

(No Model.)

2 Sheets—Sheet 1.

C. G. & S. P. DEMING.
CORN CUTTER.

No. 430,004.

Patented June 10, 1890.

Fig. 1.

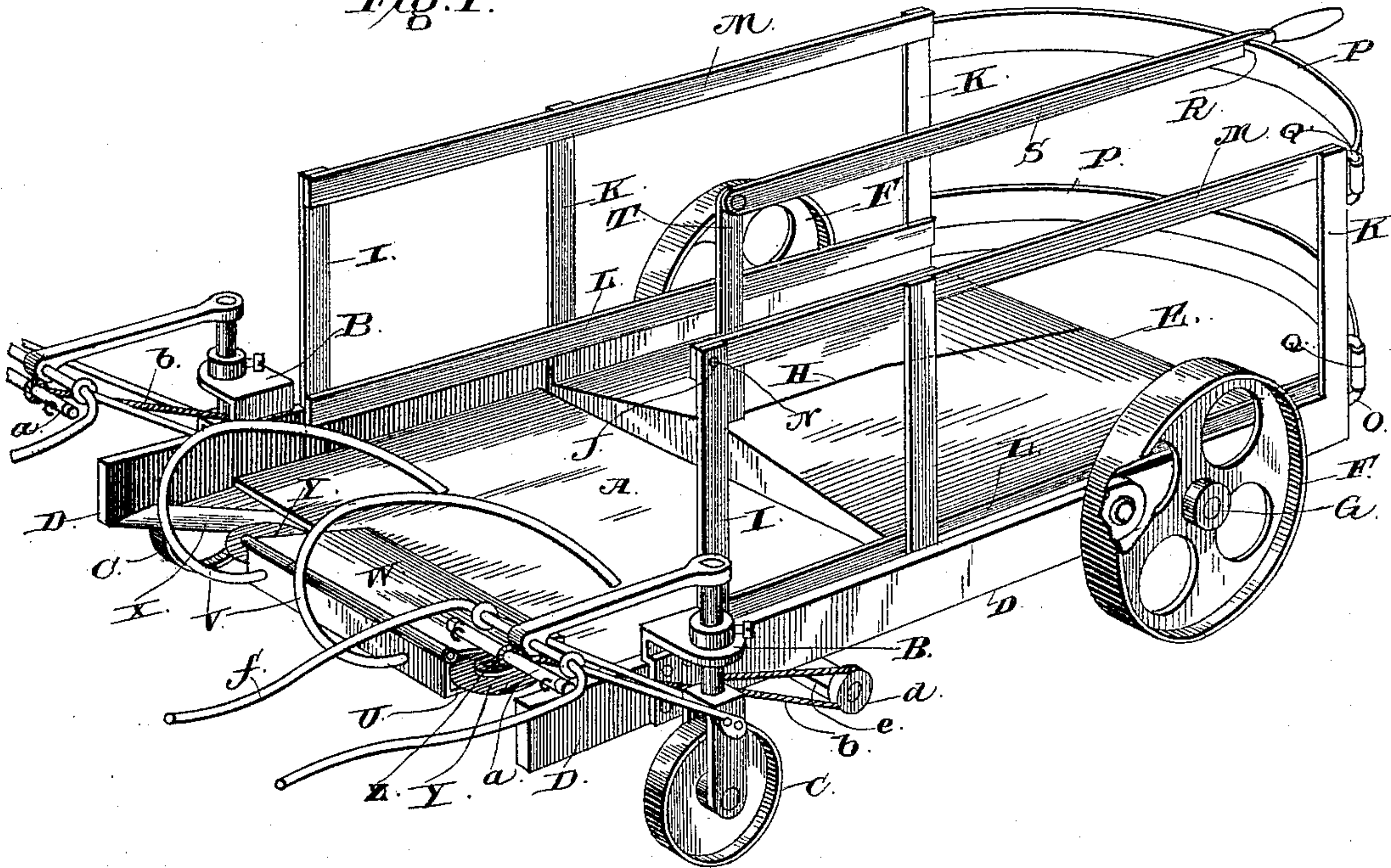


Fig. 2.

