

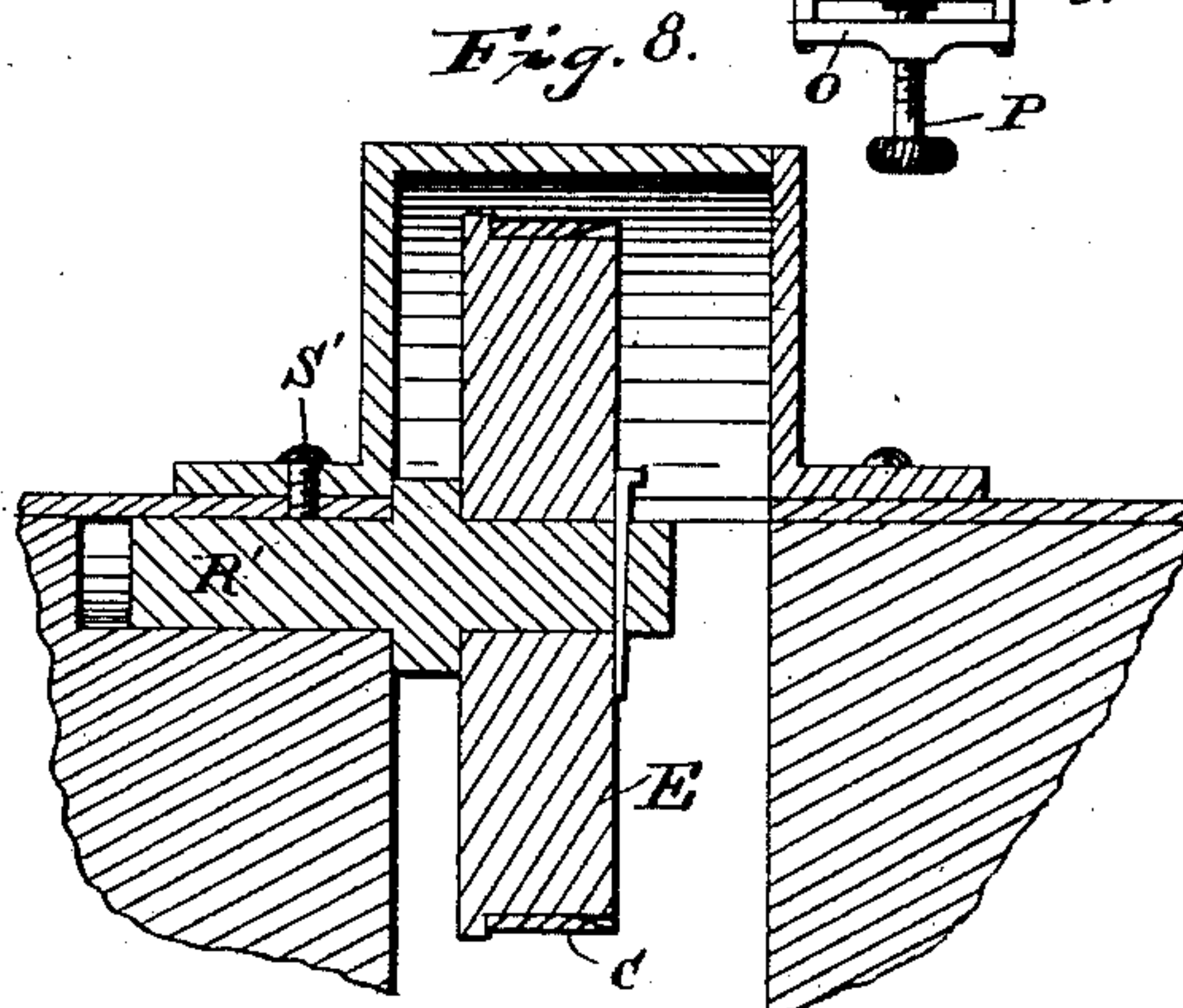
