

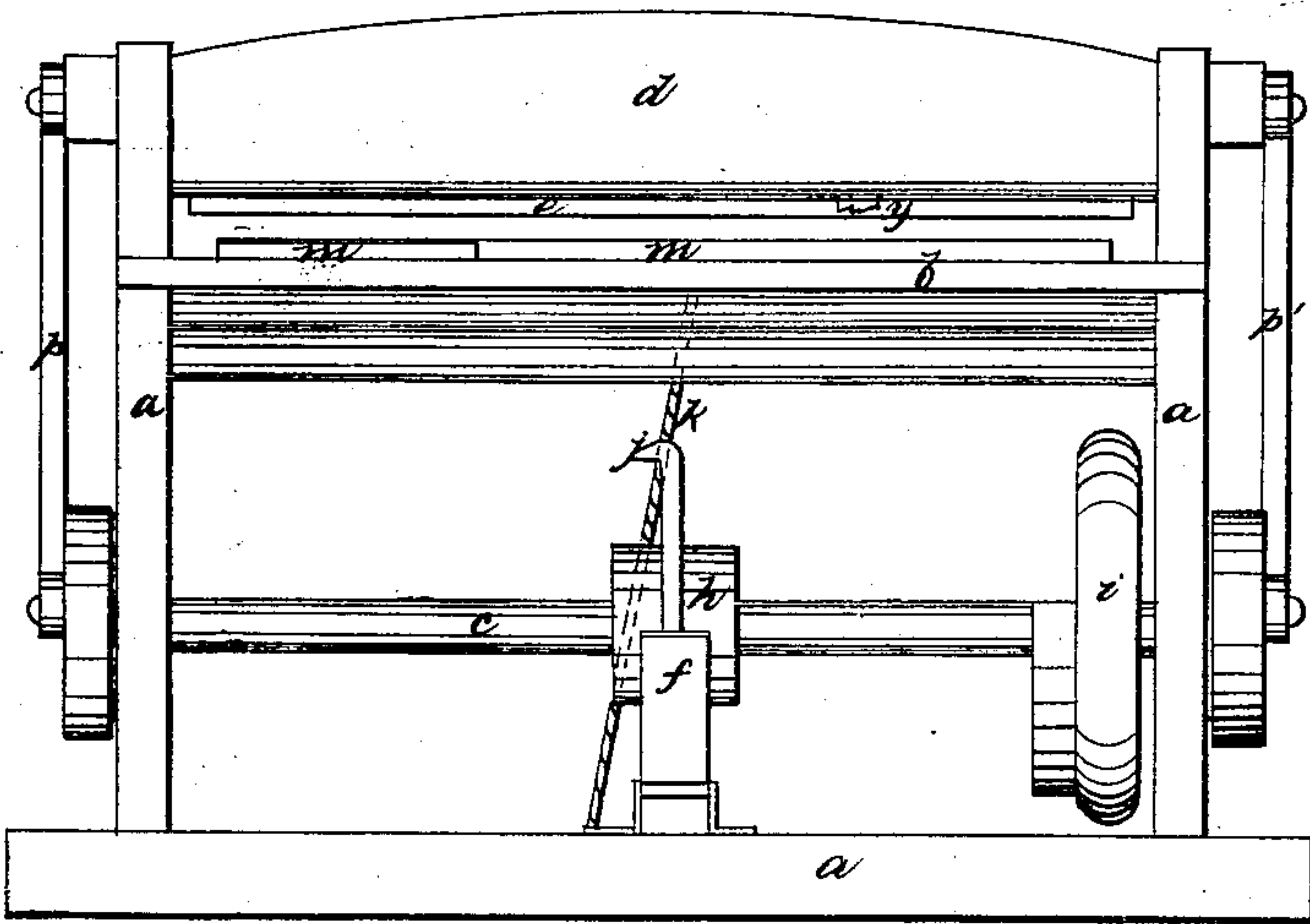
*H. D. Smith,*

*Cutting Leather,*

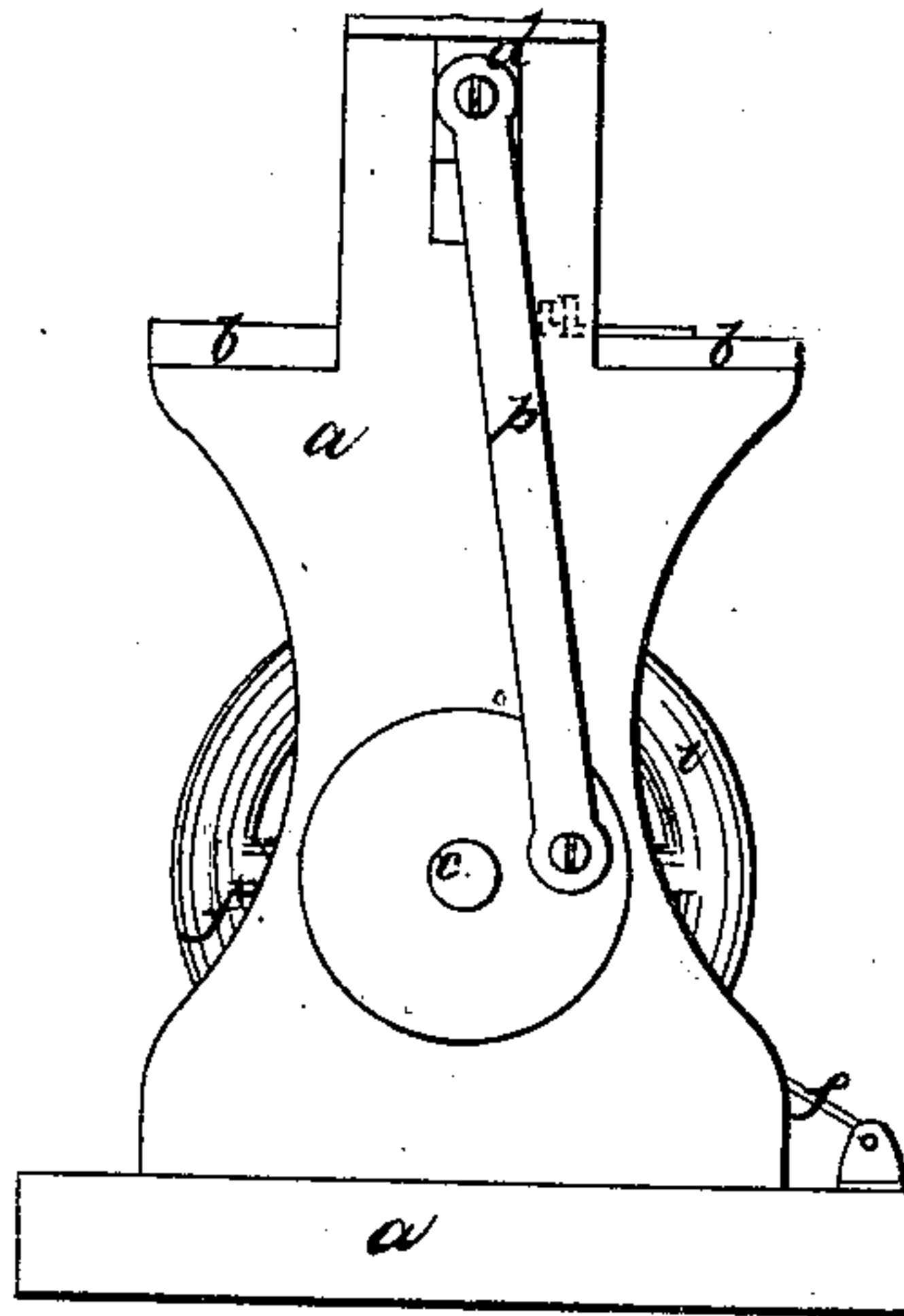
