

(No Model.)

W. HOWARD.

PROCESS OF AND MACHINE FOR COVERING PULLEYS, &c.

No. 249,525.

Patented Nov. 15, 1881.

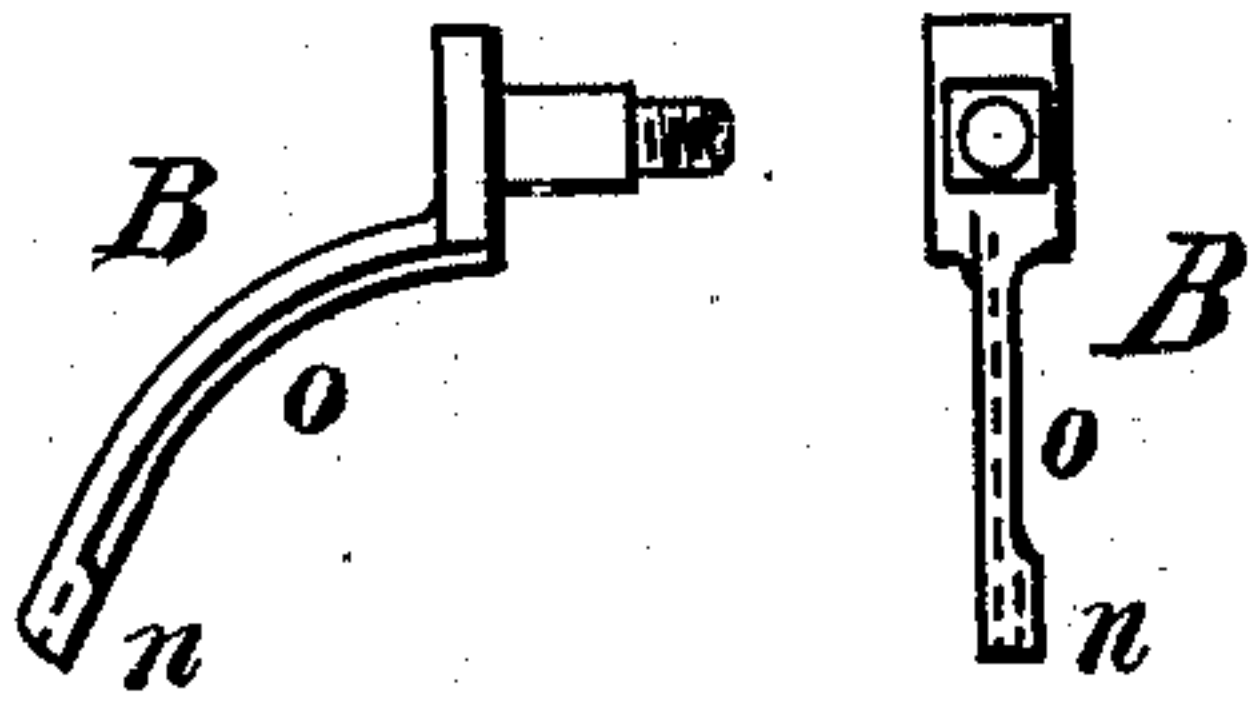


Fig. 3.

