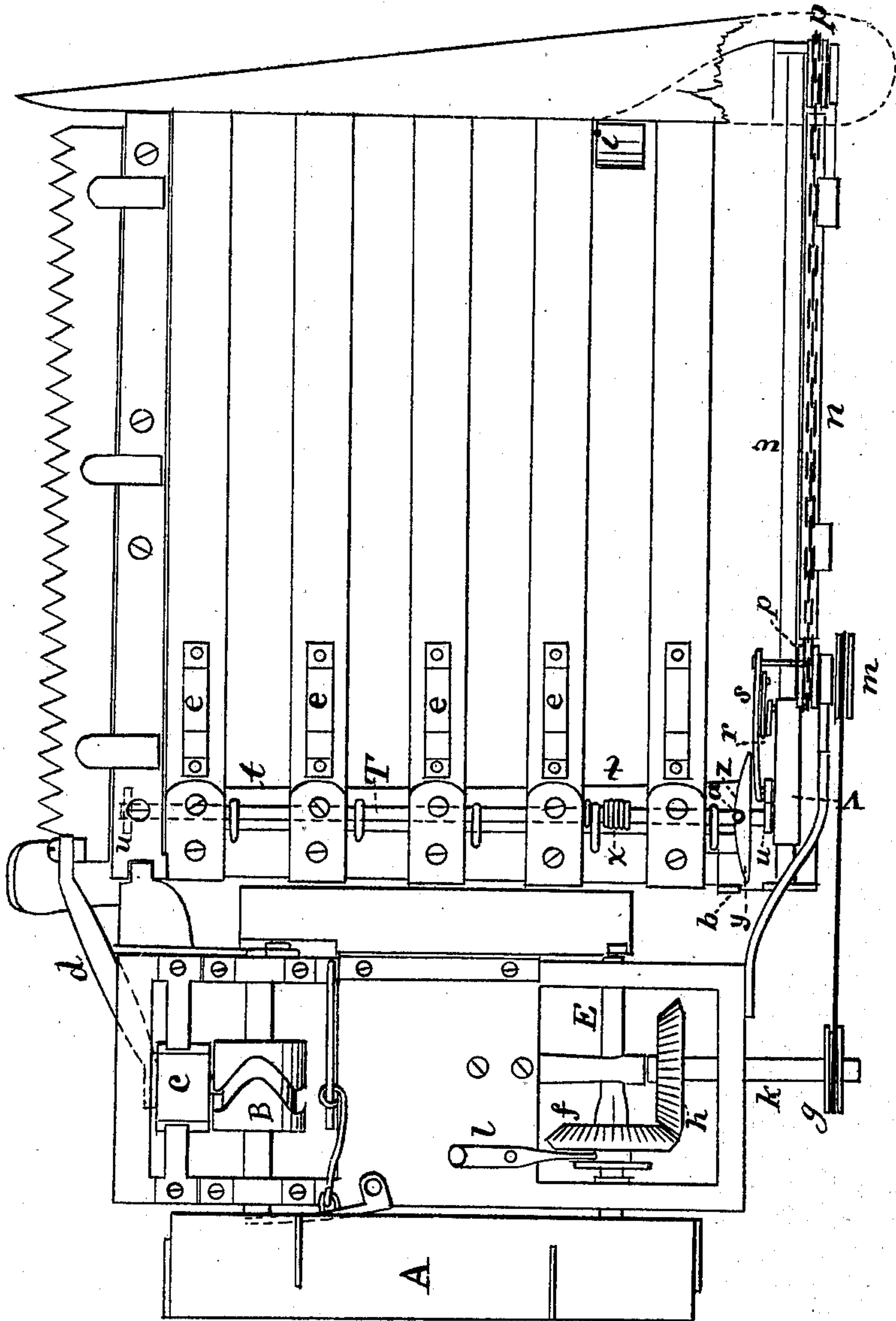


**C. S. STONE.**  
**Harvesters.**

No. 144,367.

Patented Nov. 4, 1873.

Fig. 1.



Witnesses :

14. a. Daniels -  
W. E. Chaffee

Culvin S. Stone Inventor, by  
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C. S. STONE.  
Harvesters.

No. 144,367.

Patented Nov. 4, 1873.

Fig. 2.