*N<sup>o</sup> 40,287.*

*Patented Oct. 13, 1863.*

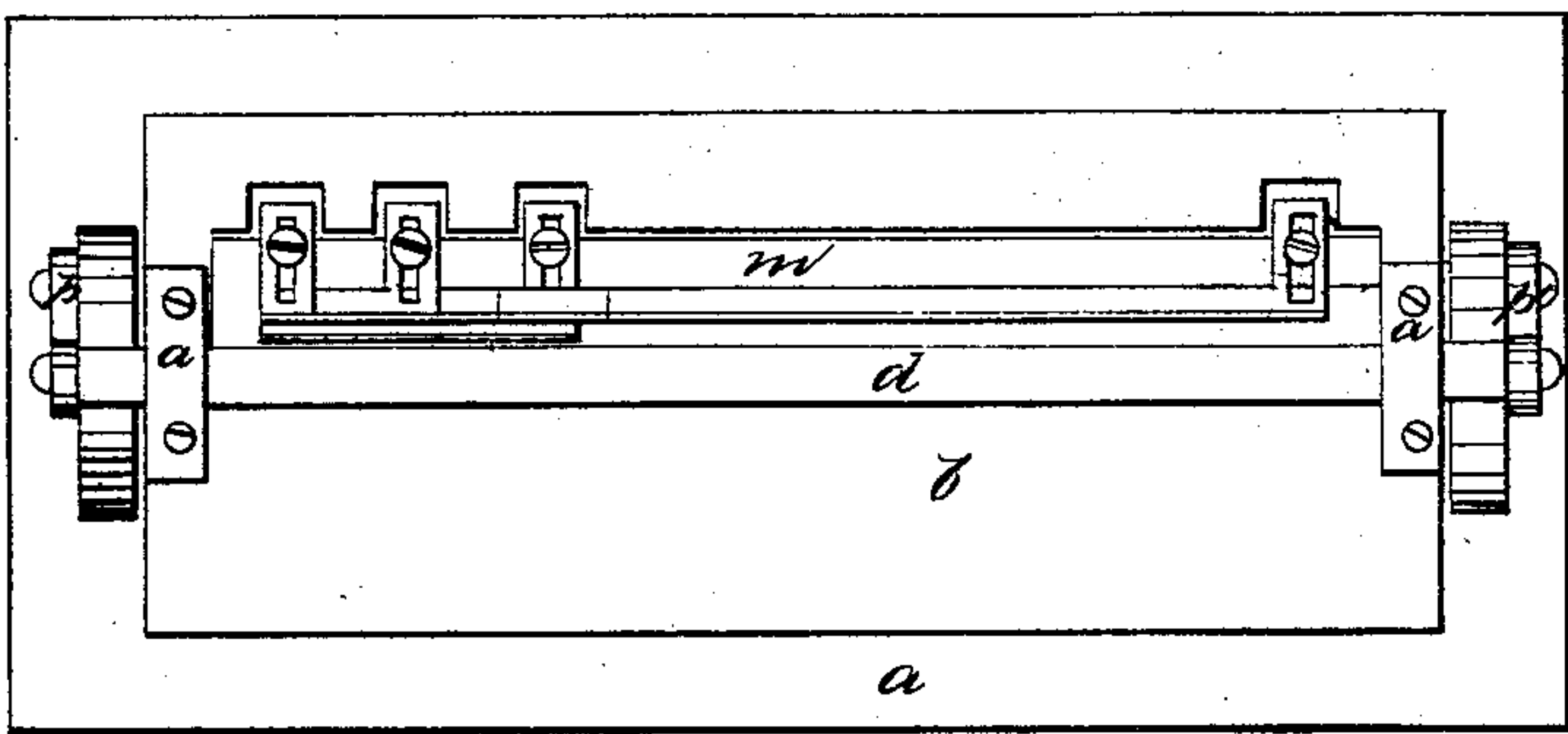