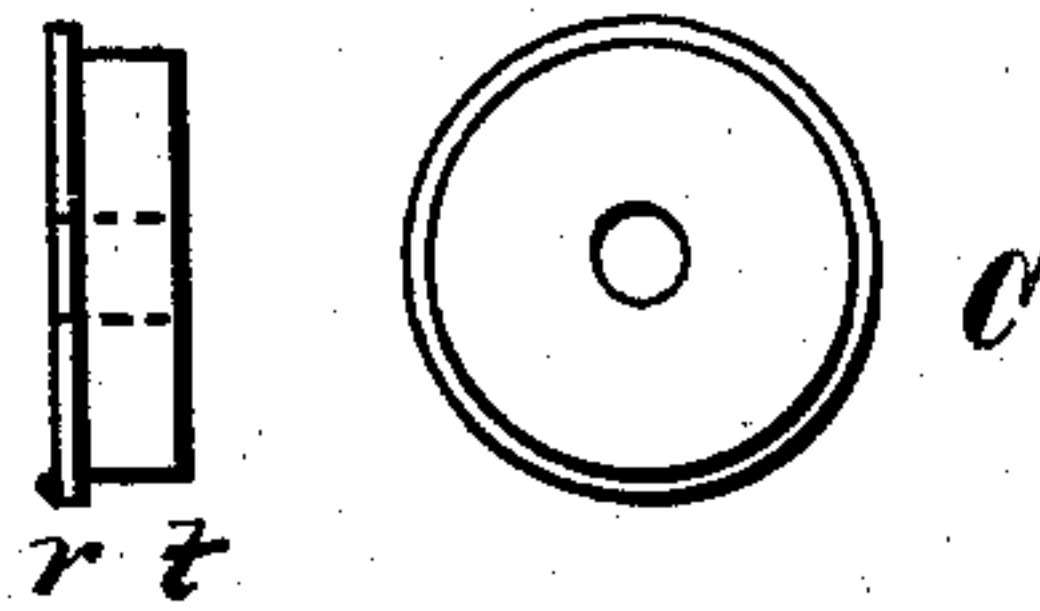


Fig. 4.

Fig. 1.