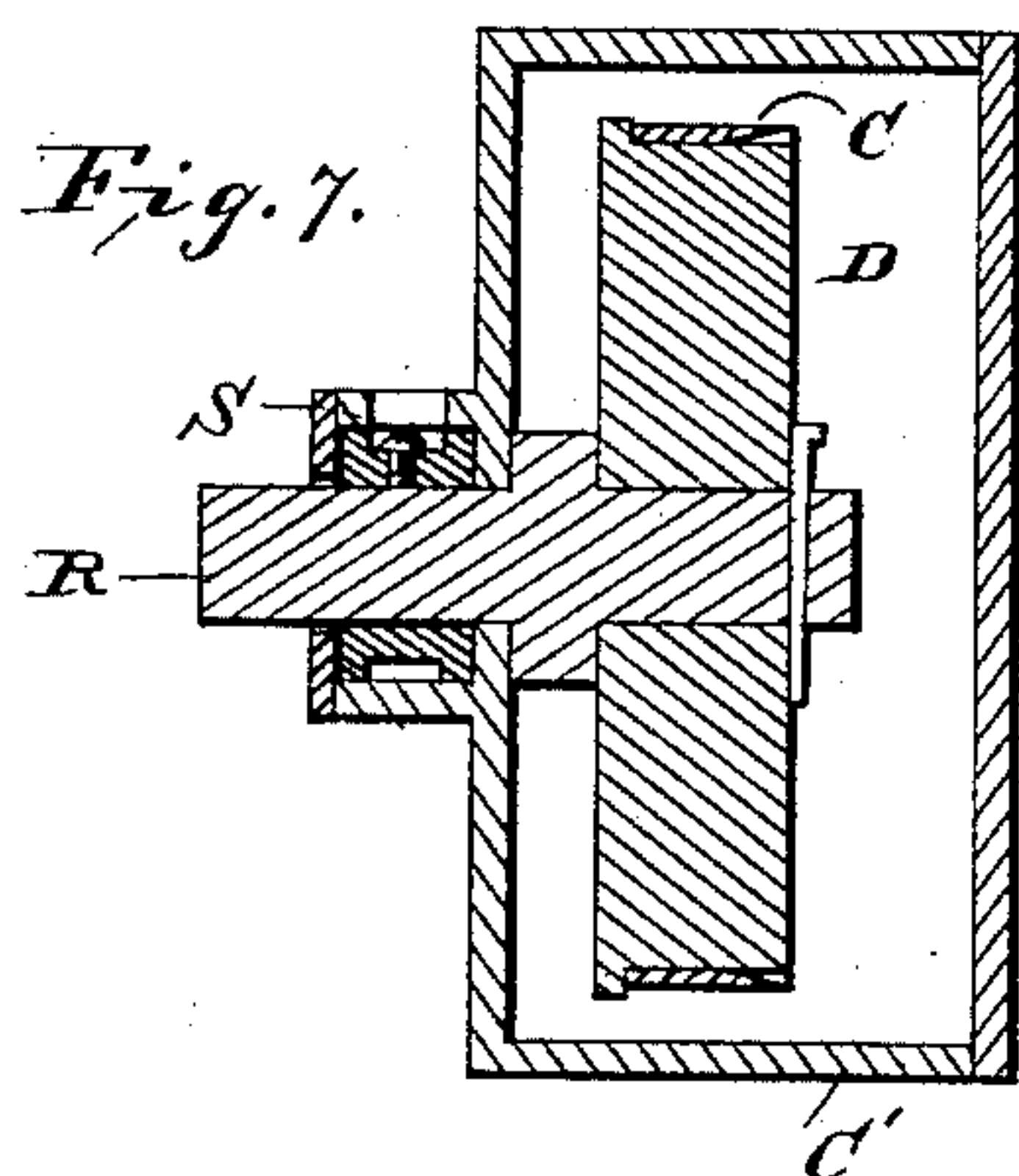