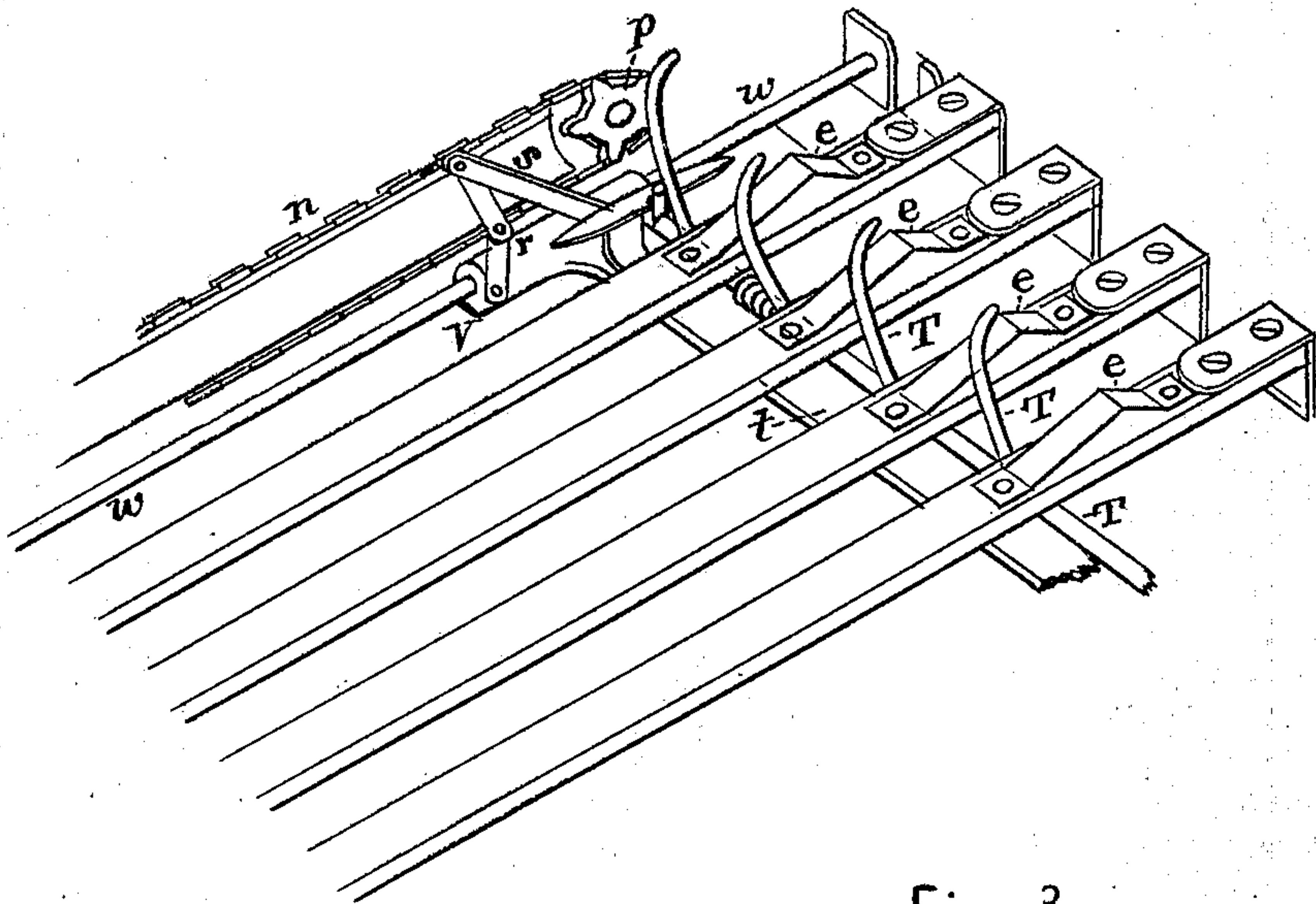


Fig. 3.

