

No. 616,322.

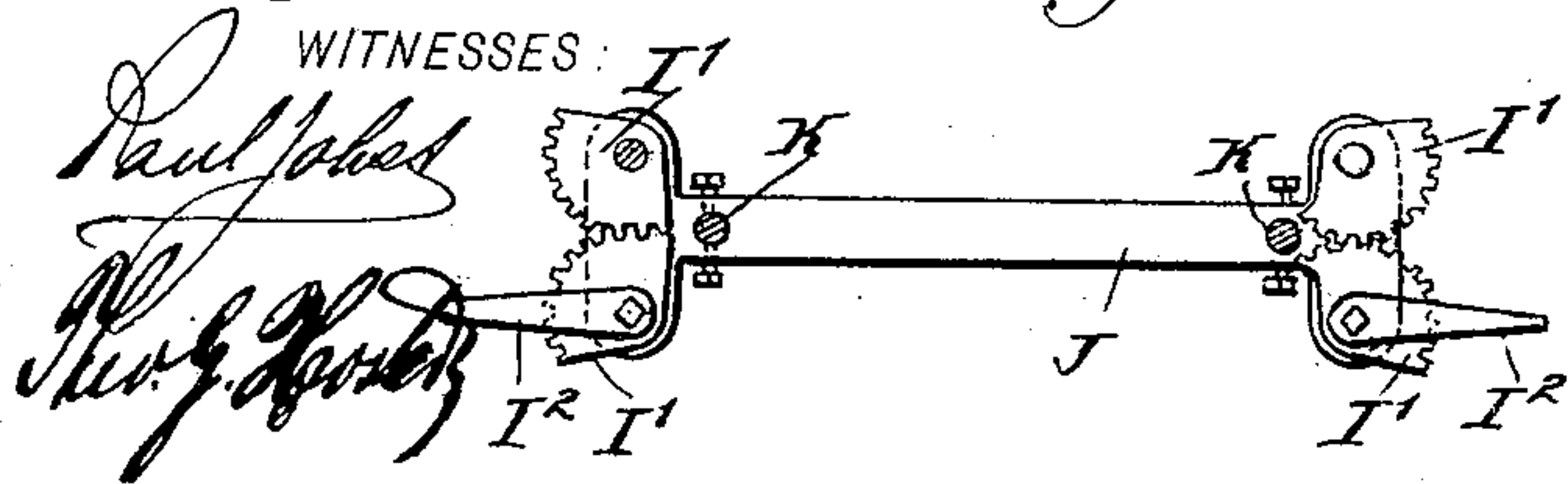
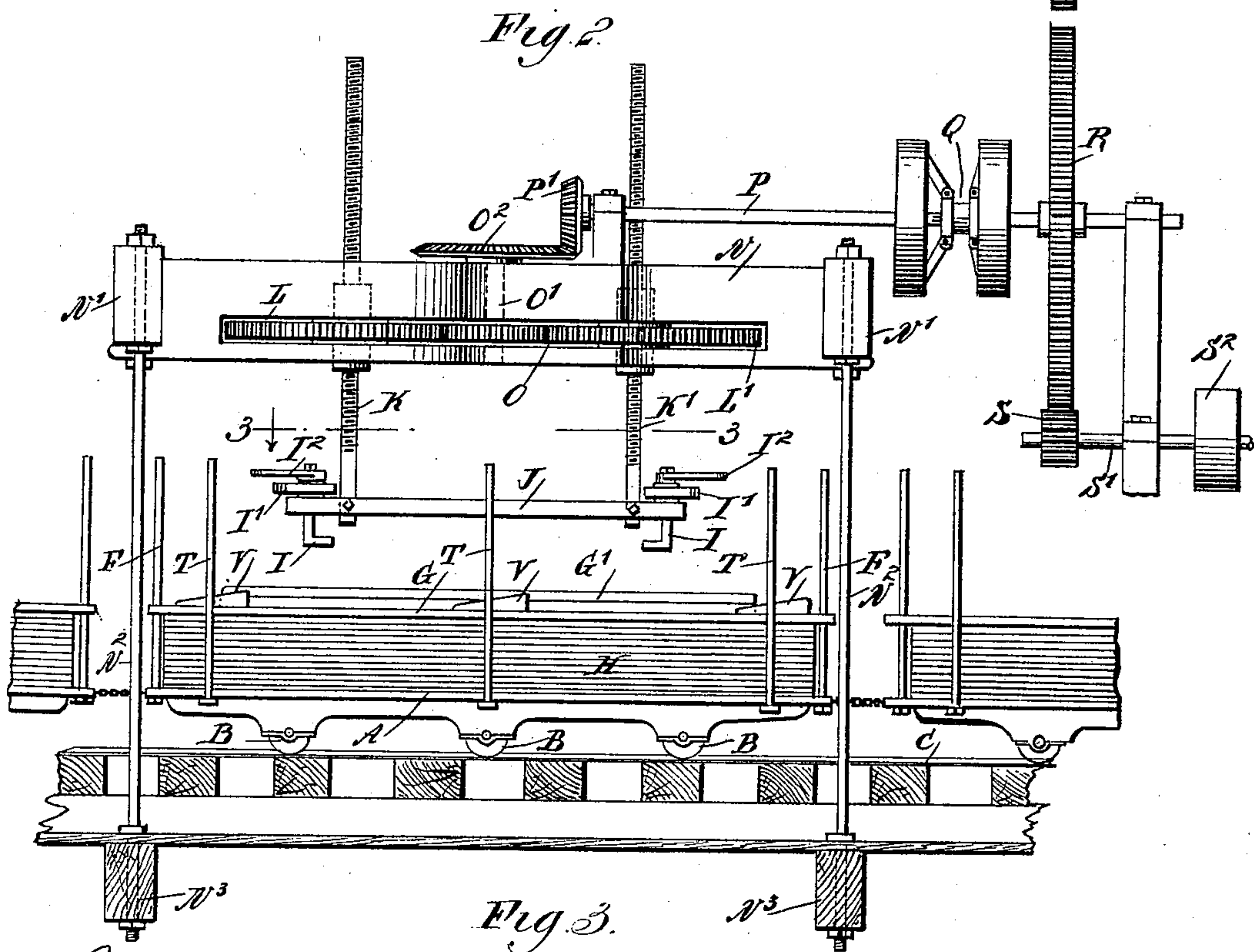