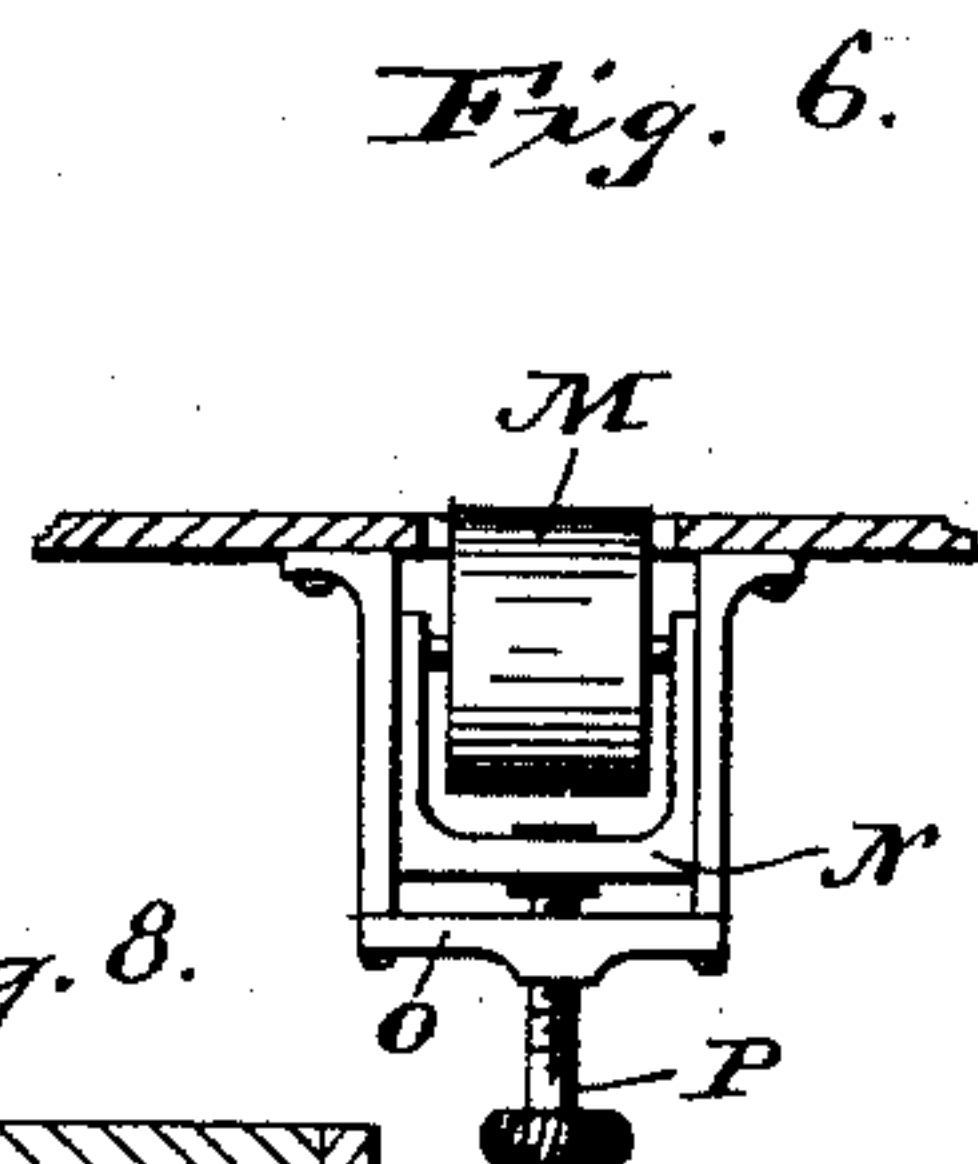
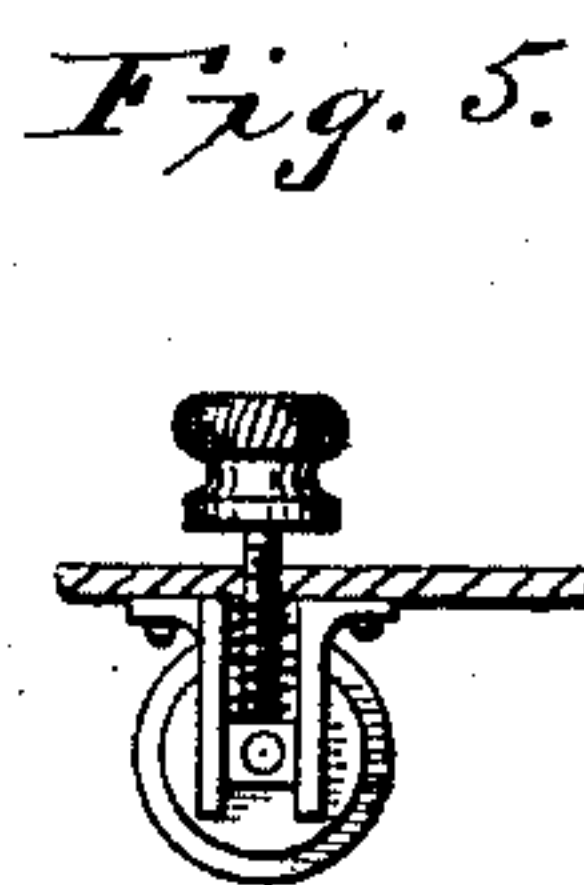