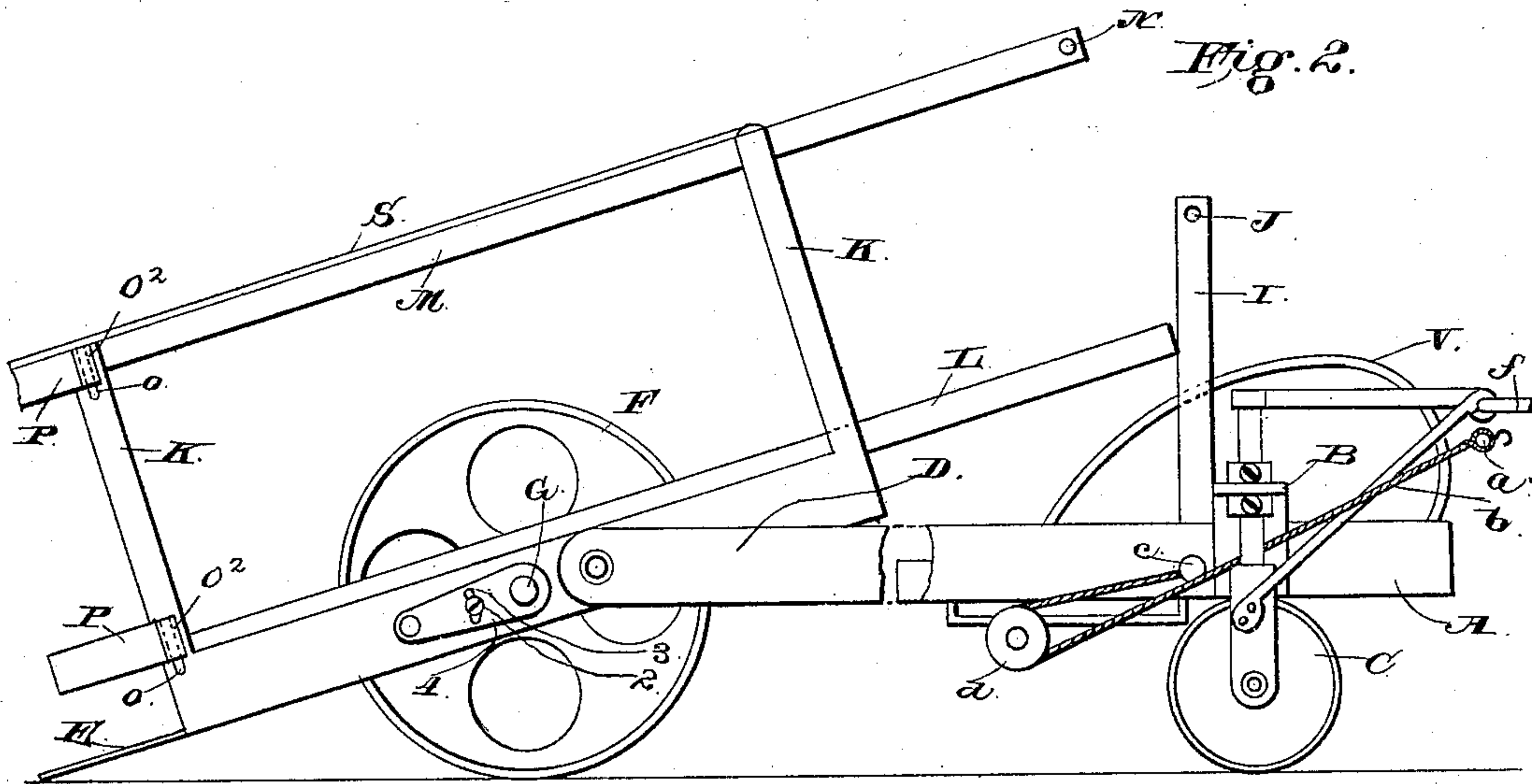


Fig. 3.

Witnesses

M. Fowler

R. H. Bishop,

By their Attorneys,

C. A. Snow & Co.

Inventors

*Caleb G. Deming and
Smith P. Deming*

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2 Sheets—Sheet 2.

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Fig. 4.

