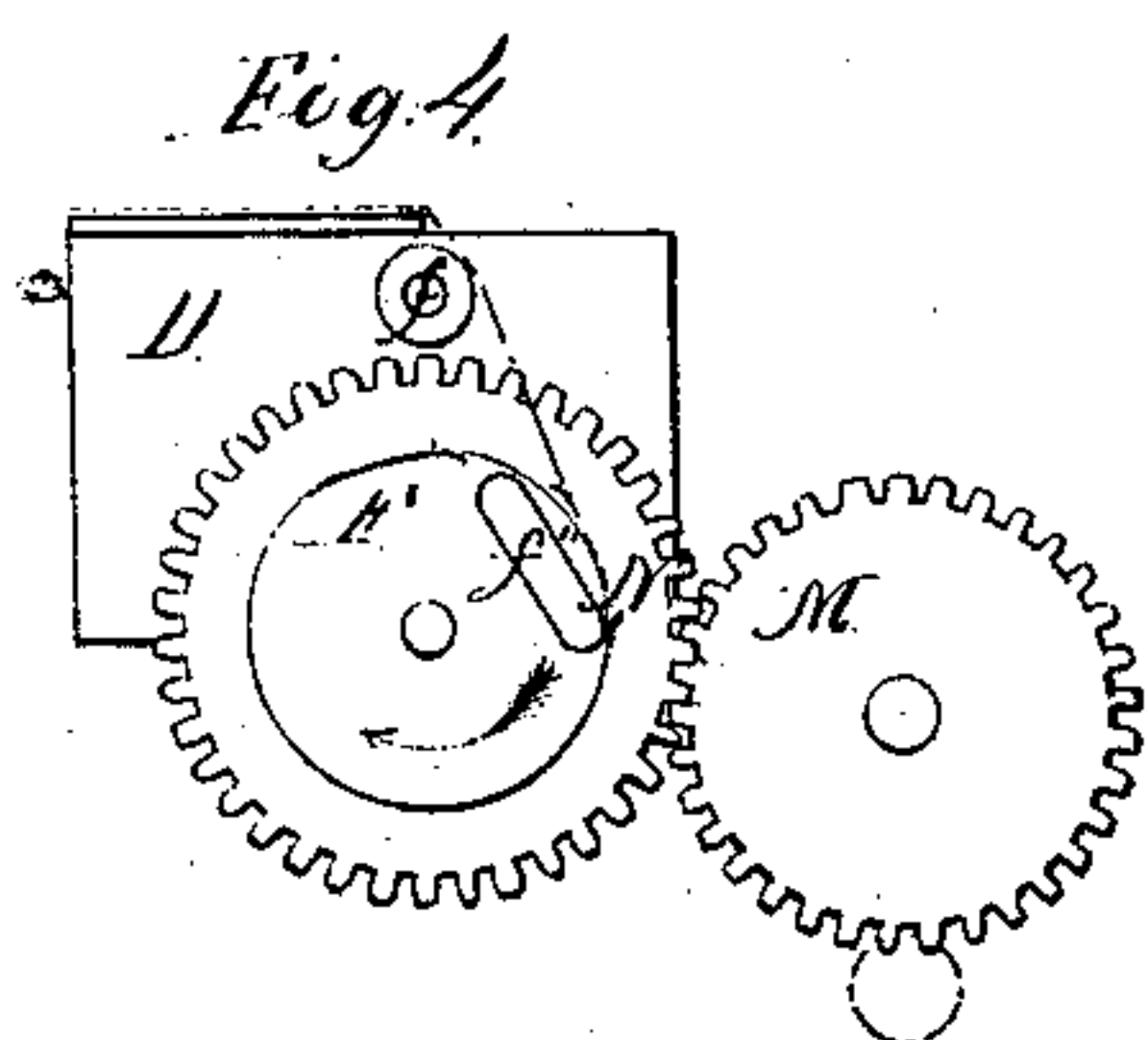