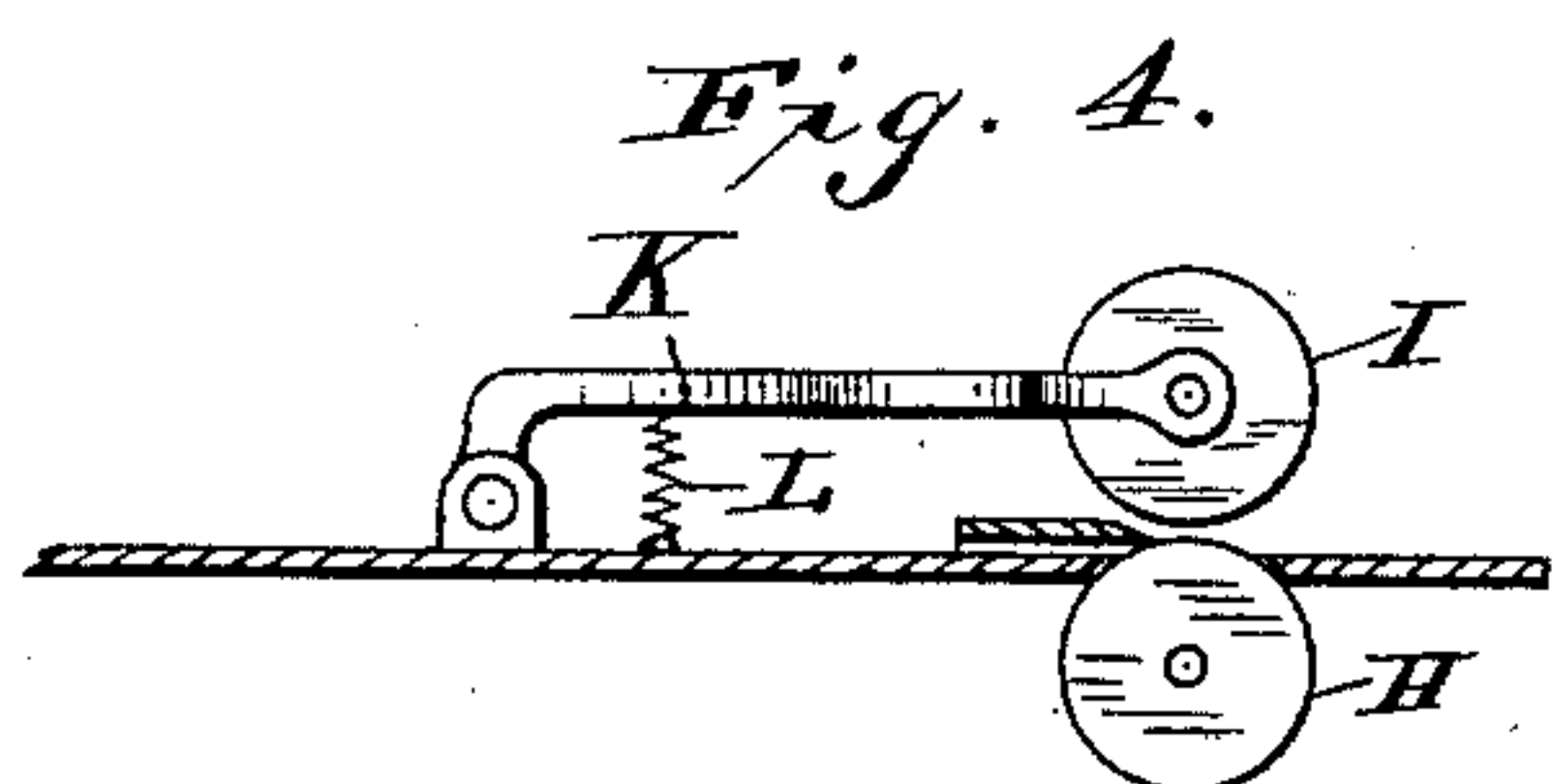
