

(No Model.)

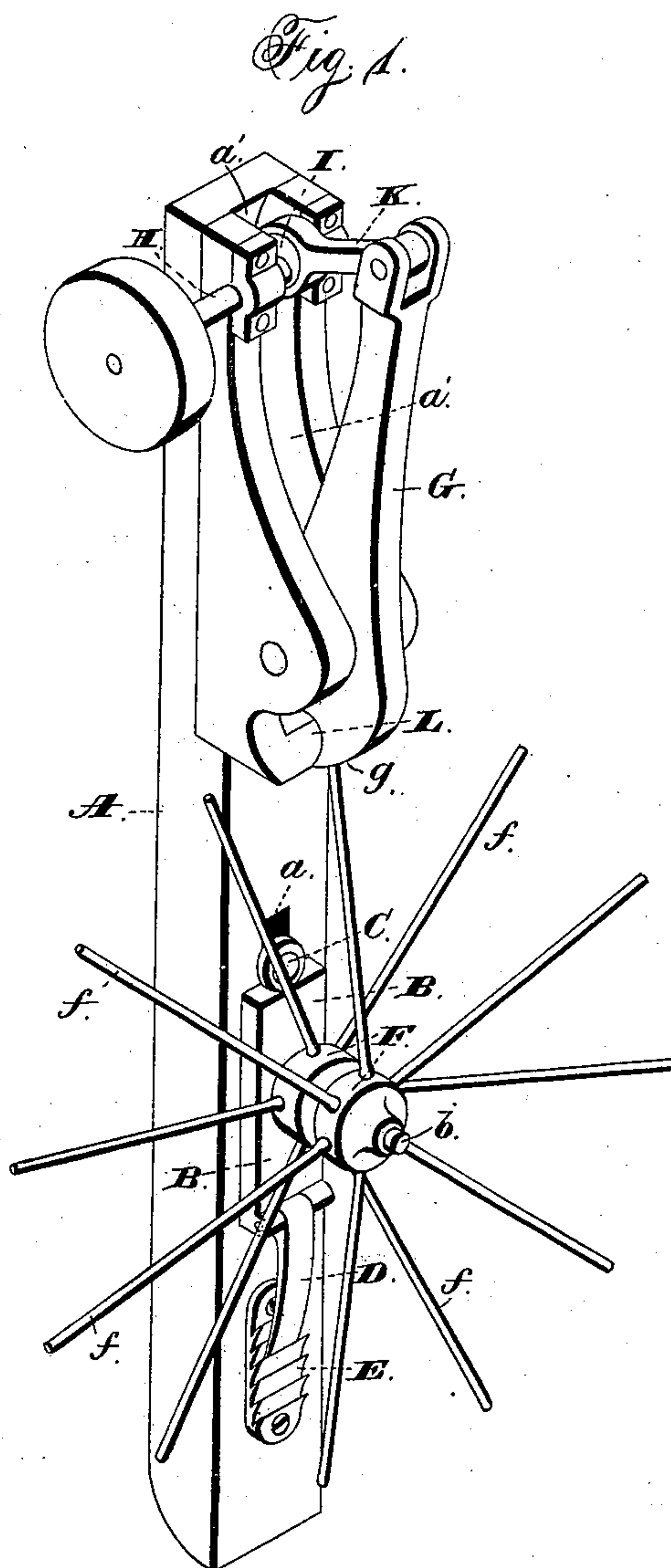
2 Sheets—Sheet 1.

J. R. LITTLE.

MECHANISM FOR THE MANUFACTURE OF METAL WHEELS.

No. 337,172.

Patented Mar. 2, 1886.



Witnesses:

*Jas. B. Hutchinson.
 Henry C. Hazard.*

Inventor.

*Jas. R. Little, by
 Prindle & Russell, his Attys*

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Fig. 2.