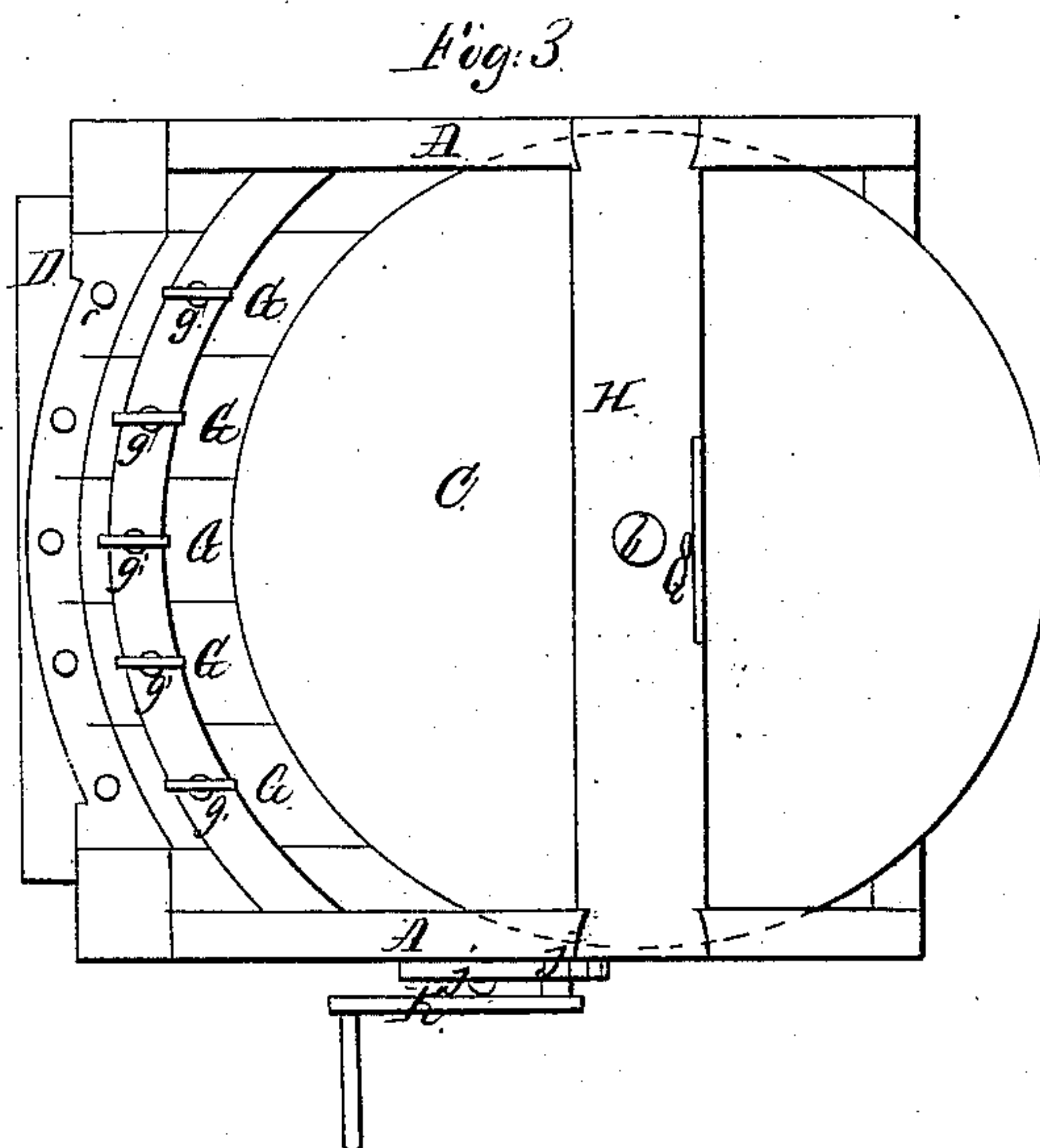