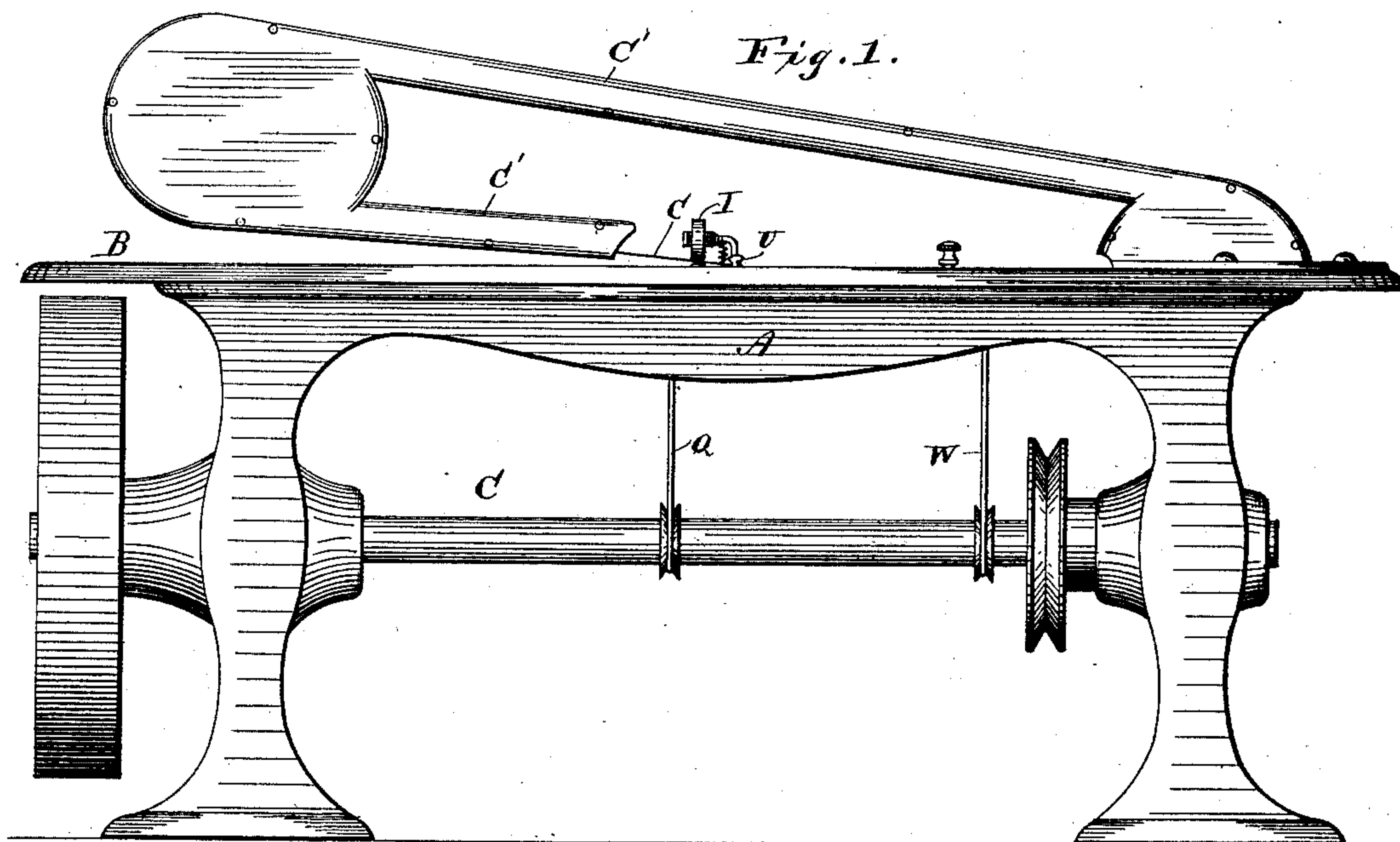
(No Model.)