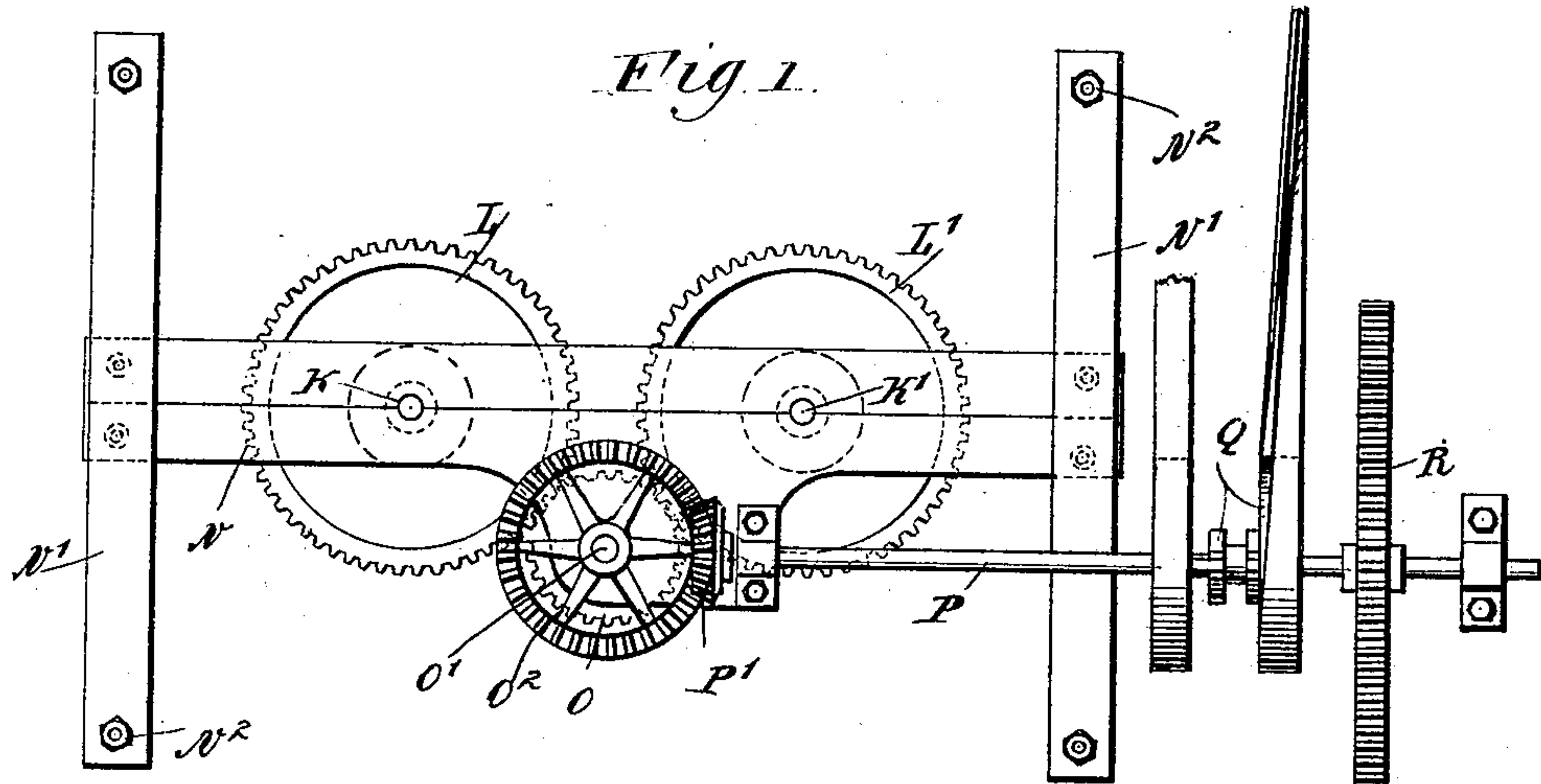
Patented Dec. 20, 1898.