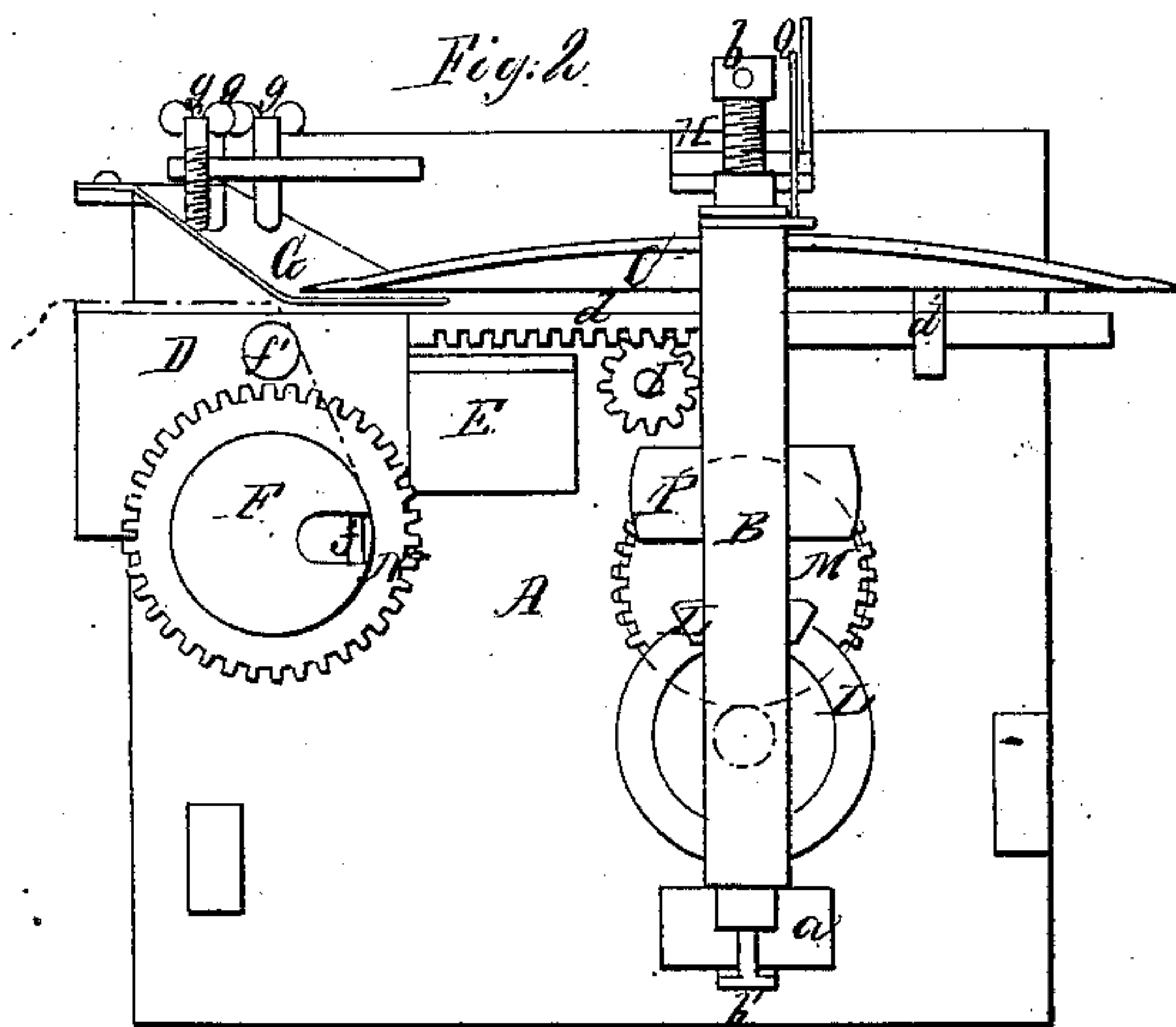