*Fig. 1.*



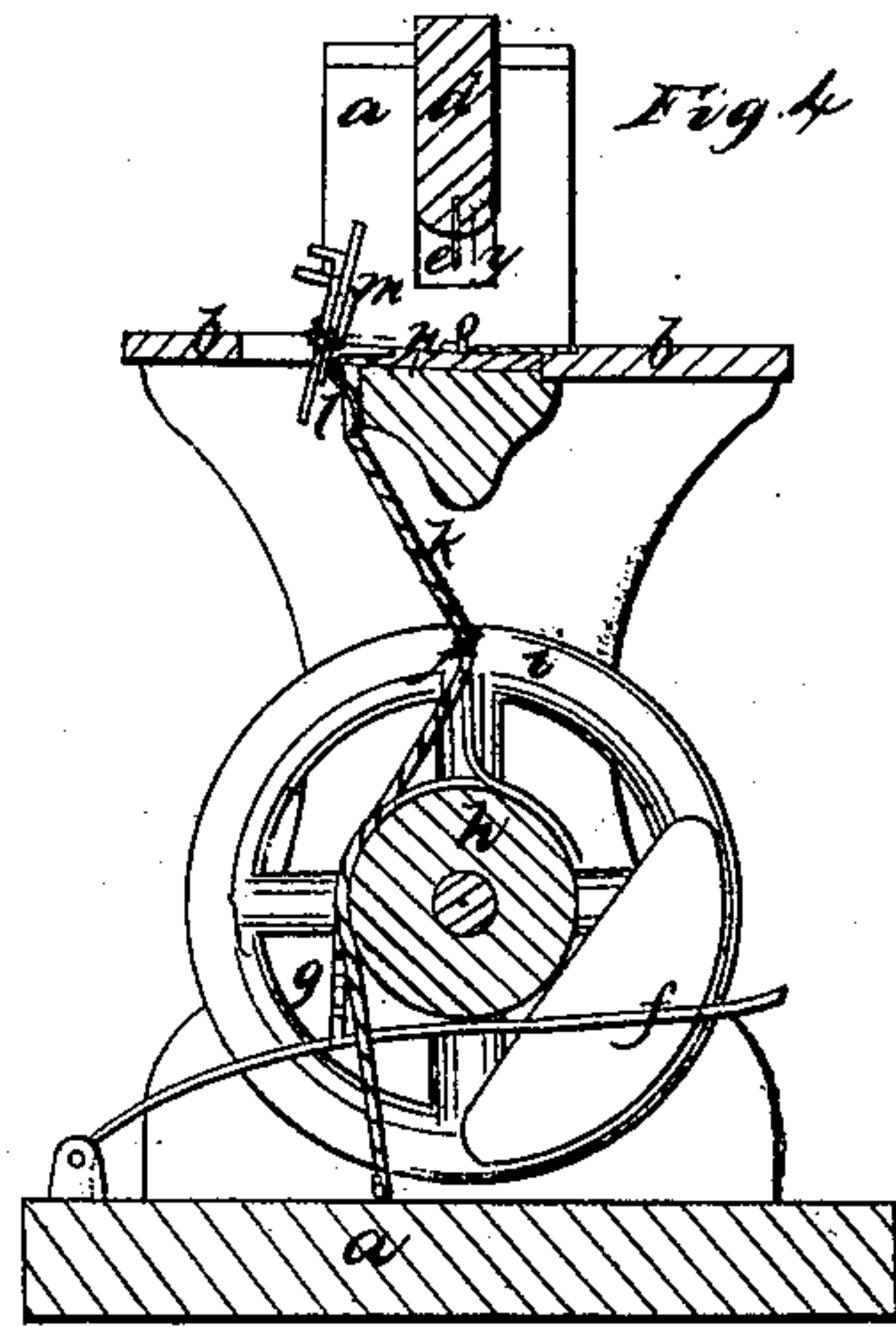
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