A. K. HATTEBERG.
VENEER PRESS.

(Application filed Oct. 6, 1897.)

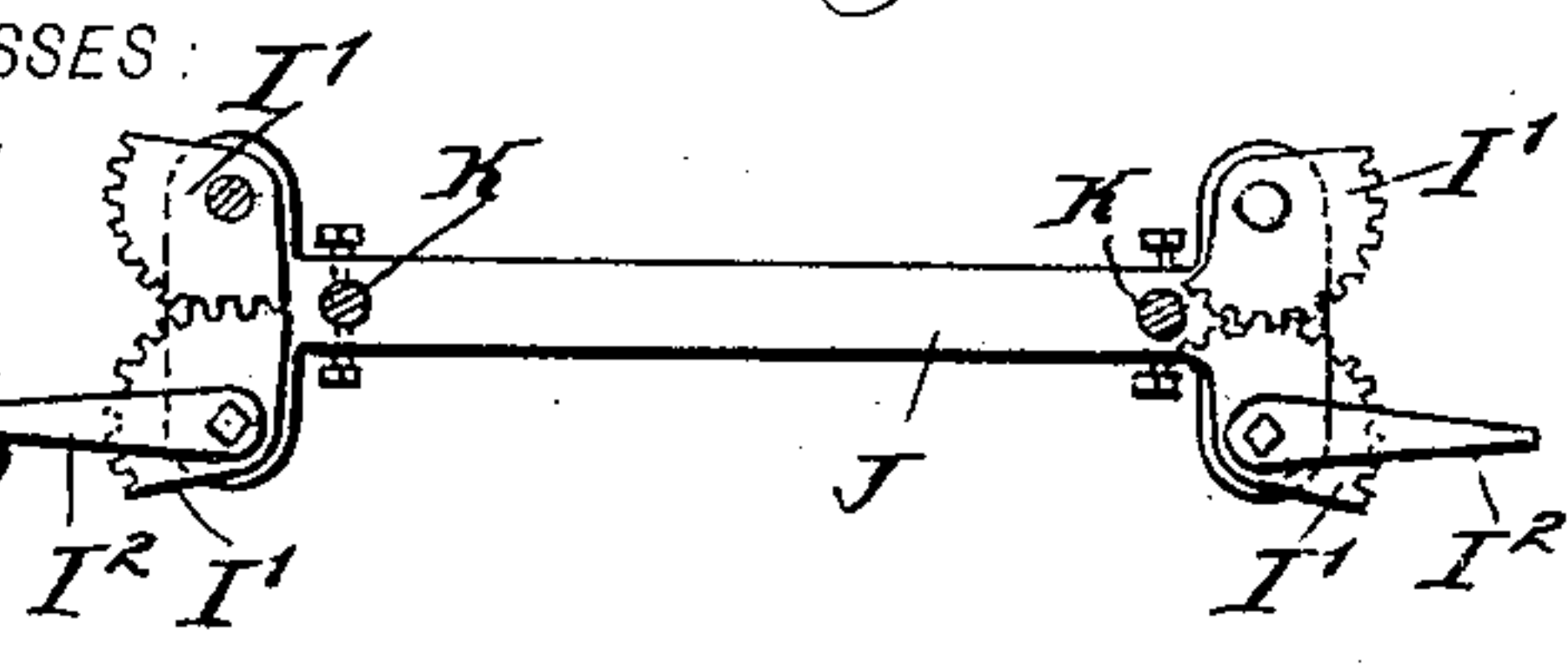
(No Model.)

3 Sheets—Sheet 1.



WITNESSES:

Paul Jones
Wm. G. Jones



INVENTOR

A. K. Hatteberg

BY

Mumford

ATTORNEYS.

No. 616,322.

Patented Dec. 20, 1898.

A. K. HATTEBERG.

VENEER PRESS.

(Application filed Oct. 6, 1897.)

(No Model.)

3 Sheets—Sheet 2.

Fig. 4.