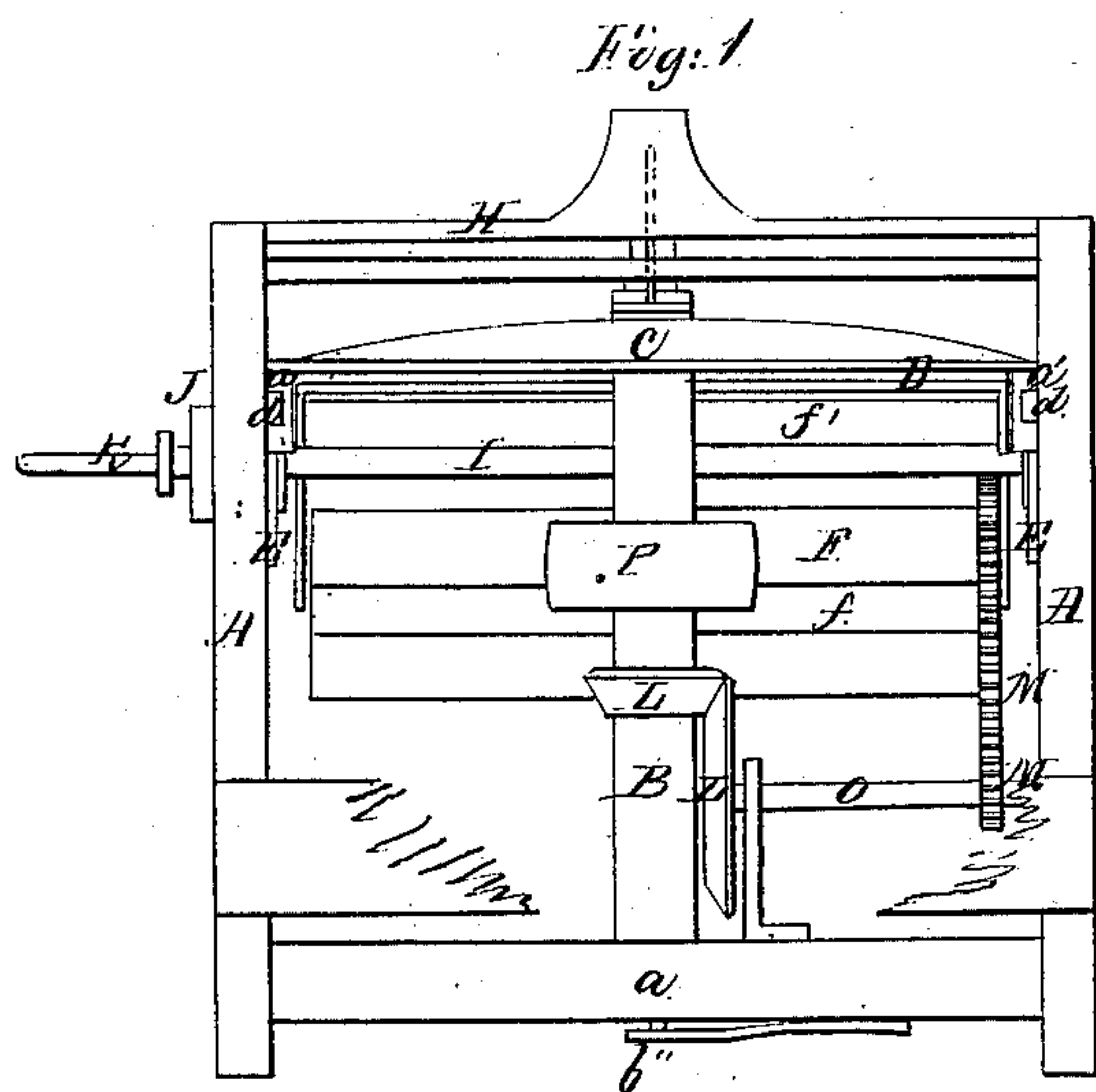