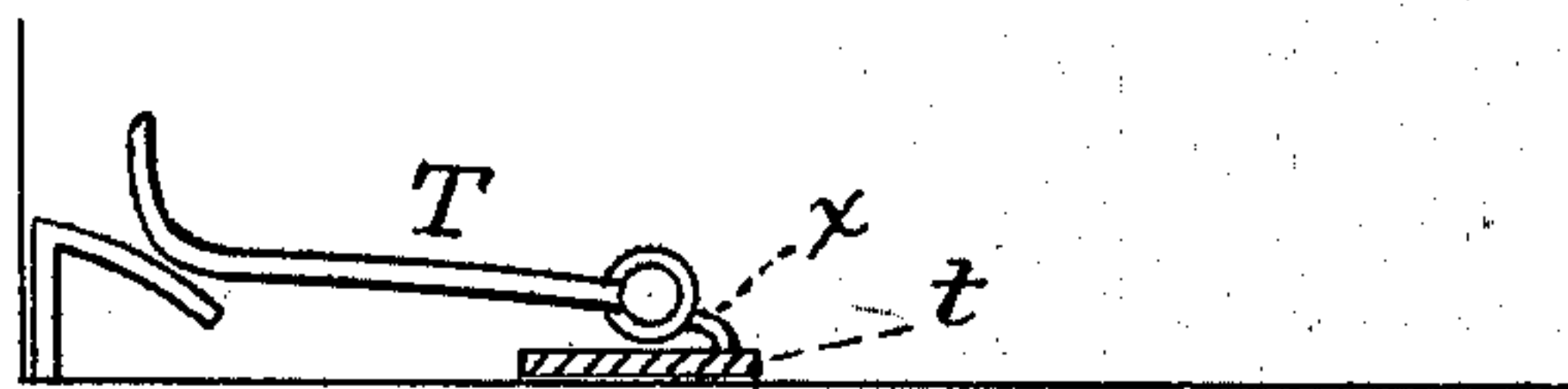
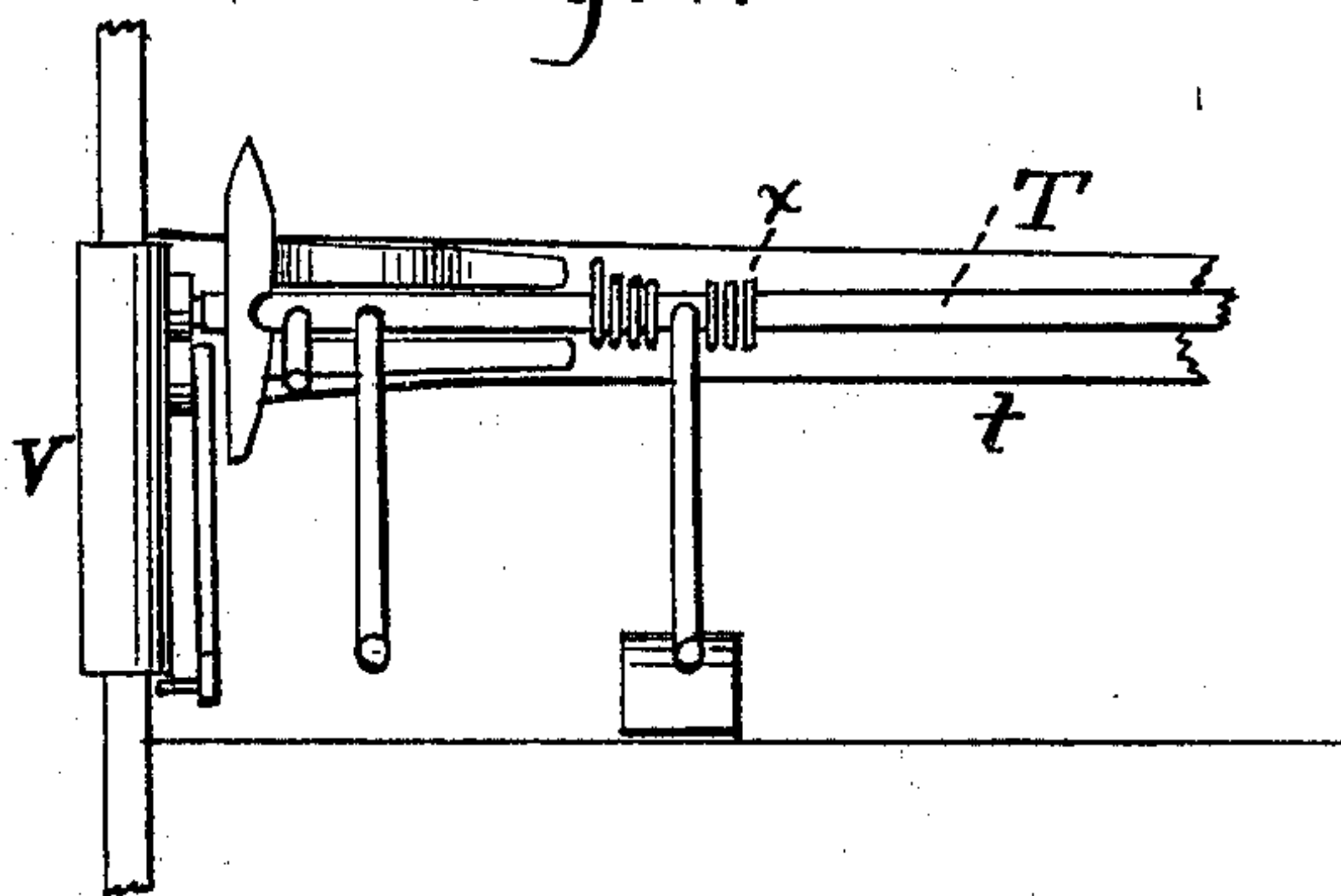


Fig. 4.