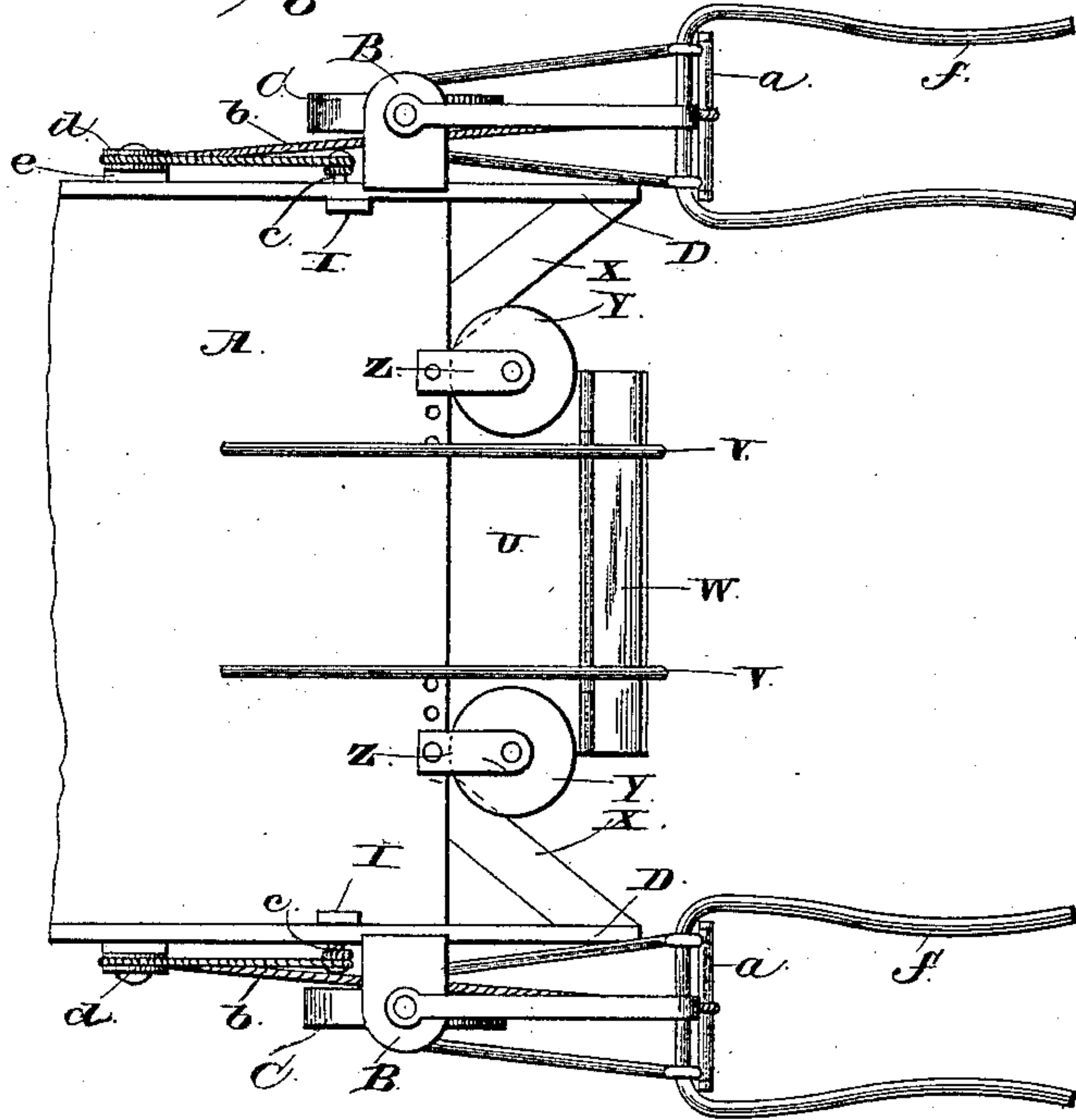