2 Sheets—Sheet 1.

C. B. HATFIELD.
SKIVING MACHINE.

No. 363,461.

Patented May 24, 1887.



Witnesses.
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A. Stewart.

Inventor.
Charles B. Hatfield
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his Attorneys.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

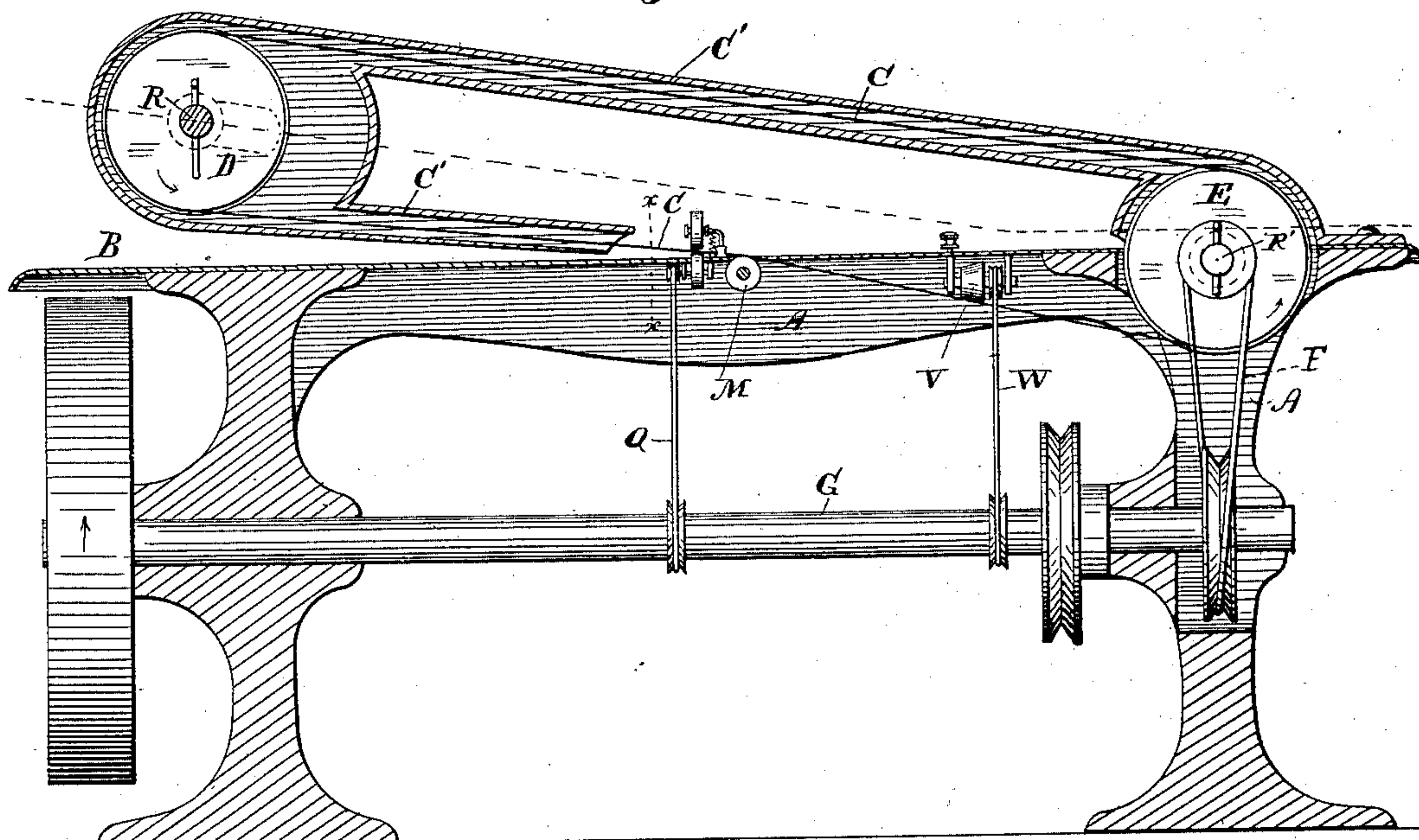
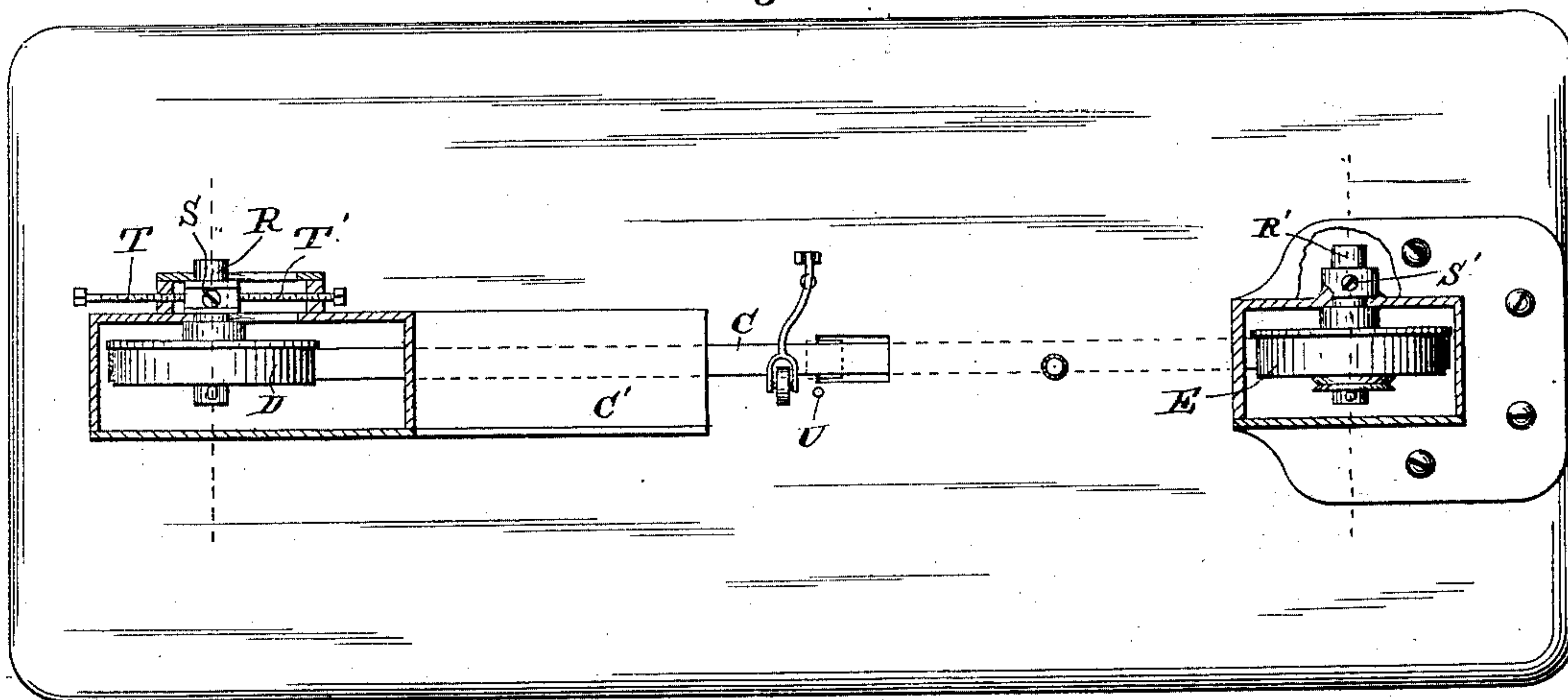