# H. E. Chapman Splitting Leather.

N<sup>o</sup> 22,108.

Patented Nov. 23, 1858.



Witnesses:  
Nelson Reed  
Wm. J. Som

Inventor:  
Henry E. Chapman

# UNITED STATES PATENT OFFICE.

H. E. CHAPMAN, OF ALBANY, NEW YORK.

## MACHINE FOR SPLITTING LEATHER.

Specification of Letters Patent No. 22,108, dated November 23, 1858.

*To all whom it may concern:*

Be it known that I, HENRY E. CHAPMAN, of the city and county of Albany and State of New York, have invented a new and useful Machine for Splitting Leather or Hides; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an end elevation; Fig. 2 a longitudinal section; Fig. 3 a plan, and Fig. 4 a view showing the wheels M, and N, thrown into gear.

The same letters indicate like parts in all the figures.

To enable others skilled in the art to make and use my invention I will describe its construction and operation.

A, A, are the side pieces of the frame:—*a*, a cross piece between them for supporting the vertical shaft B; *b*, a set screw for adjusting the cut by depressing the vertical shaft, (which is allowed sufficient end play for this purpose,) the shaft being held up against the screw by means of the spring bearing, *b'*, placed at its foot; C, a circular knife of any required diameter, made of a dishing form and placed with its convex side uppermost, thereby adding much to its rigidity, and keeping all but the cutting edge of it free from contact with the leather; D, a sliding bed or table over which the cut is made, and which also carries the feeding apparatus; *d*, *d*, racks attached to the table D, for the purpose of moving it in and out of gear; *d'*, *d'* guides for racks.

E, E, are guides attached to the side pieces, upon which the table D, slides; F, feeding roller; *f*, a clamping bar placed in a groove in the feeding roller, by which the leather is fastened to it—*f'*, a guide roller between the table and feeding roller; *f''*, a crank for working the clamping bar; G, G, G, a series of springs for holding the leather down to the table, and which are split to allow them to pass over any unequal thickness of the leather; the edge of these springs are made to conform to the circumference of the knife, so as to keep the leather down to the table close up to the cutting edge of the knife.

*g*, *g*, *g*, *g*, *g*, are set screws for regulating the pressure of the springs; H a cross bar at

the top of the machine, serving as the upper bearing of the shaft B; I, a cross shaft to which two pinions are attached gearing into the racks *d*, *d*; J, a ratchet wheel on shaft I, and *j* a pawl for holding the table up to its place while the machine is operating; K, a crank for working the shaft I; L, L, bevel wheel and pinion; M, M, spin wheel and pinion; N, spin wheel attached to the feeding roller F, and O, a horizontal shaft carrying the bevel wheel and spur pinion, (this train of gearing constitutes the feed gear to the machine); P, the driving pulley; Q, an index connected to the upper end of the shaft B, for showing the thickness of the cut.

The operation of my machine is simply as follows—Motion is given to the knife C, by means of a band on the driving pulley P; the table D, being thrown out, the side of leather is passed over it, and its end fastened into the groove of the feeding roller F, by means of the clamping bar *f*, then by simply turning the crank, K, the table, D, is moved forward bringing the leather under the springs, G, and in contact with the cutting edge of the revolving knife, C, the crank, K, is turned until the wheels, M, and N, are thrown into gear, when the pawl, *j*, is thrown down into the ratchet wheel, J, which holds the table, D, in its place, then by means of the train of feed gearing driven from the shaft, B, the feeding roller, F, is set in motion winding that portion of the leather which passes under the knife around its circumference, thereby drawing the side gradually up to the cut of the knife; the balance of the side passes over the upper side of the knife, from whence it is removed after the splitting is completed; after the side is split the pawl *j*, is raised, the table run back and the leather removed from the feed roller F.

What I claim as new in machines for splitting leather and desire to secure by Letters Patent is—

The arrangement of the dished circular knife (C) the series of split-springs (G, G, G, G,) and the sliding bed (D) in their relation to each other as herein described.

H. E. CHAPMAN.

Witnesses:

NELSON REED,  
WM. H. LOW.