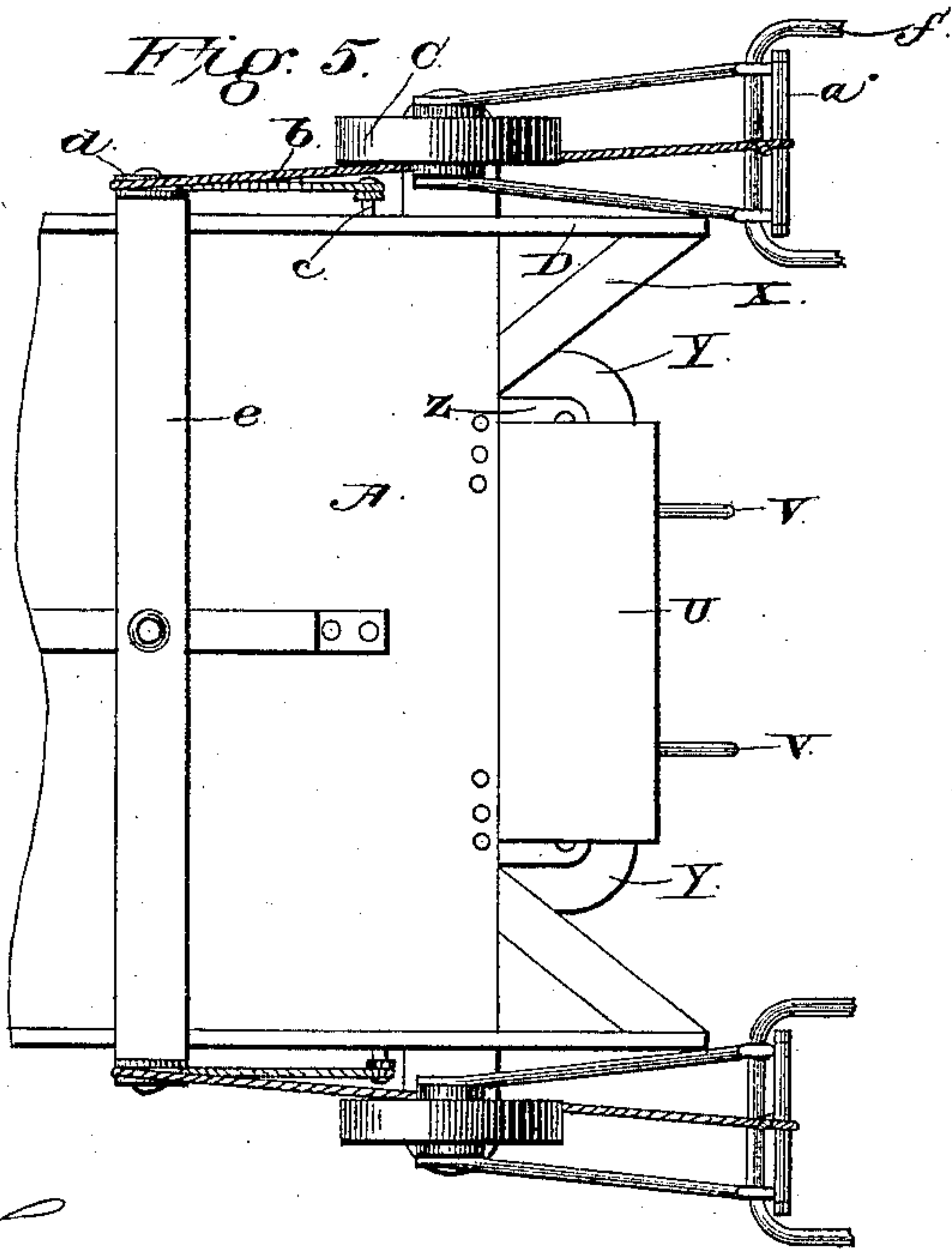