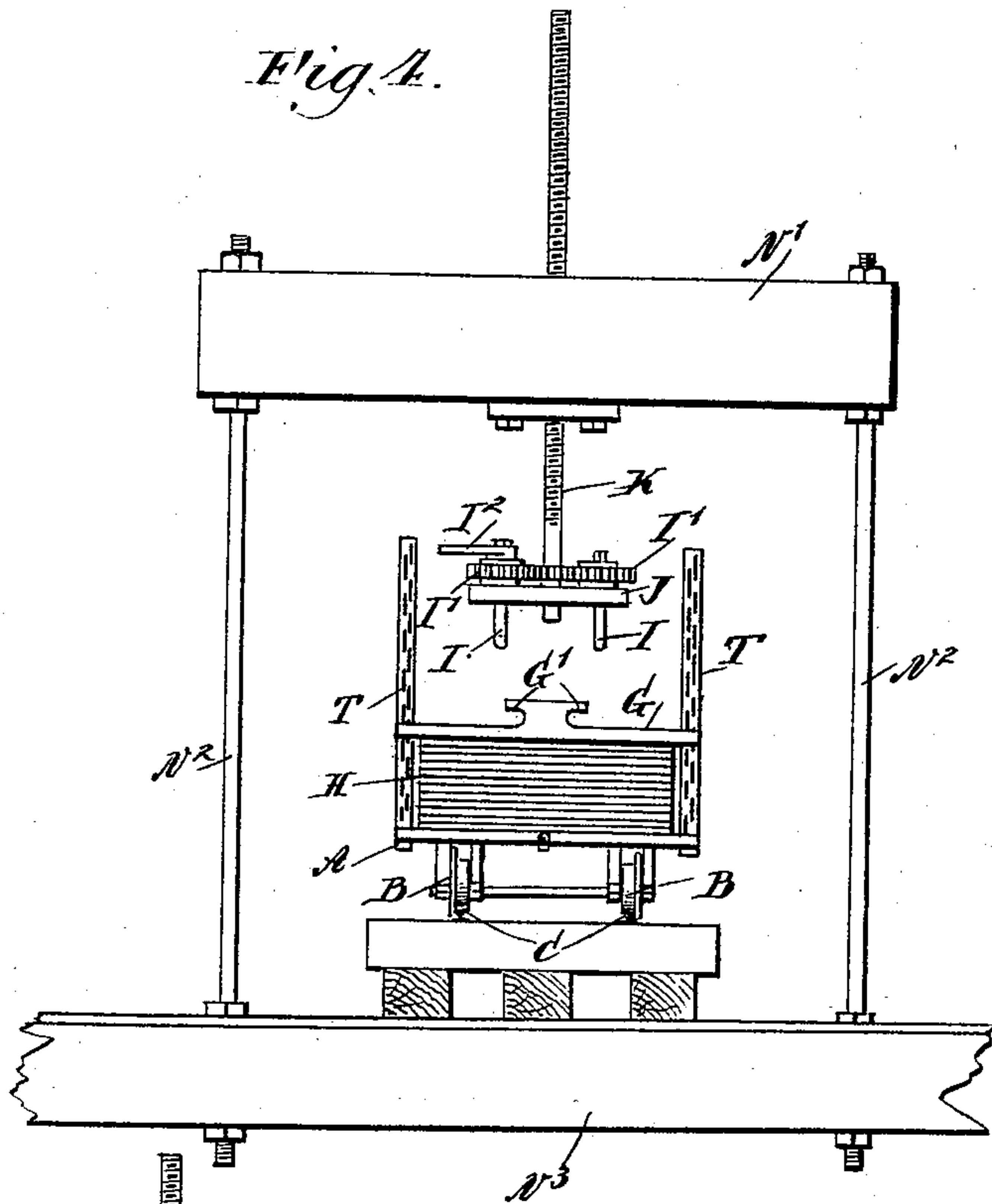


Fig. 5.

