

No. 619,963.

Patented Feb. 21, 1899.

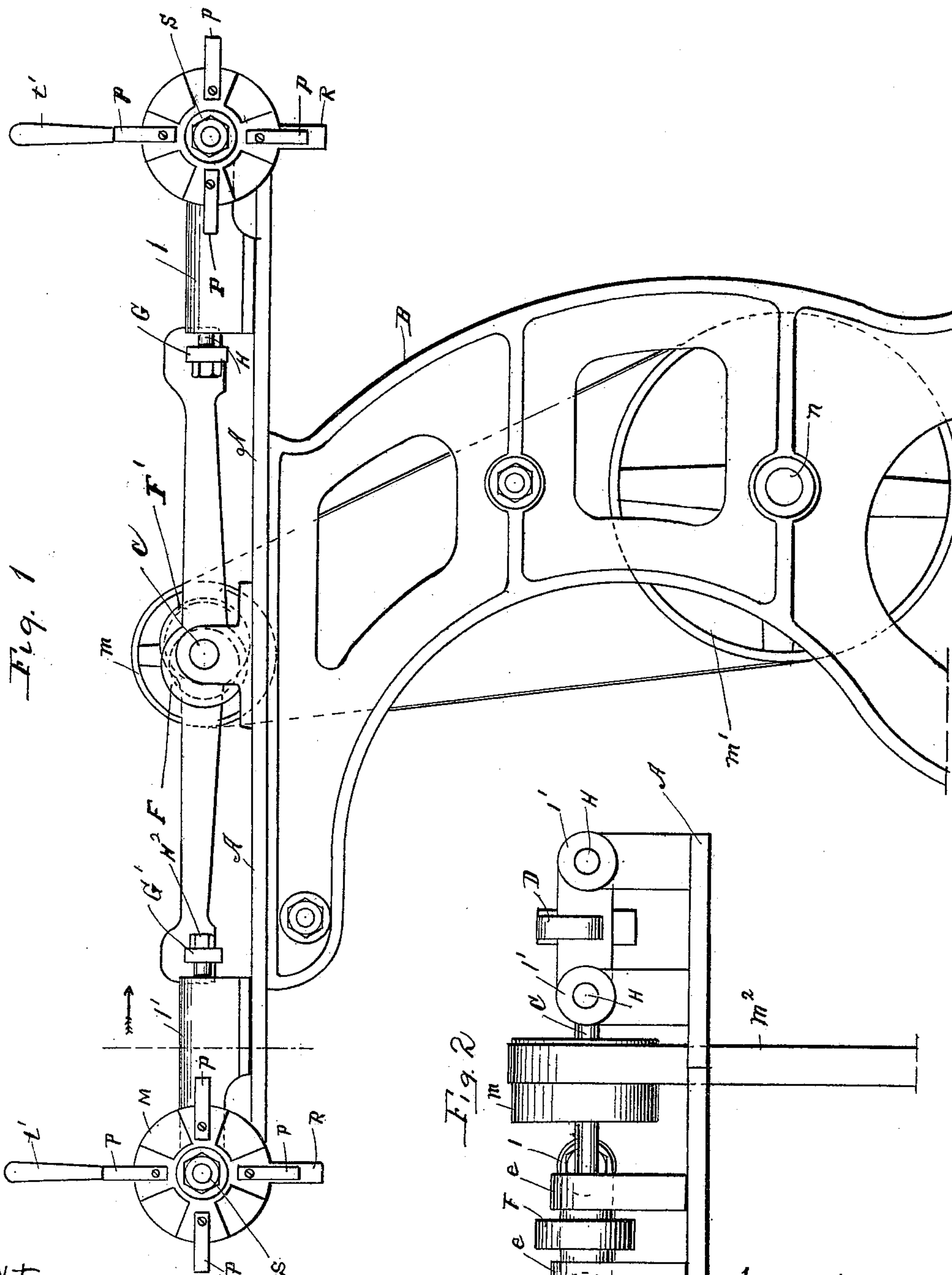
A. H. KLINE.

EDGE SETTING AND BURNISHING MACHINE.

(Application filed Oct. 29, 1897.)

(No model.)

4 Sheets—Sheet 1



Witnesses:
Ernest Conrad
Edmund Conrad

Inventor.
Albert H. Kline,
by his attorney,
Homer A. Kline.