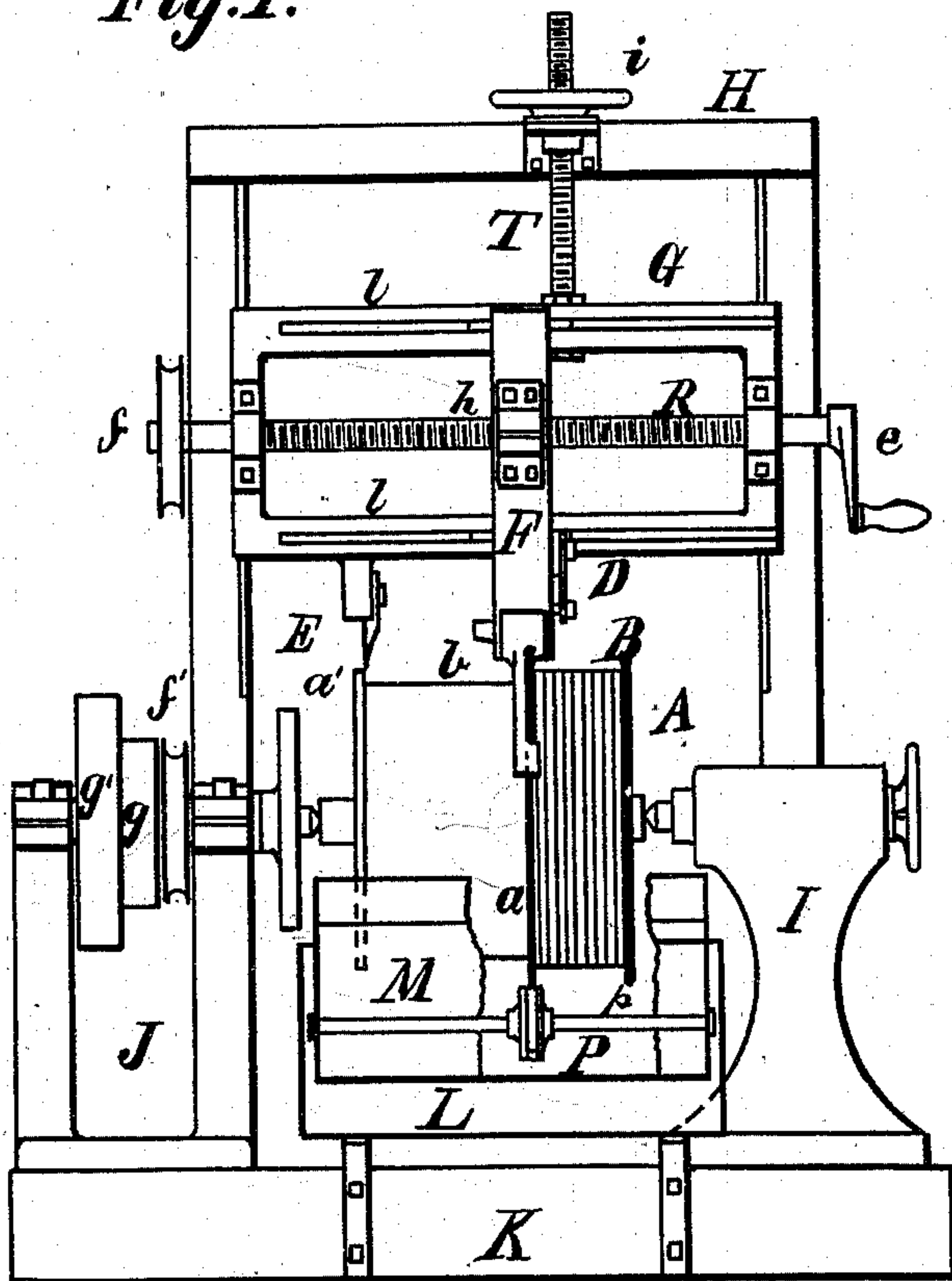
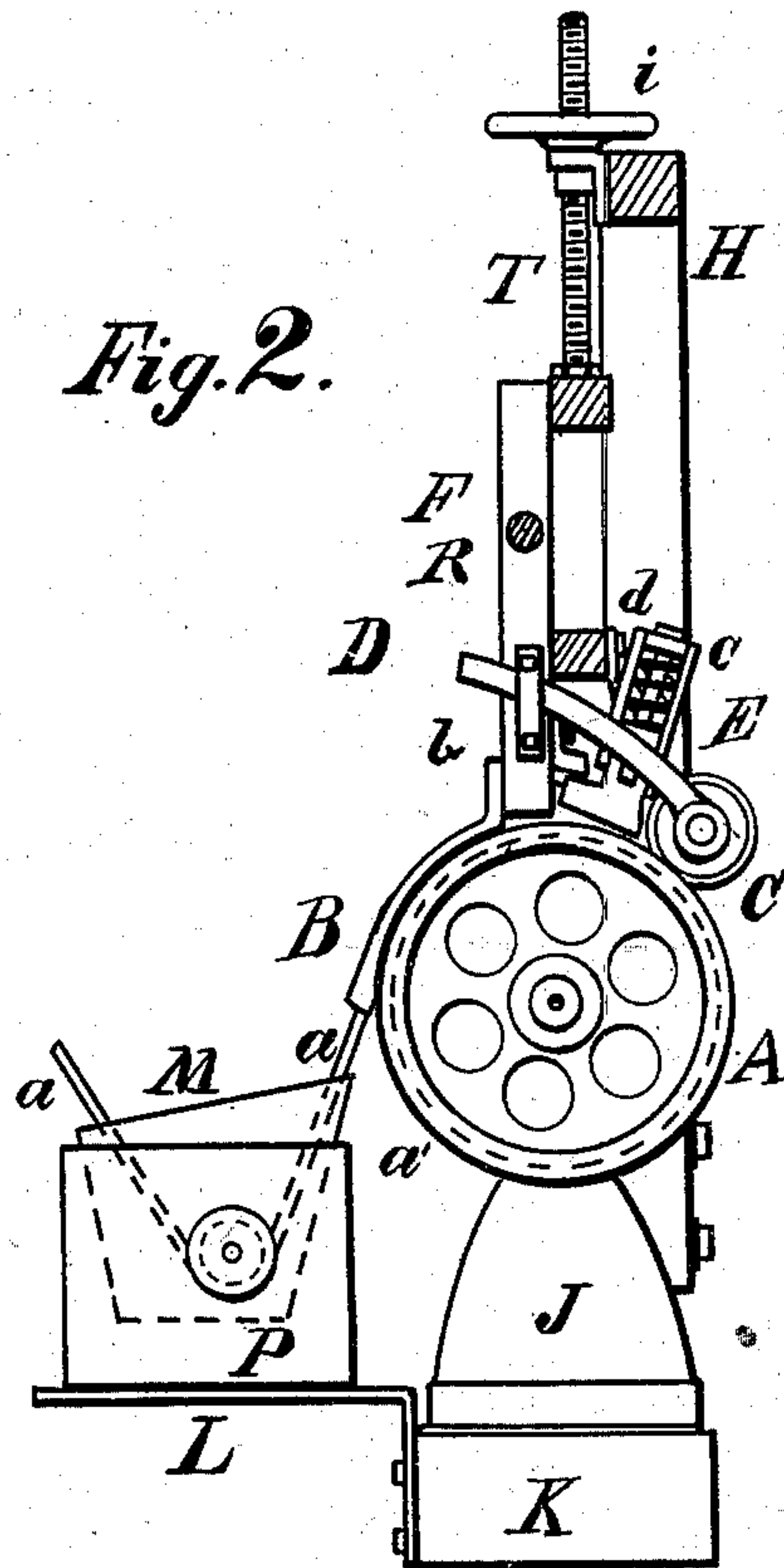


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WARREN HOWARD, OF WORCESTER, MASSACHUSETTS.