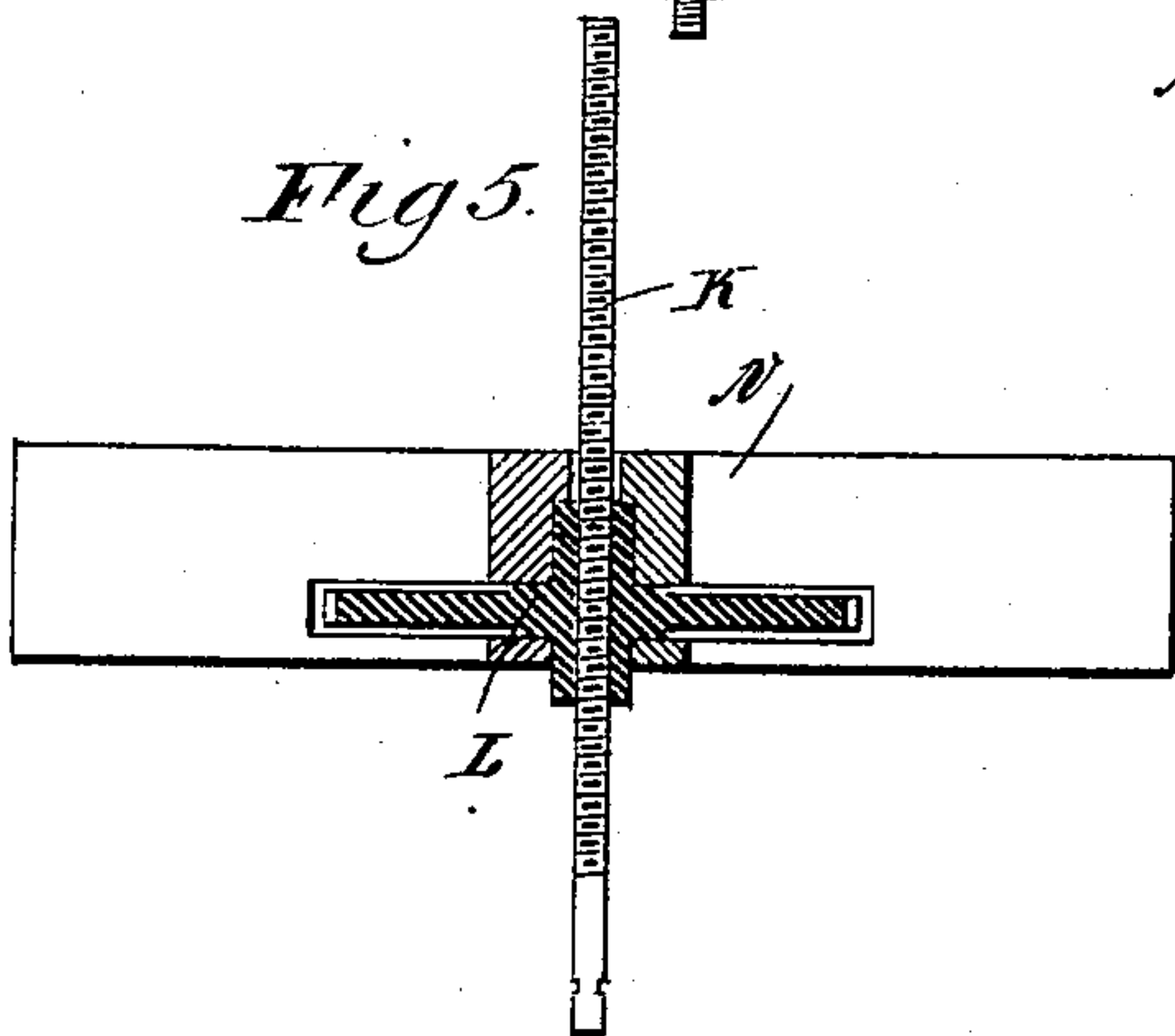


Fig. 6.

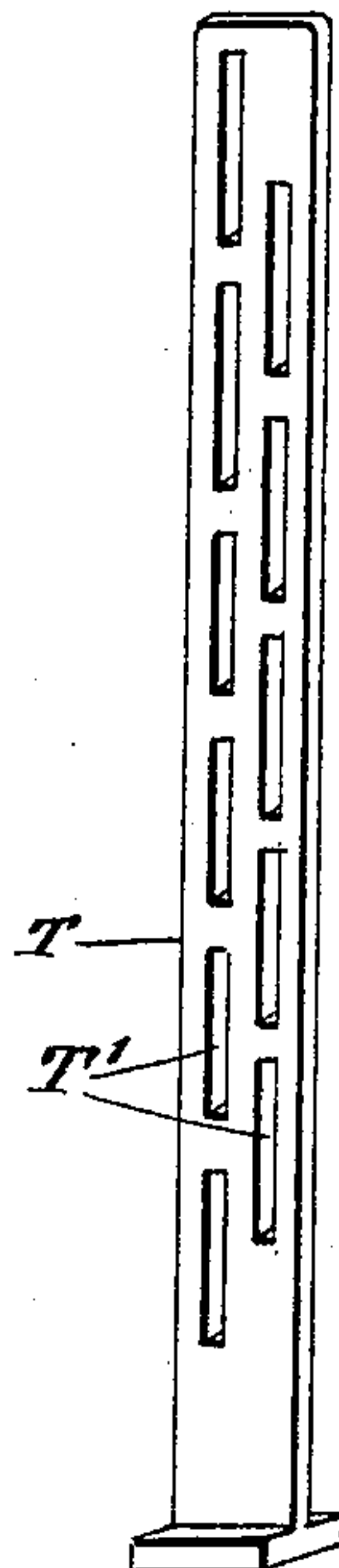
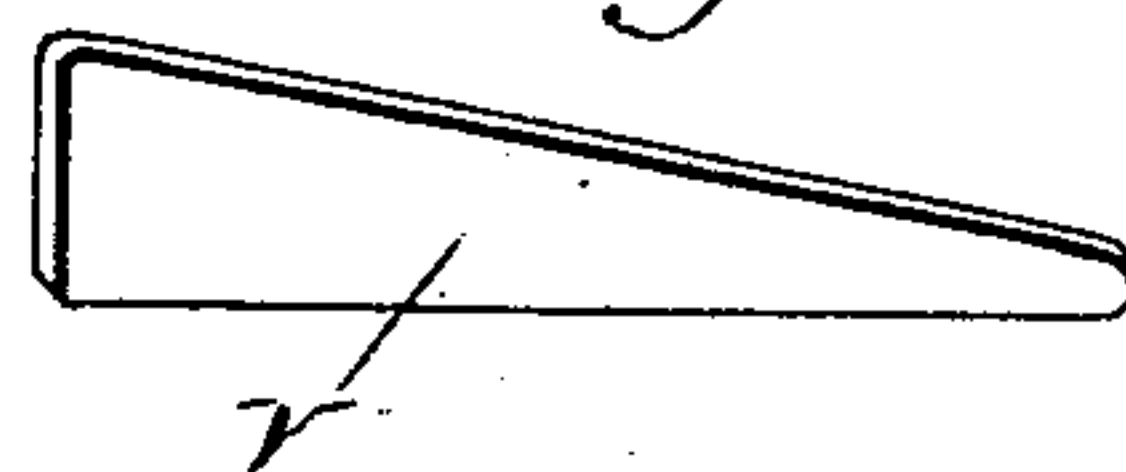