No. 619,963.

Patented Feb. 21, 1899.

A. H. KLINE.

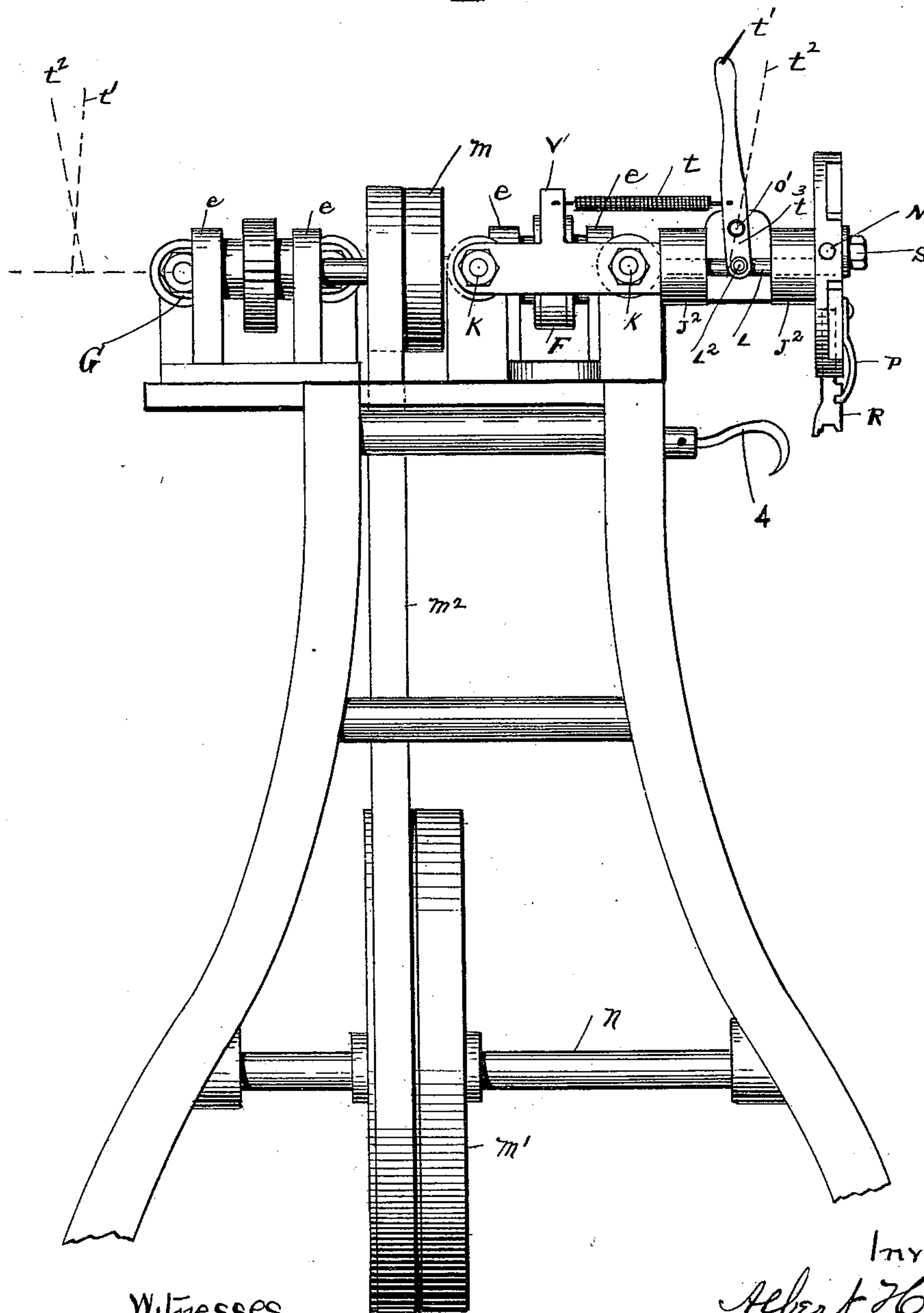
EDGE SETTING AND BURNISHING MACHINE.

(Application filed Oct. 29, 1897.)

(No Model.)

4 Sheets—Sheet 2.

Fig. 3



Witnesses.

Ernest C. Conrad
Edwin C. Nevins

Inventor.