Witnesses:

H. A. Daniels,  
W. E. Chaffee

Calvin S. Stone Inventor, by  
Chas. S. Whitman Attorney



# UNITED STATES PATENT OFFICE.

CULVIN S. STONE, OF INDIANAPOLIS, INDIANA.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **144,367**, dated November 4, 1873; application filed July 29, 1873.

*To all whom it may concern:*

Be it known that I, CULVIN S. STONE, of Indianapolis, county of Marion and State of Indiana, have invented certain Improvements in Reaping-Machines. The following description, taken in connection with the accompanying plate of drawings hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts thereof as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of harvesting-machines commonly known as self-raking reapers; and the nature thereof consists in certain improvements in the construction of the same, and novel combination of the parts constituting the self-raking attachment, as hereinafter shown and described.

In the accompanying drawing forming a part of the specification herein, Figure 1 is a top view of a harvester with my improvements applied thereto. Fig. 2 illustrates in perspective the position of the parts when the teeth are raised. Figs. 3 and 4 are detached views of the appliances made use of for adjusting and operating the rake.

The construction, operation, and relative arrangement of the component parts of my invention are as follows:

The driving-wheel A carries, as usual, a series of internal cogs, which drive a spur or pinion upon a counter-shaft, to which is attached a grooved cam, B, which imparts reciprocating rectilinear motion to the slide C and pitman *d*, connecting the cutter-bar thereto. The driving-wheel also imparts motion to the counter-shaft E, upon which is arranged the sliding bevel-gear *f*, which may be made to engage with the bevel-gear *h*, and impart continuous rotary motion to the pulley *g* upon the shaft *k*, at the will of the operator, by means of the lever *l*. The pulley *g* is connected, by means of an open belt or band, with the pulley *m*, which imparts continuous motion to the open chain-band *n*, running upon the sprocket-wheels *p*. The band *n* is connected, by means of the toggle-joint *r* and connecting-link *s*, with the rake-bar *t*, one end of which is rigidly attached to the sleeve *v* upon the rod *w*. The said rake-bar is provided with

bearings *u* for the rake T, the spiral spring *x*, and the spring-catch *z*.

The cut grain is automatically discharged from the platform, in gavels ready for binding, in the following manner: When a gavel of sufficient size has accumulated, the driver, by means of the lever *l*, throws the miter-wheels *f* and *h* into gear, which, through the medium of the pulleys, chain-band, and connecting-links, cause the rake to pass over the platform and discharge the grain upon the ground between the platform and the gearing-frame. The tines of the rake are held in an upright position by means of the spring-catch *z*, provided with a notch for the reception of the lug *a*. When the rake reaches the end of the platform next to the gearing-frame, and the gavel has been discharged, the inclined edge of the catch *z* strikes the projection *b*, and disengages it from the lug *a*, thereby causing the tines actuated by the spiral spring to assume a horizontal position. The rake then makes a retrograde movement across the platform, and the tines are again caused to assume a vertical position by the beveled projection *i*, which comes in contact with one of the tines, and presses it upward until the lug *a* is again caught by the spring-catch *z*. The angular pieces *c* are intended to prevent the straw from dribbling off, and also to retard the grain in such a manner that a complete and perfect gavel may be formed before it is pushed from the platform.

Having thus described the construction and operation of my invention, I will indicate in the following clause what I claim and desire to secure by Letters Patent of the United States—that is to say:

The self-raking mechanism consisting of the platform provided with the projections *b* and *i*, the chain-band rotating on pulleys, the rod *w*, the toggle-joint *r*, the sleeve *v*, the rake-bar *t* provided with bearings *u*, the rake T, the spring-catch *z*, and the spring *x*, all combined and working together as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 10th day of June, 1873.

CULVIN S. STONE. [L. S.]

Witnesses:

C. W. WITT,  
W. H. CORBALEY.