PROCESS OF AND MACHINE FOR COVERING PULLEYS, &c.

SPECIFICATION forming part of Letters Patent No. 249,525, dated November 15, 1881.

Application filed April 18, 1881. (No model.)

To all whom it may concern:

Be it known that I, WARREN HOWARD, residing in the city and county of Worcester, State of Massachusetts, have invented a new and useful Manner of Covering Pulleys and other Articles, and Machine for the Same, of which the following is a specification.

My invention relates to covering pulleys and other articles with a coating of leather or other suitable material in a peculiar manner, whereby I can make either the flat side or edge of the material the finished surface.

The accompanying drawings represent a machine for my manner of covering pulleys.

Figure 1 is a front view, showing the pulley A partly covered. Fig. 2 is a side view with a part of the frame left off; and Figs. 3 and 4 show some parts hereinafter more fully described.

My invention is particularly adapted to using the waste trimmings of leather for card-clothing, though various other stock, as leather-board, the trimmings of boot and shoe stock, or similar material, may be used to advantage.

The stock being prepared by forming into a strip of uniform size, it is fed into the machine as at *a*, Figs. 1 and 2, passing under a roll on the shaft *p* in the cement-pan *P*, from whence it passes up to the guide *B*, taking sufficient cement with it, and by the guide *B* is held in proper position and laid on the pulley *A*, which has raised edges or guards *a'*, against which the outside edge of the first and last turns of the covering are laid, and by them protected and held. The pressing-roll *C* presses the material onto *A*, and also firmly against the side of the turn just laid, the roll *C* having a flange, *r*, Fig. 4, for that purpose. Both the guide *B* and roll *C* are attached to the bar *F*, which slides on ways on the frame *l l*, and has a nut, *h*, securing it to the screw, whereby it is moved regularly across the surface of the pulley *A* as the covering progresses. At *E* is a knife set in a slide, *d*, and held up by the spring *c*, having its edge parallel to the raised edge of the pulley *A*. When the bar *F* has moved across the surface and the pulley *A* is fully covered a projection, *b*, on the bar *F* strikes an incline on the knife *E*, forcing it down and cutting off the covering-strip *a* by a slanting cut, which

fits the rim *a'*, and also leaves the end in the right form to begin on a new pulley. The rims of the articles to be covered are made with raised edges *a'* for holding the ends and protecting the edge of the covering all round them. The articles, while being covered, are held on a shaft supported in a suitable frame and receive motion by the pulleys *g g'*. The frame *l l* is movable on the uprights of the main frame by means of the screw *T* and its nut *i*, to adapt it to different sizes of work. The cement in pan *P* is kept warm by hot water in the tub *L*, and thus either glue or cement may be used, as desired.

It will be seen that the strip *a* may be put onto the pulley *A* either flat or edgewise, as preferred, by fitting the guide *B* to it, which guide may be in two parts, adjustable by a connecting-screw to fit different sizes. Thus either the grain or flesh of leather or its edge may be made the finished surface; and with any other material, where the edge of the strip has any advantages, it may be used as desired, and thus a covering of any thickness be made.

I am aware that articles have been covered by a strip wound spirally on. These I do not broadly claim; but

What I claim as new, and desire to patent, is—

1. The manner of winding a strip (either flat or on edge) around the surface between the two raised guards which protect and hold the covering on the pulley by the mechanism substantially as described.

2. In a machine for covering pulleys, the guide *B*, in combination with the sliding bar *F* and a mechanism for giving motion to the sliding bar, substantially as and for the purposes set forth.

3. The pressure-roll *C*, arm *D*, with sliding bar *F*, and mechanism for giving them motion across the face of the pulley, substantially as described.

4. In a machine for covering pulleys, the knife *E*, substantially as above described.

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Witnesses:

KELO WANN,

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