Albert H. Kline
by his attorney
Homer A. Beer

No. 619,963.

Patented Feb. 21, 1899.

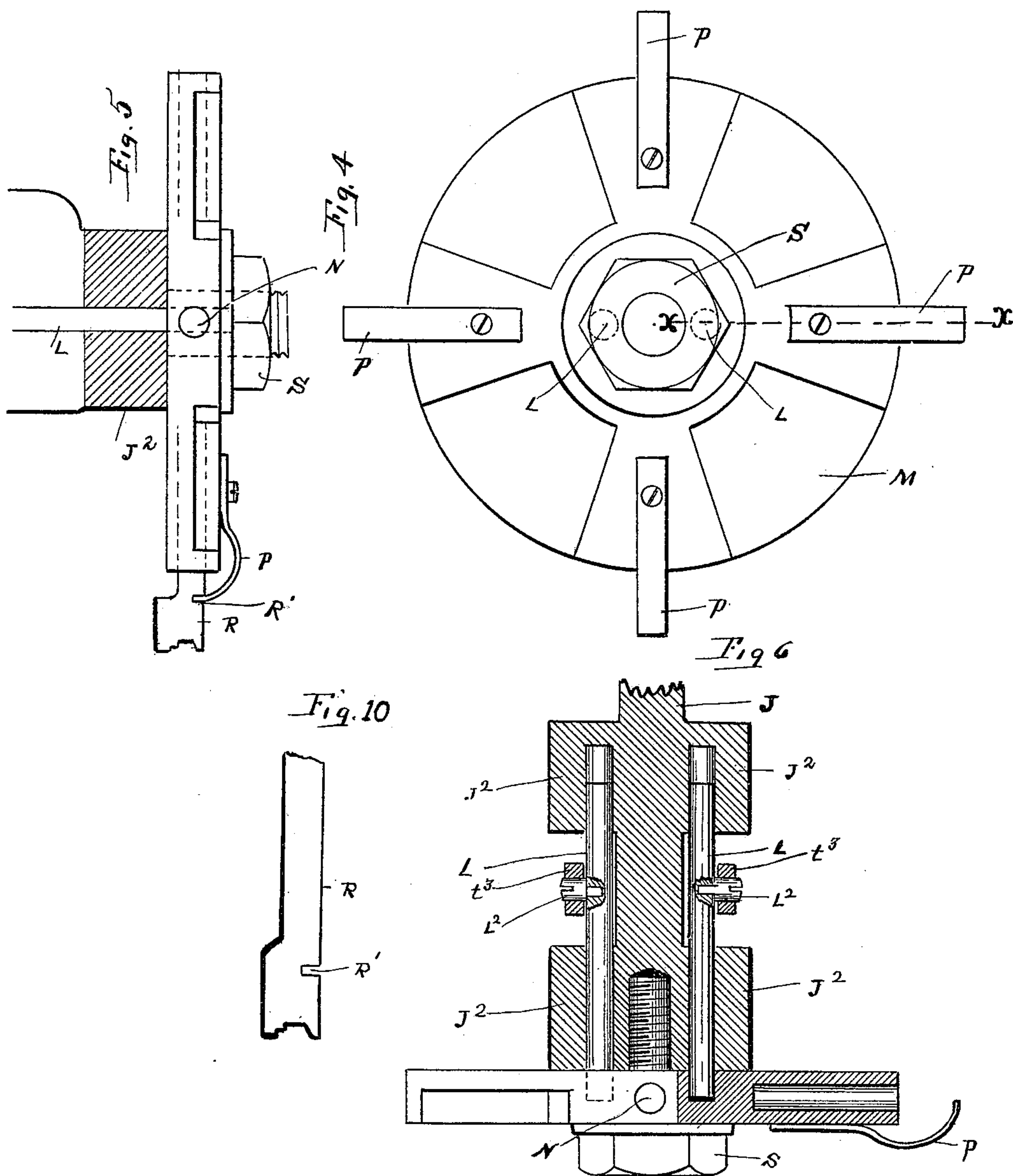
A. H. KLINE.

EDGE SETTING AND BURNISHING MACHINE.

(Application filed Oct. 29, 1897.)

(No Model.)

4 Sheets—Sheet 3.



Witnesses.

Charles E. Conner
Edwin Conner

Inventor.