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES B. HATFIELD, OF ROCHESTER, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE ROCHESTER SHOE MACHINERY COMPANY, OF SAME PLACE.

SKIVING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 363,461, dated May 24, 1887.

Application filed June 30, 1886. Serial No. 206,744. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. HATFIELD, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Skiving-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

My invention relates to that class of machines employed in skiving or beveling the edges of leather; and it consists in certain novel features of construction and combinations of parts, which I will first describe, and then point out particularly in the claims at the close of this specification.

In the accompanying drawings, Figure 1 represents an elevation of a machine constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section, and Fig. 3 a top plan view, of the same. Fig. 4 is a detail view of the feed-rollers. Fig. 5 is a detail view of the band-sharpener; Fig. 6, a similar view of the roller by which vibration of the band is prevented, and by which the angle at which the band cuts is regulated. Figs. 7 and 8 are sectional views of the pulleys which support and drive the band.

Similar letters of reference in the several figures indicate the same parts.

The letter A designates the frame of the machine; B, the work-support; C, a thin steel band sharpened at one edge, as shown in Figs. 4, 7, and 8, supported upon pulleys D E, as shown in Figs. 2 and 3, and inclosed and protected by a guard or casing, C', as shown in Figs. 1 and 2. The pulley E drives the band, and is itself driven from the main driving-shaft G by a belt, F.