Fig. 7.



WITNESSES:
Paul Jakob
Wm. G. H. H. H.

INVENTOR
A. K. Hatteberg
BY *Mumford*
ATTORNEYS.

No. 616,322.

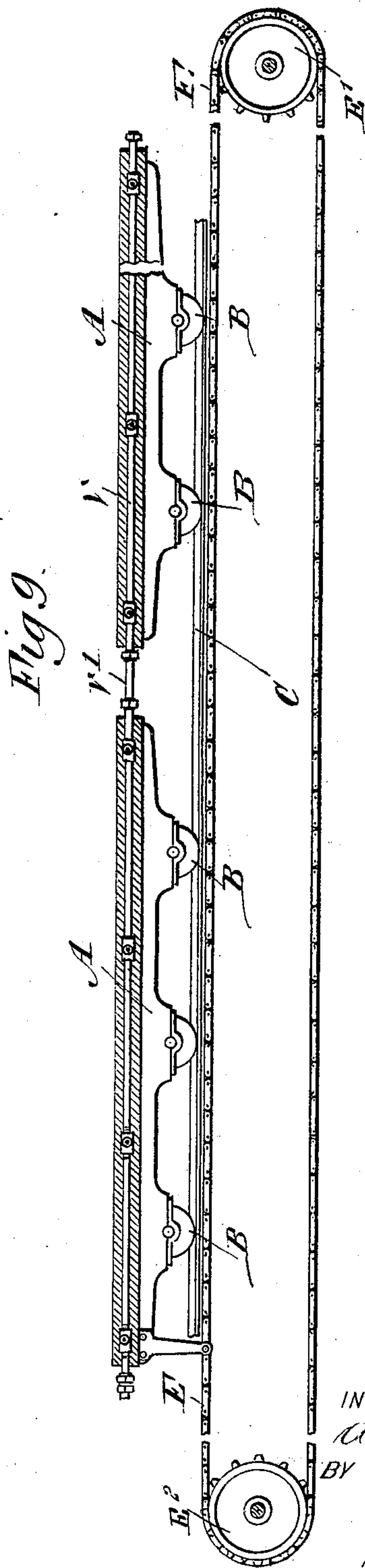
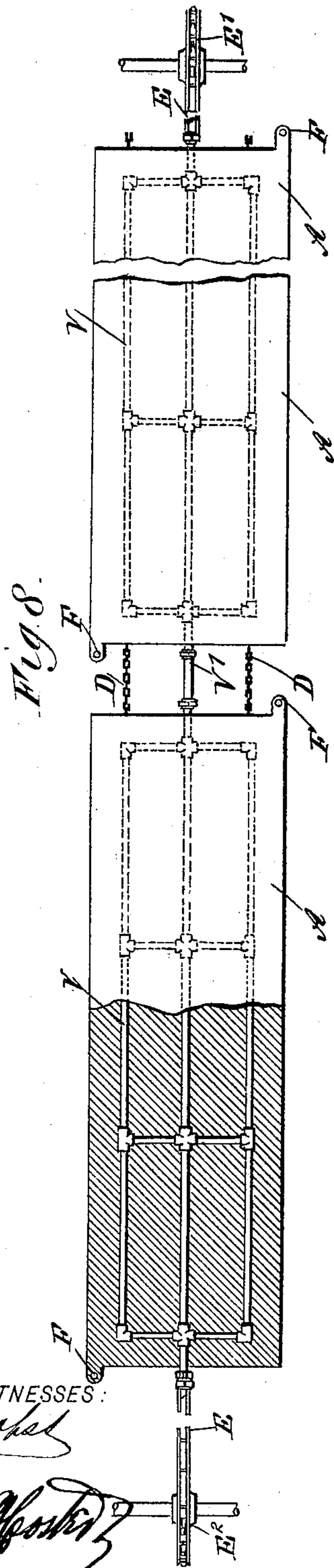
Patented Dec. 20, 1898.