Albert H. Kline,
by his attorney,
Horner A. West.

No. 619,963.

Patented Feb. 21, 1899.

A. H. KLINE.

EDGE SETTING AND BURNISHING MACHINE.

(Application filed Oct. 29, 1897.)

(No Model.)

4 Sheets—Sheet 4.

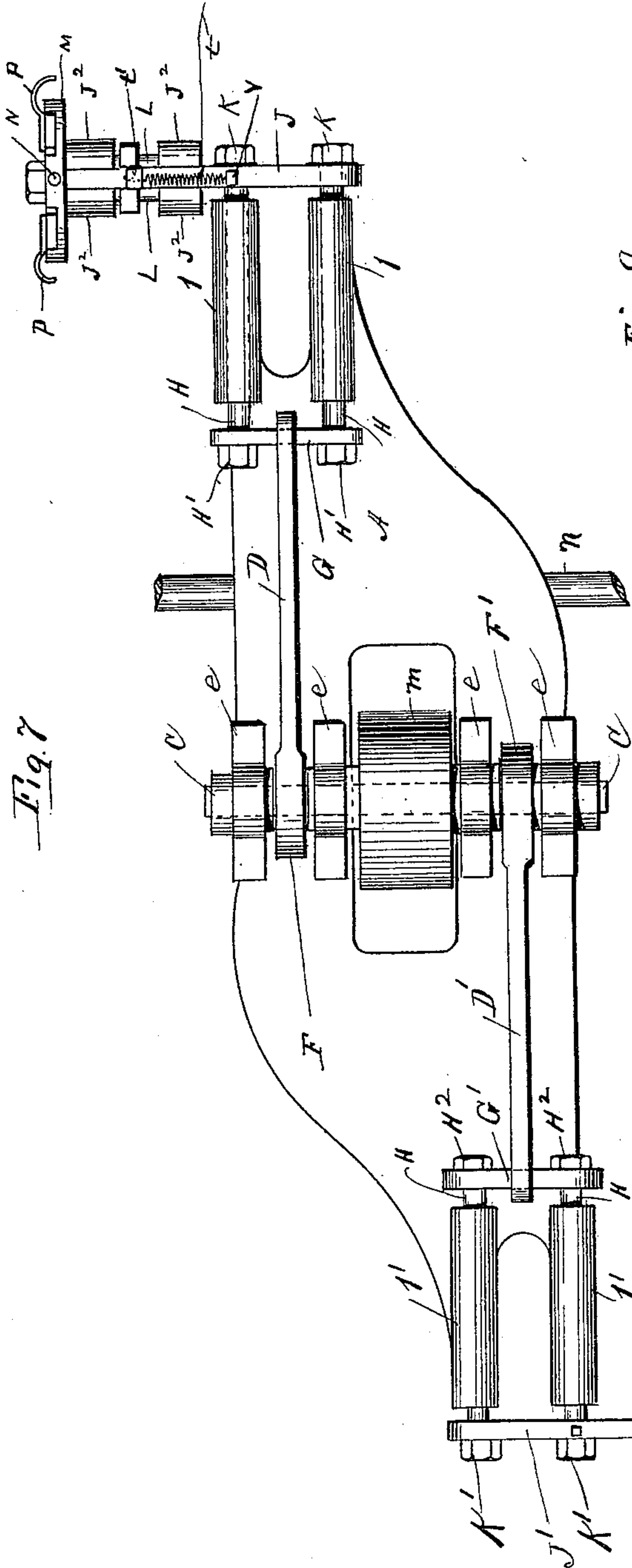


Fig. 7

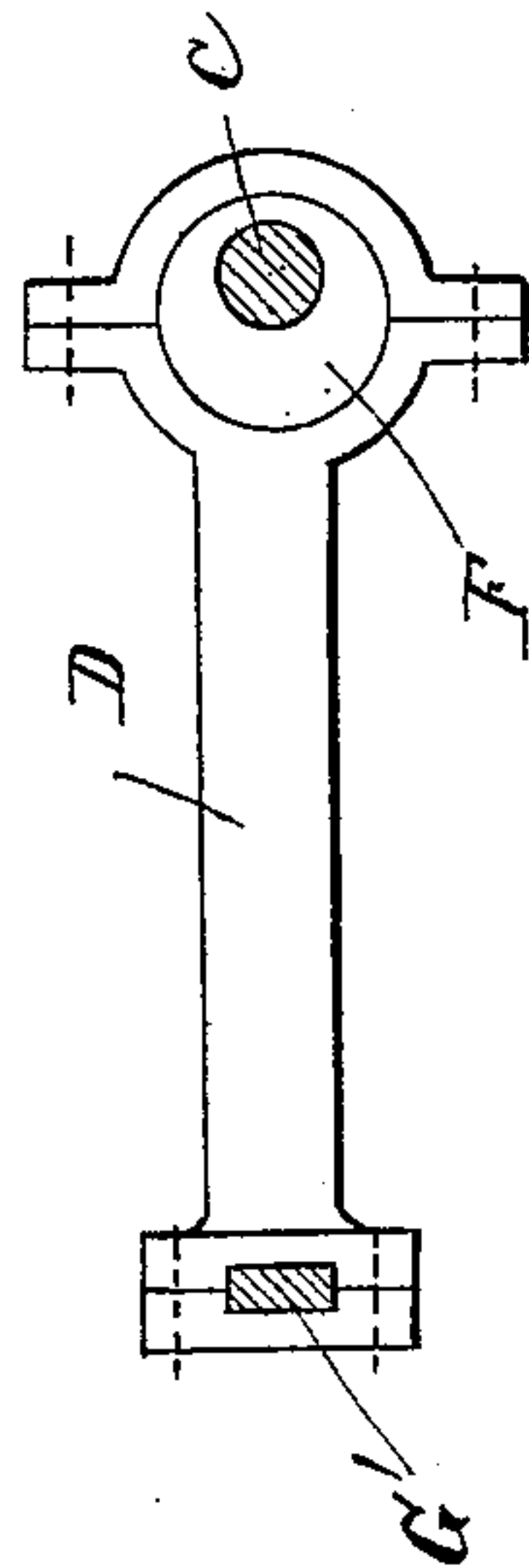


Fig. 9

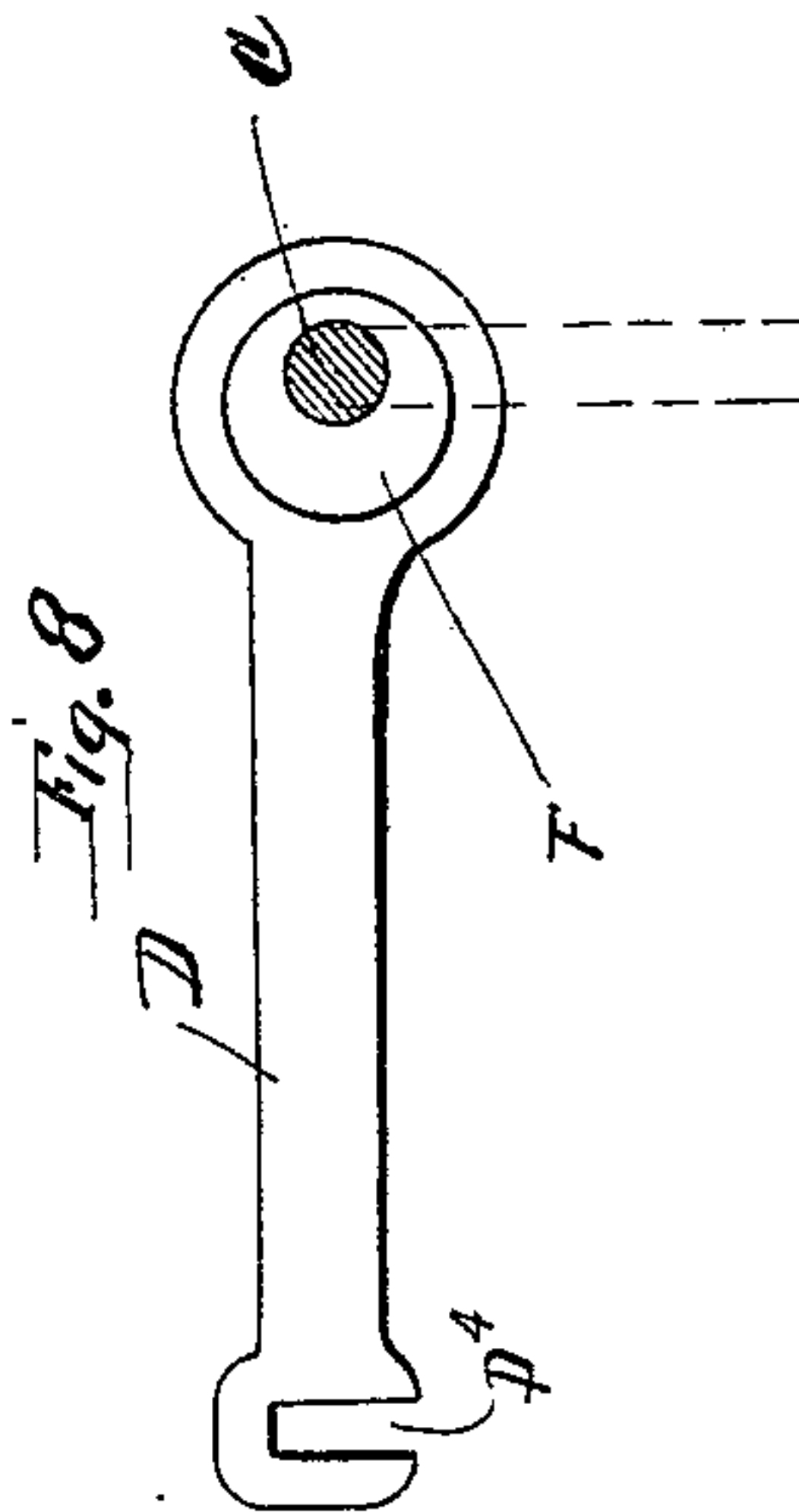


Fig. 8

Witnesses.
Ernest Courtois
Edwin Conner

Inventor.
Albert H. Kline,
by his attorney,
Howes & Herr.

UNITED STATES PATENT OFFICE.

ALBERT H. KLINE, OF CATAWISSA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO WILLIAM F. CRAMER, OF SAME PLACE, AND JUSTUS STRAUB, OF PHILADELPHIA, PENNSYLVANIA.

EDGE SETTING AND BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 619,963, dated February 21, 1899.

Application filed October 29, 1897. Serial No. 656,757. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. KLINE, a citizen of the United States, residing at Catawissa, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Edge Setting and Burnishing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has reference to edge-setting machines; and it consists of features fully set forth in the following specification and accompanying drawings, forming part thereof.