Fig. 5.



Witnesses

M. C. Fowler
R. H. Bishop.

By their Attorneys,

Inventors

Caleb G. Deming and
Smith P. Deming

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CALEB G. DEMING AND SMITH P. DEMING, OF PLEASANTON, KANSAS.

CORN-CUTTER.

SPECIFICATION forming part of Letters Patent No. 430,004, dated June 10, 1890.

Application filed November 7, 1889. Serial No. 329,590. (No model.)

To all whom it may concern:

Be it known that we, CALEB G. DEMING and SMITH P. DEMING, citizens of the United States, residing at Pleasanton, in the county of Linn and State of Kansas, have invented a new and useful Corn-Cutter, of which the following is a specification.

Our invention relates to improvements in corn-harvesters; and it consists in certain novel features, hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of our improved corn-harvester. Fig. 2 is a side view of the same with one wheel removed, showing the manner of dumping the corn. Fig. 3 is a detail view showing the manner of holding the dumping-platform in a horizontal position. Fig. 4 is a top plan view of the front end of the machine. Fig. 5 is a bottom plan view of the same.

In carrying out our invention we employ a main platform A, having the brackets or projections B near its front end, in which the rotary caster-wheels C are mounted. The side rails D of the platform are extended rearward, and to the ends of the same are pivoted the sides of the dumping-platform E. The carrying-wheels F are mounted on stud-axles G, which are formed on plates pivoted to the sides of the dumping-platform and adjustably secured thereto by bolts 2, passing through slots 3 in the plates 4, on which the axles are formed. The platform is provided with a central ridge H, from which the upper side of the platform inclines outward and rearward to the edges of the same. This construction of the platform facilitates the dumping and handling of the shocks when the machine is in use. On the upper side of the main platform near the front edge of the same we erect the standards I, provided with transverse openings J in their upper ends, and on the upper side of the dumping-platform and at the side edges of the same we erect the standards K K, as shown. Rails L are secured to the lower ends of the standards K, and extend forward so as to engage the inner sides of the standards I, and thereby prevent sidewise movement of the dumping-platform. To the upper ends of the standards K we secure the rails M, which extend forward to the standards I, and are pro-

vided at their ends with outwardly-projecting pins N, which are adapted to engage the openings J, and thereby prevent accidental dumping of the platform. The rear uprights K are provided on their outer sides at their rear ends with the hooks or keepers O, and these keepers are engaged by loops O², formed at the ends of hoops or rails P, extending across the rear end of the machine. These hoops may be held in place by having both ends engaged in the keepers O; but we prefer to secure one end of the hoop to the adjacent upright by a staple Q, so as to prevent loss of the hoop, and have so illustrated it in the drawings. The upper hoop P is provided in its upper edge at its center with a notch R, and this notch is normally engaged by a supporting-bar S, which has its front end secured to a standard T, rising from the front edge of the dumping-platform at the center of the same, as clearly shown. The bar S, which is held from lateral displacement by the notch R, serves as a rest against which the upper ends of the cornstalks may be supported until it shall be desired to tie the shock.

The stationary platform is provided at its center with the forwardly-projecting and upwardly-bent plate U, which serves as a support for the guiding-arms V, which are secured to the said plate and extend forward therefrom and then upward and backward over the platform in a substantially U shape. To the front upper edge of the plate U we hinge the guard W, which is adapted to extend backward over the rotary cutters and serve as a shield to prevent injury to the cutters and also as a guard to prevent the operator stepping on and being maimed by the cutters.

To the main platform we secure the stationary knives or cutters X, which project forward therefrom, and adjacent to the front ends of these cutters we provide the rotary cutters Y, as shown. As the machine is drawn along, the stalks are directed to the cutters by the guide-arms, and the said cutters sever the same. The rotary cutters are mounted in brackets Z, which are adjustably secured to the platform, so that they can be adjusted to and away from the stationary cutters, as will be readily understood.

The whiffletrees *a* are attached to the front ends of the cords *b*, which have their rear ends secured to pins *c* on the sides of the main platform, their intermediate portions passing around pulleys *d* on the ends of the doubletree *e*, which is pivoted on the bottom of the main platform. The horses are harnessed to the shafts *f*, which are secured to the spindles of the caster-wheels *C*, and the machine is steered by the shafts and caster-wheels. The pivoted doubletree acts as a draft-equalizer, so that the machine will be drawn along steadily and evenly.

In practice the machine is drawn over the field in the usual manner, the horses walking between two rows and two rows being between the horses. The stalks in the rows between the horses will be engaged by the guide-arms and directed to the cutters and severed by the said cutters. They are then grasped by the operators on the main platform, and when a sufficient quantity has been gathered a third operator on the dumping-platform forms them into a shock and rests the shock against the supporting-bar. The loops *O*² at the ends of the hoops *P* are disengaged from the keepers or hooks *O*, the rails are released from the standards *I*, and the platform is then dumped, so that the shock will fall to the ground in rear of the machine. The dumping-platform is then restored to its former position, the rails again engaged with the standards *I*, the ends of the hoops inserted in the keepers, and the machine drawn along as before.