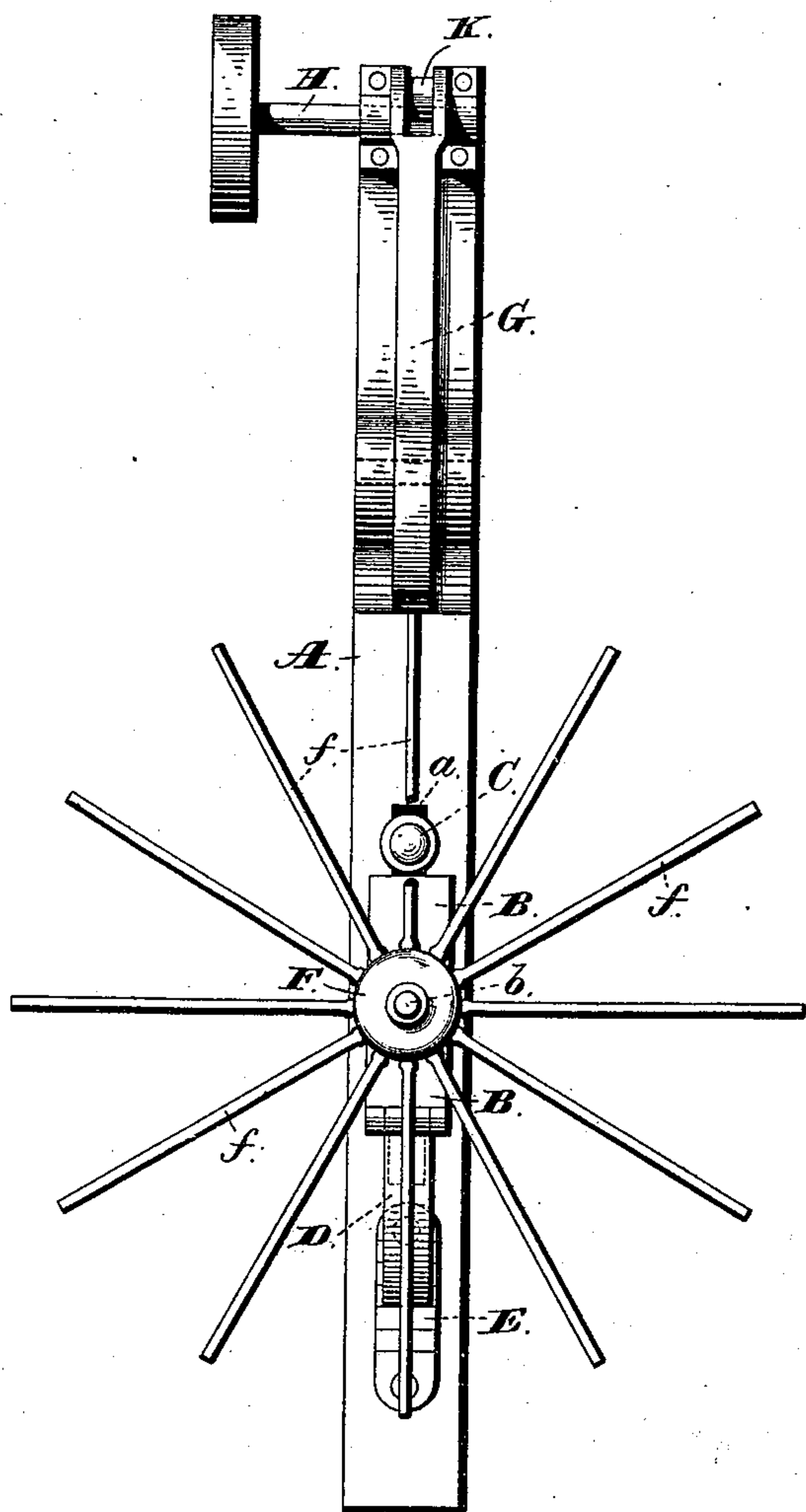
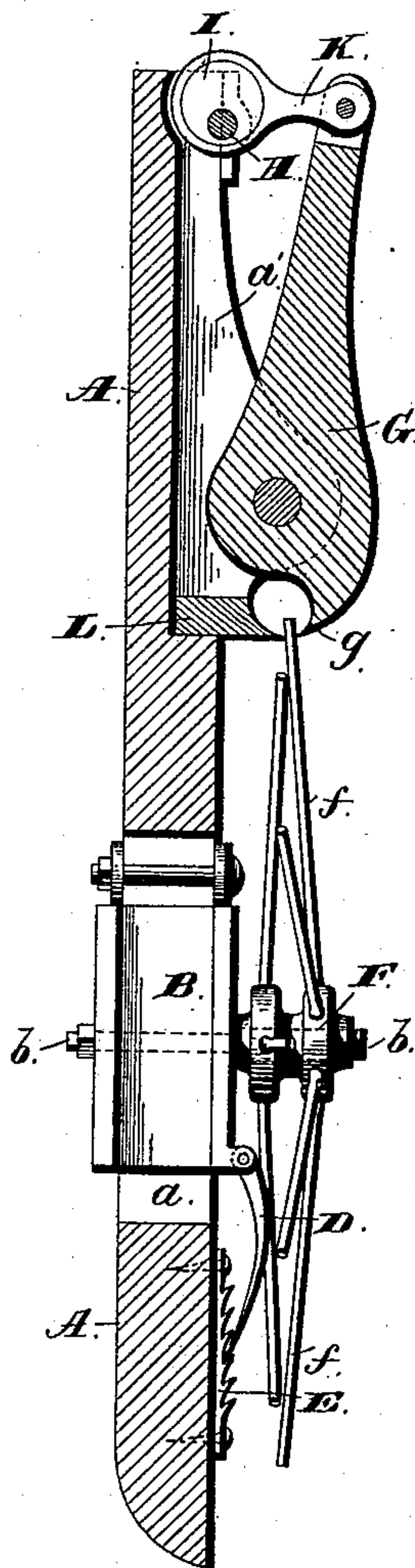


Fig. 3.