It consists of a machine in the above class more specifically adapted for setting the edges of shoes.

The object of my invention is to provide a machine for doing a large amount of work in a cheap and very efficient manner and a machine simple in construction, with the liability to derangement reduced to a minimum.

It consists of one or a series of reciprocating tool-carriers and means for actuating them in a horizontal manner. The edge-setting tools proper are fixedly mounted on a common tool-support. Locks are provided for the edge-setting tools, whereby they are held removably to their said support.

In the drawings like parts are referred to by marks of a corresponding kind in the different views.

Figure 1 is a side elevation of my machine with two tool-supports turned in the same direction. Fig. 2 is an end view of Fig. 1, with heads, however, removed. Fig. 3 is an end view of the machine. Fig. 4 is an enlarged side elevation of the tool-holder; Fig. 5, an end elevation of same and vertical section through one of the locking-rods therefor. Fig. 6 is a horizontal section through the supports for the locking-rods for the tool-holder and part horizontal section through the burner or edge-setter holder. Fig. 7 is a general plan with the supporting-standards removed. Fig. 8 is a side elevation of one of the links or arms which reciprocate the tool-holder. Fig. 9 is a modified way of connecting the link shown in Fig. 8, in which I dispense with the slotted head p^4 shown therein. This latter is in practice my preferred man-

ner of uniting this member with its source of motion and the part it actuates. Fig. 10 is an enlarged view of one of my burnishing-tools.

A is the head, or, more properly, the bed-plate of the machine, supported on standards B. $e e e e$ are a series of bearings fixed to the said bed-plate. C is a shaft supported in said bearings.

m is a belt-pulley carried by the shaft C. This pulley is actuated by the primary pulley m' , carried by the primary shaft n .