The hoops may be manipulated in the manner described, partly owing to their natural flexibility and partly because they are hinged so loosely upon the staples *Q* that no difficulty will be experienced in disengaging their opposite ends from or attaching them to the hooks *O*, as may be desired.

From the foregoing description it will be seen that we have provided a very simple corn-cutting machine, in which the stalks will be effectually severed and be positively directed to the cutters and in which the bundles or shocks may be formed and then dumped at stated points along the field.

While we have shown and described our machine as adapted to act on two rows of corn, it will involve no departure from our invention to decrease its width, so that it will act on only one row.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination of the main platform having the standards *I*, provided with the openings *J*, the dumping-platform hinged thereto and having standards on its upper side, and the rails secured to said standards and provided at their front ends with outwardly-projecting pins adapted to engage the openings *J*, as set forth.

2. The combination of a dumping-platform, the rails supported thereon, the hoops remov-

ably attached to said rails at the rear, the standard at the front edge of the dumping-platform, and the supporting-bar secured to said standard and resting on the upper hoop, as set forth.

3. The combination of the platform, the doubletree pivoted on the under side of the same and having pulleys at its ends, the whiffletrees, and the cords passing around the pulleys and having their front ends secured to the whiffletrees and their rear ends secured to the sides of the platform, as set forth.

4. The combination of the platform, the cutters mounted thereon, the forwardly-extending upwardly-bent plate secured to the platform between the cutters, and the guard hinged to the front edge of said plate and adapted to extend rearwardly over the cutters, as set forth.

5. A corn-harvester provided with a dumping-platform having a floor provided with a longitudinally-disposed ridge from which the said floor slants rearwardly and outwardly, and a longitudinally-disposed supporting-bar above the ridge, as set forth.

6. In a corn-harvester, the main platform carrying the cutting mechanism and provided with side casters, combined with the dumping-platform pivoted horizontally to the main platform and provided with means to lock and release the dumping-platform, and the supporting-wheels carried by the dumping-platform, as set forth.

7. In a corn-harvester, the main platform carrying the cutting mechanism and provided with side casters, combined with the dumping-platform pivoted horizontally to the main platform and provided with means to lock and release the dumping-platform, and the supporting-wheels mounted on adjustably-pivoted plates carried by the dumping-platform, as set forth.

8. In a corn-harvester, the main platform carrying the cutting mechanism and provided with supporting-casters, combined with the dumping-platform hinged horizontally to the rear end of the main platform and provided with supporting-wheels, the rails extended forward from the dumping-platform and provided with locking means to engage the main platform, the removable hoops closing the rear end of the dumping-platform, and the locking-bar *S* to engage the hoops, for the purpose set forth.

9. In a corn-harvester, the main platform carrying the cutting mechanism and provided with the side casters, combined with the dumping-platform pivoted to the main platform and provided with means to lock and release the dumping-platform, and the supporting-wheels carried by the dumping-platform, the said platform having its upper side elevated above the plane of the floor of the main platform and inclining downward from the center both laterally outward and rearward, as set forth.

10. In a corn-harvester, the stationary plat-

form provided at each side with the duplicate sets of inclined rigid and circular rotary cutters, the plate U in the center of the platform between the two sets of cutters, the guard W, hinged to the plate and extending over the rotary cutters, and the series of curved guiding-arms V, attached to the plate and extending outward, then upward, and finally backward over the platform, as set forth.

11. The combination of the platform, the doubletree pivoted on the under side of the same and having pulleys at its ends, the whiffletrees, and the cords passing around the pulleys and having their front ends secured

to the whiffletrees and their rear ends secured to the sides of the platform, the caster-wheels mounted thereon at each side, the shafts secured to the spindle of the caster-wheels, and the cutting mechanism carried by the platform and mounted between the shafts, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

CALEB G. DEMING.
SMITH P. DEMING.

Witnesses:

C. S. ATKINS,
N. W. BARNETT.