H and I are two rollers for feeding the work to the cutting-band. One of these rollers, H, is arranged so that its periphery projects slightly above the upper surface of the table B in proximity to the cutting-band, and is adapted to be driven by a belt, Q, from the main driving-shaft G, while the other one, I, is mounted upon a hinged arm, K, and is nor-

mally kept pressed down upon the roll H by means of a spring, L.

M is a friction wheel or roller mounted in a frame, N, which slides vertically in a hanger, O, secured to the under side of the table, and is rendered adjustable by means of a set-screw, P, so as to bear with more or less pressure against the cutting-blade, as shown in Fig. 2. The function of this wheel M is twofold—that is to say, it operates, first, by affording a support for the cutting-band near the point where the cutting is done, to prevent undue vibration of the band; and, secondly, by its capability of adjustment it enables the pitch or angle of the cutting-blade to be varied, so as to effect a corresponding variation in the pitch of the bevel made on the work.

The shafts or studs R R', upon which the pulleys D and E are mounted, may be longitudinally adjusted in the bearings by the manipulation of set-screws S S', which confine them, so as to enable the cutting-band to be laterally adjusted with respect to the rollers M and feed-rollers H I, and the shaft or stud R of the pulley D may also be laterally shifted by means of adjusting-screws T T', so as to increase or diminish the tension of the cutting-band at pleasure.

U is a pin or projection of any kind, secured to the table in proximity to the feed-rollers, and serving as a gage for properly directing and guiding the work as it is fed by the rollers H and I to the cutting-band.

V is an emery-wheel driven by a belt, W, from the main shaft G, and adapted to be thrown into or out of contact with the cutting-band by means of a screw, spring, or adjustable nut applied to one of its journals, as shown in Figs. 2 and 5.

The foregoing description, it is believed, will enable the operation of the machine to be readily understood.

Assuming the machine to be in motion, the operator has only to place the leather to be skived upon the table and insert it between the rollers H I, having a care that the edge to be operated upon is against the gage U, whereupon the feed-rollers will carry it forward and subject it to the action of the rapidly-moving

cutting-band, which will perform its duty in the most thorough and efficient manner. To change the pitch of the bevel produced, it is only necessary to change the adjustment of the rollers M by manipulating the set-screw P, and when, for the quality of the work, it becomes evident that the blade requires sharpening, the grinding-wheel V may be thrown instantly into operation without interfering with the progress of the work in the slightest.

It will be observed that the band is entirely inclosed and protected save at the cutting-point, and that therefore the liability of injury to the operator is reduced to the minimum.

Having thus described my invention, what I claim as new is—

1. In a skiving-machine, the combination, with the table or support for the work, of an endless cutting-band, a bearing for said band applied near the cutting-point, and an adjusting mechanism, such as described, for adjusting said bearing against the face of the band, whereby the pitch or angle of the cutting-band is enabled to be varied so as to effect a corresponding variation in the pitch of the bevel made on the work, substantially as described.

2. In a skiving-machine, the combination, with an endless cutting-band, of a roller-bearing applied to said band near the cutting-point, and devices, substantially such as described, for adjusting said roller vertically, substantially as and for the purpose specified.

3. In a skiving-machine, the combination,

substantially as described, of an endless cutting-band, a table or support for the work, feed-rolls, and a gage, such as U, on the table, as set forth.

4. The combination, with the endless cutting-band, its supporting-pulleys, the table or work support, the feeding-rolls, and devices, substantially such as described, for adjusting the supporting-pulleys so as to bring the cutting-band nearer to or farther from the feeding-rolls, substantially as described.

5. The combination, with the endless cutting-band, of the grinding-wheel and means, substantially as described, for throwing said wheel into and out of contact with the cutting-band, substantially as described.

6. The combination, with the endless cutting-band, the pulley bearing near the cutting-point, and the feed-table, of the grinding-wheel having one fixed and one movable bearing, and the screw and nut for adjusting the movable bearing from the top of the table so as to throw the grinding-wheel into and out of operation, substantially as described.

7. The combination of the band-knife, the driving and supporting pulleys, the supporting-table, the roller for preventing vibration, the feed-rollers, and the gage, substantially as described.

CHARLES B. HATFIELD.

Witnesses:

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