D and D' are two links supported on the one end by the shaft C aforesaid through actuating cams or eccentrics F and F' . On the other these links are attached to the cross-bar G, also G' . There are different ways in which I could connect these links with the said bars G and G' . Fig. 8 shows one and Fig. 9 another; but I do not limit myself to any specific manner, just so it is rigid, positive, and secure. The aforementioned bars G and G' are identical in function and are exact mechanical duplications one of the other, likewise the links D and D' .

H and H' are two supporting-rods for the bar G and held thereto by the nuts H' H' or in any other substantial and efficient manner.

I I are the supporting-housings for the bars or rods H. These housings are rigidly fixed to the bed-plate A. It is of course manifest that I' I' are in every mechanical sense the same as I I. Likewise the bar J is the same as the bar J' , nuts H^2 H^2 the same as nuts H' H' , nuts K' K' the same as nuts K K, &c. My description will therefore be limited to the parts as shown in the right-hand side of the figure or to the mechanism, as shown in Fig. 7. J is a frame carried by the outer ends of the rods H H aforesaid, Fig. 7. J^2 J^2 J^2 J^2 are two laterally-projecting lugs carried by this bar. The purpose of these lugs is to permit of guide-holes being drilled therein to guide and retain the locking-rods L L, Figs. 3, 4, 5, 6, and 7.

M is the holder for the edge-setting tools. This holder is circular, as shown in the drawings; but I do not confine myself to this shape. Any convenient shape adapted to be carried movably by the reciprocating bar J will an-

swer the purpose of this tool-support. The said holder M is rotatably supported on the aforementioned bar J by the screw-journal S, Fig. 6. L L are two locking-rods for the tool-holder M. These rods are carried in the holes of the lugs J² J² of the bar J aforementioned.

t', Figs. 1, 3, and 7, is a lock-actuating handle.

L², Figs. 3 and 6, is a screw pin or pivot holding the arm t' of the aforesaid handle t' to the rods L. When the arm t' is in the position shown in the solid drawing Fig. 3, the holder M is locked; but when it is in the position indicated by the dotted line t' the rods L are forced back into disengagement with or from the holder M, and the said tool-holder M is therefore free to rotate. The tool-holder M can have as many locking-holes to receive the locking-rods L as its different fixed positions may require. But two are indicated in Fig. 4 at the points where the rods L L are shown in dotted circles.

t is a spring fixed at one end to an upward projection Y of the bar J and at the other to the arm t'. This spring keeps the rods L in normal locking engagement with the tool-holder M, as is evident.

P is a spring-lock holding the tool R in position. There are a series of these spring-locks, one for each tool. They are secured to the holder M, each at a point coinciding to the holes N of the holder M.

In the drawings I have only shown two tool-holders operated from the common shaft C. It is very evident that in practice I could connect four or more according to the volume of work on hand.

In the operation of my machine the wheel m' through the belt m² actuates the follower m and therethrough the shaft C. The eccentrics F reciprocate the links D, and thereby the rods H H, carrying the frame J, which supports the tool-holder M for my edge-setting tools. Thus the throw of my eccentrics F determines the degree of movement my edge-setting tools will have during each re-

ciprocation. In operating my machine the attendant or operator holds the edge of the shoe-sole in proper frictional contact with the tool R. The hook shown at x, Fig. 3, is designed to be engaged by the hand to facilitate the maintaining of the shoe in the proper position. I do not limit myself to the specific structure set out, as modifications could be made without departing from the spirit of my invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination in an edge-setting machine of a series of edge-setting tools, a common rotatable holder for said tools, a series of locks, one for each tool carried by said holder, a rectilinear reciprocating support for said tool-holder, hand-controlled means for locking said tool-holder to its support, and means for reciprocating said tool-holder support.

2. The combination in an edge-setting machine of an edge-setting tool, a rotatable holder therefor, a spring-lock for said tool carried by said holder, a supporting-frame for said holder, a hand-controlled lock for said tool-holder carried by said supporting-frame and means for actuating said frame reciprocally in a horizontal path, as and for the purpose set forth.

3. The combination in an edge-setting machine of a series of edge-setting tools, a common holder for said tools, a series of locks one for each tool carried by said holder, a reciprocating support for said tool-holder, hand-controlled means for locking said tool-holder to its support, consisting of the locking-rods L, L, means for actuating said rods, and means for reciprocating said tool-holder support.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT H. KLINE.

Witnesses:

HOMER A. HERR,
JOSHUA R. MORGAN.