Witnesses:

Jas. C. Hutchinson.
 Henry C. Hazard

Inventor.

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UNITED STATES PATENT OFFICE.

JAMES R. LITTLE, OF QUINCY, ILLINOIS, ASSIGNOR TO THE QUINCY METAL WHEEL COMPANY, OF SAME PLACE.

MECHANISM FOR THE MANUFACTURE OF METAL WHEELS.

SPECIFICATION forming part of Letters Patent No. 337,172, dated March 2, 1886.

Application filed December 24, 1885. Serial No. 186,629. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. LITTLE, of Quincy, in the county of Adams, and in the State of Illinois, have invented certain Improvements in Mechanism for the Manufacture of Metal Wheels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my machine as arranged for use. Fig. 2 is a front elevation of the same; and Fig. 3 is a vertical section upon line *xx* of Fig. 2.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of metal wheels it is customary to first secure the inner ends of the spokes within the hub and then to place the rim upon and secure it to the outer ends of said spokes, but before performing the last-named operation it has been found necessary to turn off the outer ends of some, if not all of said spokes, so as to give to the same the required uniform length.

The object of my invention is to enable the spoke ends to be easily and quickly trimmed to length; and said invention consists in the construction and combination of parts, substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice I employ a vertically-arranged frame, A, within which, below its center, is provided a longitudinal slot, *a*, that extends from its front side to its back side, and receives a block or head, B, that is held in place by front and rear flanges, and is adapted to slide freely within the limits of said slot. A bolt, C, passing through the upper portion of said slot and readily adjustable lengthwise of the latter, forms a stop to limit the upward motion of said head, while a pawl, D, pivoted upon the lower end of the latter and engaging with a toothed rack, E, that is secured upon the outer face of said frame below said slot, secures said head in position when adjusted thereto. The head B carries an axle-arm, *b*, which projects horizontally forward and is adapted to receive and support the hub F of a wheel and to permit said hub to be freely rotated thereon so

as to bring each of its spokes *f* successively into vertical position at the upperside. Within the front side, at the upper end of the frame A, is formed a vertical groove, *a'*, within which is pivoted a lever, G, that is adapted to be moved upon its pivotal bearing in a vertical plane which is parallel with the axle-arm *b*. Such motion is effected by means of a shaft, H, that is journaled at the upper end of said frame, and is provided with an eccentric, I, and a bar, K, which has one end pivoted to the upper end of said lever, and its opposite end journaled upon said eccentric. The lower end of the lever G is provided with a cutting-jaw, *g*, which coincides with and may be caused to impinge upon a fixed cutting-jaw, L, that is secured upon the frame A, the arrangement being such that as said lever oscillates upon its pivotal bearing, said cutting-jaw *g* alternately recedes from and impinges upon said stationary jaw L, so that anything placed between will be severed. The axle-arm being adjusted to position for the length of spoke desired, the spokes are successively moved into position between the cutting-jaws as the same are opened, and when said jaws again close together the projecting end of said spoke is cut off, the mechanism thus operated acting to reduce said spokes to a uniform predetermined length.

If desired, the head and axle-arm may be moved vertically by means of a treadle, so as to lower each spoke from contact with the cutting-jaws after having been operated upon by the latter.

I do not claim or intend to cover by my claims herein a machine for trimming spokes, in which a circular saw is used to cut the spokes, and holding-jaws are employed to hold each spoke in position when it is being acted upon by the saw.

Having thus described my invention, what I claim is—

1. As an improvement in mechanism for manufacturing metal wheels, an axle-arm or stud for journaling a wheel-spider, in combination with cutting-jaws adapted to act upon opposite sides of each spoke as the spokes are successively brought into position between the jaws by the rotation of the spider upon the

axle-arm or stud, substantially as and for the purpose specified.

2. As an improvement in mechanism for manufacturing metal wheels, in combination
5 with the movable block, the axle-arm or stud thereon for journaling a wheel-spider, and the cutting-jaws adapted to operate upon opposite sides of a wheel-spoke, to cut off the end thereof as the spokes are brought suc-
10 cessively between the jaws by the rotation of the spider upon the axle arm or stud, substantially as and for the purpose shown.

3. In a machine for trimming the spokes of metal wheels, in combination with a suitable
15 frame, the fixed cutting-jaw mounted thereon, the movable cutting-jaw acting in opposition

to such fixed jaw, means for actuating the movable jaw, the movable block adapted to be moved toward or from the cutting-jaws, and the axle arm or stud carried by the block 20 for journaling a wheel-spider, so that the spoke ends can be brought successively between the jaws by the rotation of the spider, substantially as and for the purpose described.

In testimony that I claim the foregoing I 25 have hereunto set my hand this 7th day of December, 1885.

JAMES R. LITTLE.

Witnesses:

CEYLON SMITH,
CHAS. H. BAGBY.