*Witnesses.*

*Chas. Merrill  
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*Inventor.*

*Henry D. Smith*

# UNITED STATES PATENT OFFICE.

HENRY D. SMITH, OF NEW YORK, N. Y.

## IMPROVED BELT-CUTTING MACHINE.

Specification forming part of Letters Patent No. 40,287, dated October 13, 1863.

*To all whom it may concern:*

Be it known that I, HENRY D. SMITH, of the city, county, and State of New York, have invented new and useful Improvements in Belt-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification.

Figure 1 is a front elevation; Fig. 2, a top view; Fig. 3, an end elevation, and Fig. 4 is a vertical cross-section.

Similar letters of reference refer to corresponding parts in all the views.

The frame *a a a* has two uprights supporting the table *b*, the rocking shaft *c* and the bearings of the slide-beam *d*, which latter carries the knife or cutter *e*.

The motion is communicated to the rocking shaft *c* and from thence by the cranks and pitmen *p* and *p'* to the slide-beam *d* by means of a footboard, *f*, connected by a chain, *g*, with the upper side of the cam-cylinder *h*.

A loaded balance-wheel, *i*, on the rocking shaft, serves to bring back the shaft to its original position, and thus raise the knife after the cutting is completed. As the shaft thus goes back the cam *j* catches the chain *k* and draws it in, as shown in Fig. 4. The chain is fastened at the bottom and connected above with an arm or crank, *l*, on rocking gage-plate *m*, which is by this means suddenly jerked up, as shown in Fig. 4, so as to throw off the strip which has just been cut. As the cam *j* continues to move back the chain *k* slips off and the gage-plate falls back, ready for the next cutting operation.

The gage-plate falls upon a bed of rubber, *n*, or other elastic substance. Upon this rubber opposite to gage-plate is a stationary plate of metal, placed so that its edge is a short distance from the edge of the gage-plate, as shown on Fig. 4 at *o*, thus forming a groove into which the knife drops as it completes the cutting operation. The gage is made in two parts, which can be set independently of each other for convenience in cutting different widths without altering the gage, where a flaw or irregularity in the material would render it useless for a wide strip.

When it is desired to mark or stamp the leather for stitching or any other purpose, the points or punches are affixed to the under side of the slide-beam, as shown at *y*, by which means the marking is effected simultaneously with the cutting.

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

1. The rocking or movable gage-plate, or its equivalent, for the purpose of throwing off the strips as they are cut.

2. The combination of the movable gage-plate with the packing *n* and stationary plate, forming a groove, *o*, for the reception of the knife.

3. Combining the cutting with the embossing, stamping, or marking operations, so that they are effected simultaneously.

HENRY D. SMITH.

Witnesses:

CHAS. MORRILL,  
EDW. E. QUIMBY.