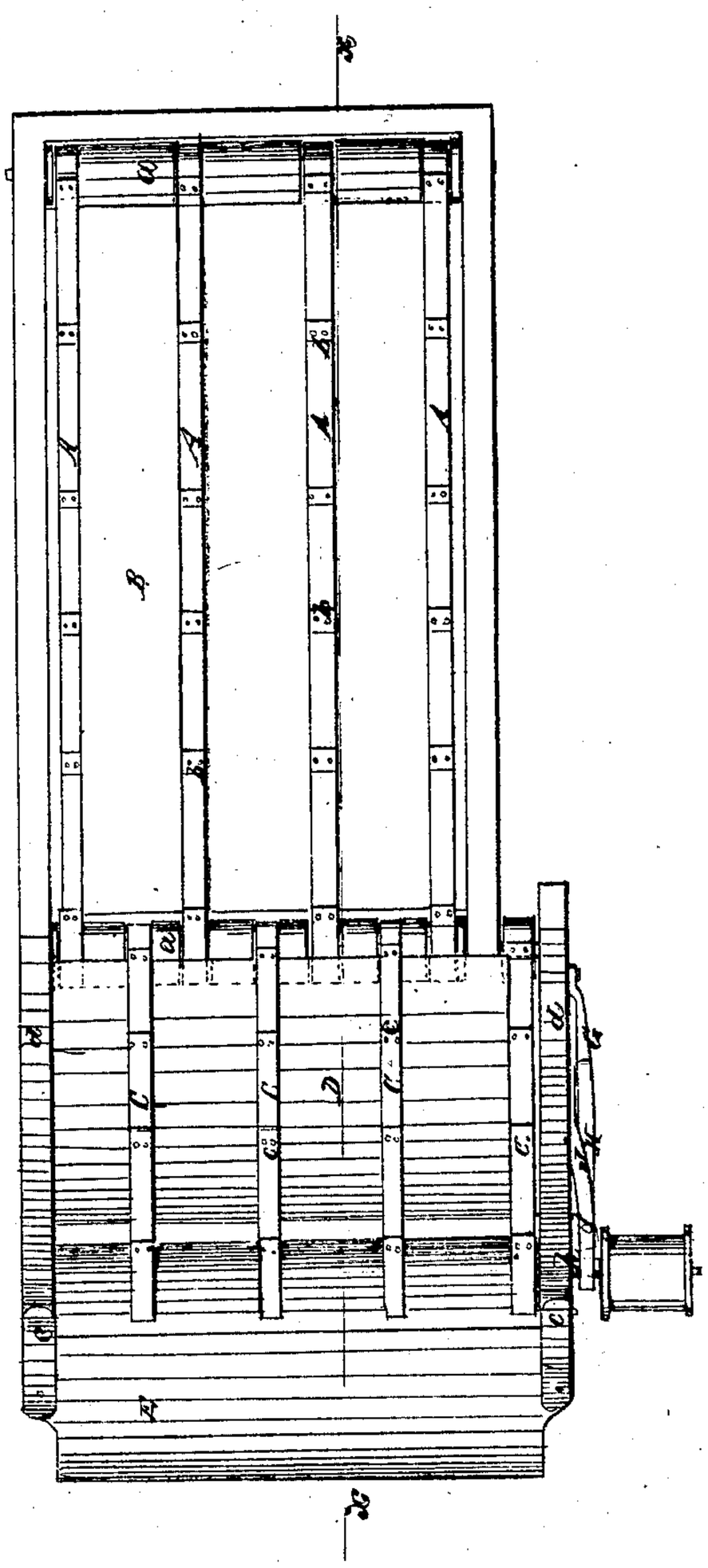


Fig. 3.



Witnesses
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ROBERT MORRIS, OF SALEM, INDIANA.

IMPROVEMENT IN REAPING-MACHINES.

Specification forming part of Letters Patent No. **57,549**, dated August 28, 1866.

To all whom it may concern:

Be it known that I, ROBERT MORRIS, of Salem, in the county of Washington and State of Indiana, have invented a new and Improved Grain-Discharging Device for Harvesters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a portion of my invention; Fig. 2, a side sectional view of the same, taken in the line *x x*, Fig. 2; Fig. 3, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved device for discharging grain in gavels from harvesters; and it consists of endless carriers in connection with a rotary gavel-discharger provided with a regulating attachment for determining the size of the gavels or rendering them of uniform size.

A represents a series of horizontal endless belts, which work around rollers *a a* inserted in the platform B, on which the cut grain is discharged. These belts are provided with projections *b* to catch the cut grain and cause it to be carried along by the movement of the belts.

C represents a series of inclined belts which work over an inclined plane, D, and have projections *c* attached to them like those on the belts A. By means of these endless belts the cut grain is carried laterally off from the platform B of the inclined plane D and discharged from the upper end of the latter.

The inclined plane D is fitted between inclined side pieces, *d d*, and to the upper ends of the latter a flap, E, is secured by hinges or joints *e*, said flap being secured in position by hooks *e**.

F represents a gavel-discharger, composed of four chambers, *f*, arranged on a horizontal shaft, and having its bearings in bars *g*, which support the inclined side pieces, *d d*. On one end of the shaft of this gavel-discharger there is secured or formed a square, *h*, on which a bar, G, bears, said bar serving as a check to prevent the discharger from turning more than a quarter of a revolution at each movement. (See more particularly Fig. 1.)

The bar G is pressed upon the square by means of a spring, H, and graduating-screw *i*, said spring being attached at one end to bar G, and the screw *i* passing through an arm, *j*, secured to one of the side pieces, *d*.

The grain, as it falls over the upper end of the inclined plane D, drops into a compartment or chamber, *f*, of the discharger, which is held in position under the pressure of the bar G until a sufficient quantity of grain has fallen into the chamber to overcome that pressure, and the discharger then rotates a quarter of a revolution, the filled chamber discharging itself and an empty one passing in position to receive the grain from the upper end of D, the flap preventing the grain from falling over or beyond the discharger. By turning the set-screw *i* the pressure of the bar G on the square *h* may be graduated in order that the cut grain may be discharged in gavels of greater or less size, as may be desired, and the spring H may have an index, *k*, attached, to work over a graduated arc, to indicate the pressure of bar G on the square *h*, and consequently the weight and size of the gavel.

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

1. The square *h* and spring H, operating with the discharger F, substantially as and for the purpose specified.

2. The index *k* and set-screw *i*, in combination with the spring H, arranged with the bar G and square *h*, substantially as described, for the purpose specified.

ROBERT MORRIS.

Witnesses:

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