A. K. HATTEBERG.
VENEER PRESS.

(Application filed Oct. 8, 1897.)

(No Model.)

3 Sheets—Sheet 3.



WITNESSES:
Raul Johel
Rev. J. H. H. H.

INVENTOR
A. K. Hatteberg
BY *Mumford*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

AXEL K. HATTEBERG, OF MATTOON, WISCONSIN.

VENEER-PRESS.

SPECIFICATION forming part of Letters Patent No. 616,322, dated December 20, 1898.

Application filed October 6, 1897. Serial No. 654,271. (No model.)

To all whom it may concern:

Be it known that I, AXEL K. HATTEBERG, of Mattoon, in the county of Shawano and State of Wisconsin, have invented a new and Improved Veneer-Press, of which the following is a full, clear, and exact description.

The objects of the invention are to provide a new and improved veneer-press arranged for conveniently and quickly pressing the veneers, to insure proper work, and to permit of handling a large amount of work in a comparatively short time.

The invention consists principally of a bed, a platen over the bed and carried thereby, a pressing device adapted to be temporarily connected with the said platen for pressing the veneers held on the bed, and means for locking the platen to the bed after pressing, to allow of removing the pressing device, and to keep the veneers locked between the bed and platen until the glue is set.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a side elevation of the same. Fig. 3 is a sectional plan view of the presser-plate and device for attaching the latter to the platen, the section being taken on the line 3 3 of Fig. 2. Fig. 4 is an end elevation of the improvement. Fig. 5 is a sectional side elevation of the lifting screw-rod and its bearing. Fig. 6 is an enlarged perspective view of one of the lock-bars for the platen. Fig. 7 is a perspective view of one of the wedges for the lock-bar. Fig. 8 is a plan view, with part in section, of the double bed-plates and means for moving the same; and Fig. 9 is a sectional side elevation of the same.

The improved veneer-press is provided with a number of beds A, made portable and mounted for this purpose on wheels B, adapted to travel on track-rails C to conveniently move one of the beds under the press proper, as shown in Fig. 2, while the other beds are at the sides of the press to allow the glue con-

necting the veneers with each other to set, as hereinafter more fully described.

The several beds A are connected with each other by chains or other connecting devices D, (see Fig. 8,) and the outer end of the first bed A is connected with a sprocket-chain E, passing over sprocket-wheels E' E², adapted to be turned to cause the chain E to travel so as to move the several beds and bring a desired bed under the press, as shown in Fig. 2.

Each of the beds A is provided at its ends with upwardly-extending posts or guide-rods F, on which is fitted to slide a platen G, adapted to engage the top veneer of the veneers H, held on the bed A, as indicated in Fig. 2, the said platen being formed at its top and at the middle thereof with a longitudinally-extending double cleat G', adapted to be engaged by pairs of hooks I, mounted to turn on a presser-plate J to connect the platen to the said presser-plate for lifting the platen and placing the veneers in position and for lowering the platen upon the veneers to permit the presser-plate J to force the platen downward, so as to firmly press the veneers before uniting the same after the glue has been applied to the veneers. The hooks I in each pair are provided with segmental gear-wheels I', in mesh with each other, as plainly shown in Fig. 3, and with a handle I² for turning one of the hooks, so as to move the two hooks in the pair simultaneously into or out of engagement with the cleat G' on the platen G.

The presser-plate J is held on the lower ends of screw-rods K K', adapted to move vertically by engaging nuts formed in the hubs of gear-wheels L L', respectively, journaled in suitable bearings formed in a beam N, carried by cross-beams N', supported on posts N², attached to foundation-beams N³, located under the floor carrying the rail C, the said beams and posts constituting the framework of the press. The gear-wheels L L' are both in mesh with a gear-wheel O, secured on a shaft O', journaled in suitable bearings in the beam N, with the upper end of a shaft O', carrying a beveled gear-wheel O², in mesh with a pinion P', secured on a shaft P, upon which the clutch-pulleys Q are loosely mounted. Upon each of the clutch-

pulleys runs a belt, one a straight and the other a cross belt, and by which the shaft P is rotated. The rotary motion of the shaft P is transmitted by the gear-wheels P' O² to the shaft O', so that the gear-wheel O imparts a simultaneous rotary motion to the nut gear-wheels L L' to cause the two screw-rods K K' to travel upwardly or downwardly, according to the direction in which the shaft P is rotated.

As an auxiliary means for operating the shaft P when greater pressure is required I mount upon the end of the shaft P the gear-wheel R, which meshes with the pinion S on the shaft S', carrying the pulley S², by which the shaft S' is operated.

On the bed A are held a series of locked bars T, each formed with vertically-disposed slots T', adapted to be engaged by a wedge U, resting on the top of the platen G, so as to lock the latter in place after it is pressed downward by the presser-plate J, the wedges U being engaged with corresponding slots in the said lock-bars, as will be readily understood by reference to Fig. 2. (See also Figs. 6 and 7.)

In order to prevent the glue from setting too rapidly, I provide each of the beds A with heating-pipes V, of which the heating-pipes in one bed are connected with the ones in the adjacent bed by a coupling V', (see Figs. 8 and 9,) and the heating-pipe in one of the end beds is connected with a suitable source of steam-supply, so that all the beds can be simultaneously heated when steam is let into the connected pipes.

The operation is as follows: The bed A in the press at the time receives the veneers H with the platen G supported above the bed by the hooks I, carried on the presser-plate J. When the last layer of veneer has been put in position, the shaft P is rotated by manipulating the clutch mechanism Q accordingly to cause the screw-rods K K' to move downwardly to bring the platen G in contact with the uppermost veneer, the further downward movement of the screw-rods causing the presser-plate J to firmly force the platen G downward, so as to properly press the veneers between the bed A and the platen G. When this has been done, the wedges U are driven into the slots in the lock-bars T to securely fasten the platen in place, after which the operator turns the handles I² to disengage the hooks I from the cleat G' on the platen G. The shaft P is now rotated in the opposite direction to raise the presser-plate J and the hooks carried thereby, after which a traveling motion is given to the sprocket-chain E, so as to set the train of beds into motion to move the bed A, with its pressed veneers and platen, from under the press and to bring an empty bed A under the press. The platen carried by this press is now first engaged by the hooks I of the lower plate J, and then the platen is raised above the bed by the plate to permit of conveniently plac-

ing the veneers in position on the bed. The above-described operation is then repeated—that is, the platen is lowered and pressed in contact with the veneers and locked in position by the wedges engaging the locking-bars T, as before explained. Now when the several beds are successively loaded with veneers and the latter have dried then the train of beds is run backward and the beds are successively unloaded, use being made of the press for lifting and supporting the platen during this process.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A veneer-press, comprising a movable bed, a pressing device above the bed, a platen adapted to rest upon the veneers to be pressed, means for detachably connecting the platen with the pressing device, whereby the platen may be held by the pressing device above the bed while the veneers are being placed thereon and then disengaged therefrom after the veneers have been pressed, and means for locking the platen to the movable bed after the veneers have been pressed, whereby the bed with its pressed veneers and platen may be moved from under the pressing device, substantially as described.

2. A veneer-press, comprising a portable bed, a presser-plate above the bed, means for raising and lowering the presser-plate, a platen adapted to rest upon the veneers to be pressed, hooks carried by the presser-plate and projecting from its lower face, said hooks being adapted to be engaged with the platen to hold it above the bed while the veneers are being placed thereon and to be disengaged therefrom after the veneers have been pressed, and a locking device for locking the platen to the bed, substantially as described.

3. A veneer-press provided with a bed carrying upwardly-projecting guide-rods, a platen above the bed and fitted to slide on the said guide-rods, upwardly-projecting and slotted locking-bars held on the said bed, and wedges engaging the platen and the slots in the said locking-bars, substantially as shown and described.

4. A veneer-press, comprising a portable bed, a presser-plate above the bed, means for raising and lowering the presser-plate, a platen, a pair of hooks at each end of the presser-plate for engaging the platen, means for simultaneously operating the hooks of each pair, and a locking device for locking the platen to the bed, substantially as described.

5. In a veneer-press, the combination with a presser-plate, and a platen, of a pair of hooks at each end of the presser-plate for engaging the platen segmental gears in mesh with each other for each pair of hooks, and means for operating the segmental gears, substantially as described.

6. In a veneer-press, the combination with a platen provided on its upper face with a

double cleat, of a presser-plate, a pair of hooks at each end of the presser-plate for engaging the cleat of the platen, segmental gears in mesh with each other for each pair 5 of hooks, and a handle secured to one of the gears of each pair, substantially as described.

7. A veneer-press, comprising a pressing device provided with a presser-plate, a pair of hooks at each end of the presser-plate, 10 means for simultaneously operating the hooks of each pair, a wheeled bed below the press-

ing device and provided with upwardly-projecting and slotted bars, a platen between the bed and presser-plate and with which the hooks of the latter are adapted to engage to 15 hold it above the bed, and wedges adapted to enter the slots of the said bars, substantially as described.

AXEL K. HATTEBERG.

Witnesses:

F. J. ROTHBAUER,
C. F. LADWIG.