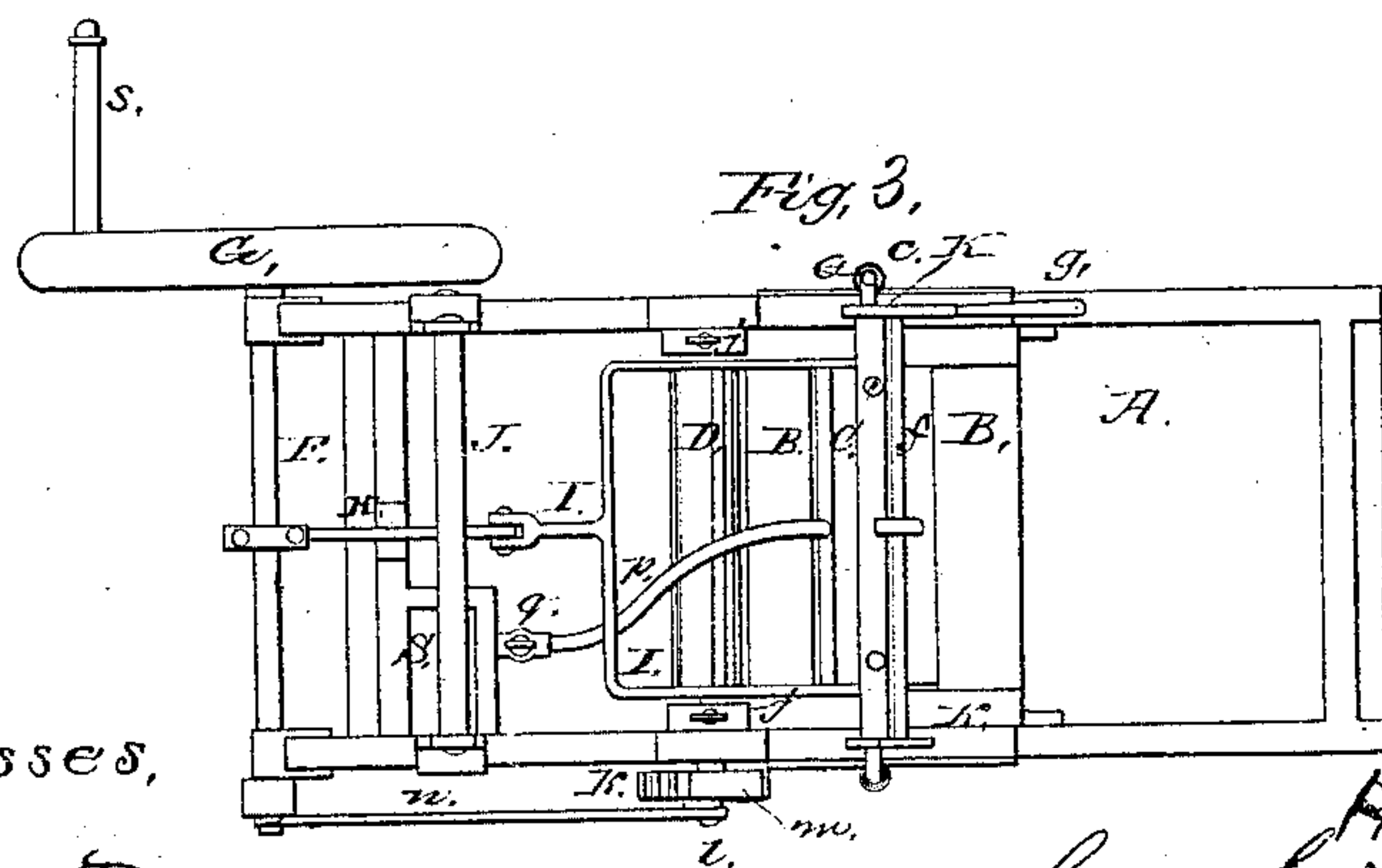
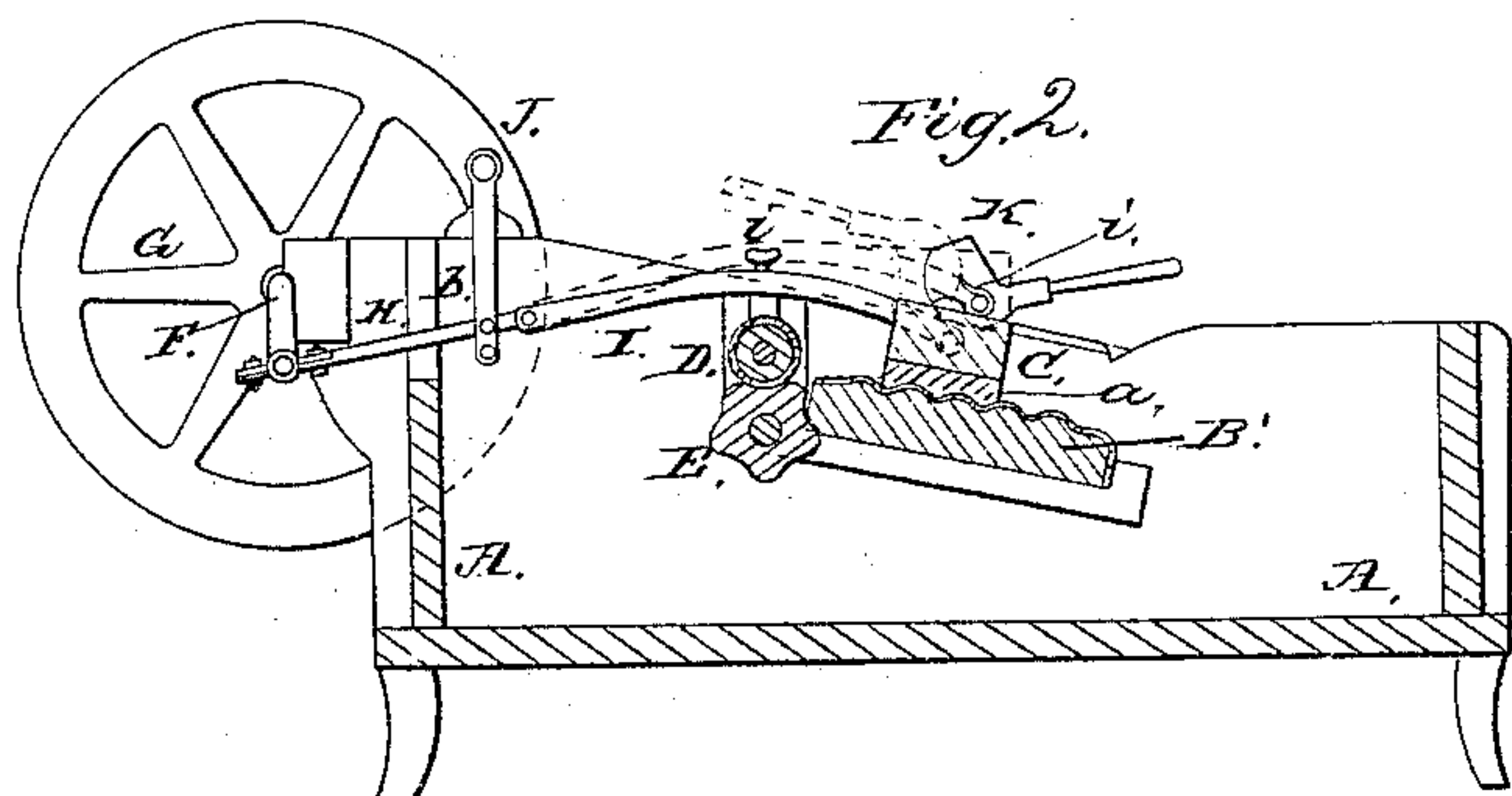
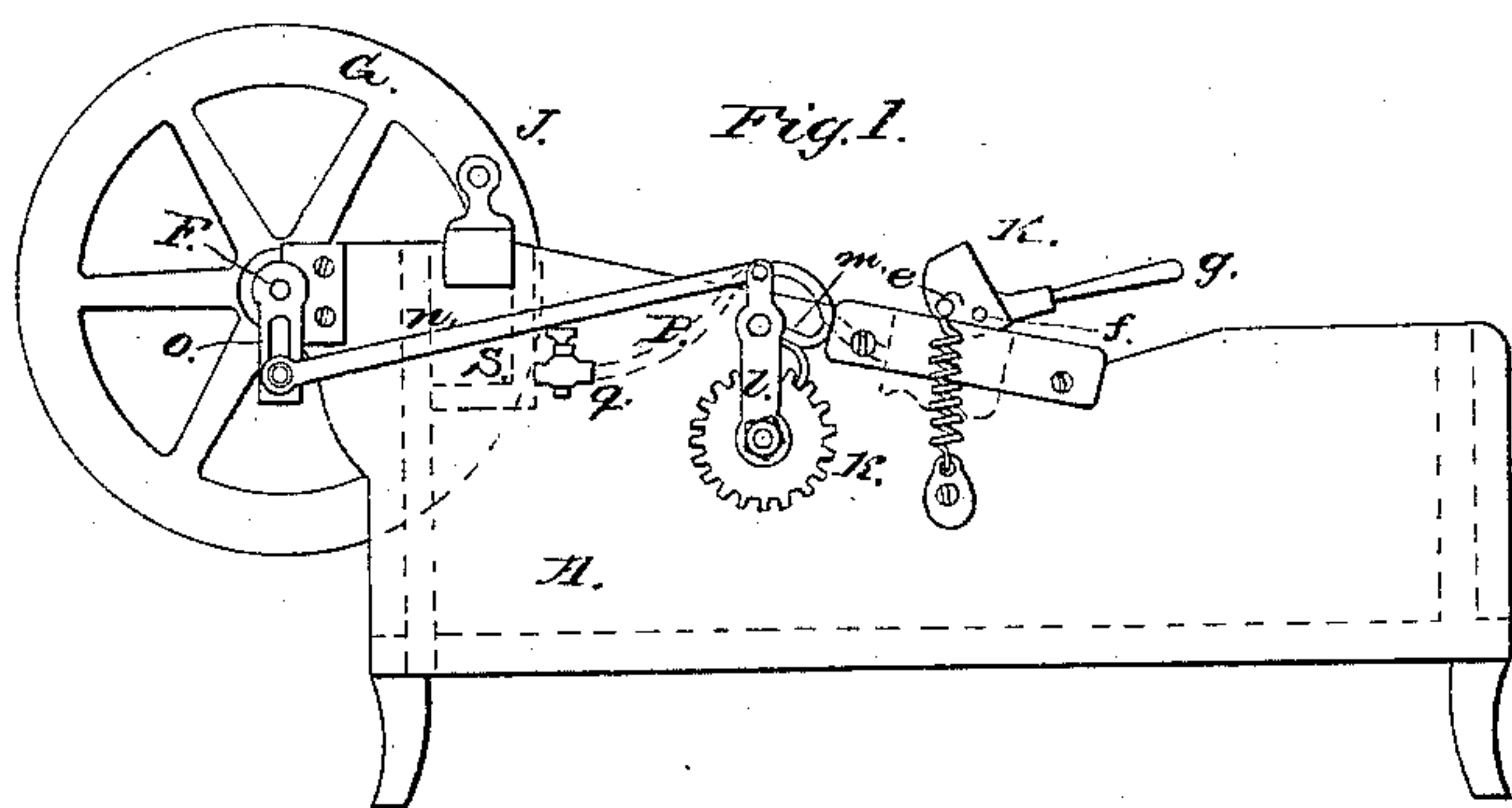


*H.F. Sehnders,*  
*Washing Machine,*  
*N<sup>o</sup> 69,261, Patented Sept. 24, 1867.*



Witnesses,  
*Jay Klyatt,*  
*J.R. Druce*

Inventor,  
*H.F. Sehnders*  
 by *J. Fraser & Co.*  
*Atty.*

# United States Patent Office.

HENRY F. SEHNDERS, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF  
AND BARBORA WACKERMAN, OF THE SAME PLACE.

*Letters Patent No. 69,261, dated September 24, 1867.*

## IMPROVED WASHING MACHINE.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY F. SEHNDERS, of the city of Buffalo, in the county of Erie, and State of New York, have invented certain new and useful improvements in Washing Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation.

Figure 2, a central longitudinal section.

Figure 3, a plan.

Like letters designate corresponding parts in all the figures.

My invention consists in the combination and arrangement of a movable rubber, with its face of India rubber or other elastic material, which is made to reciprocate over a stationary board, in the peculiar manner described, together with adjustable feed-rollers, provided with a double pawl, by which they can be made to feed the garments in either direction. It also consists in the use and arrangement therewith of a receptacle for containing soap-suds or other preparation, which is continuously supplied to the clothes on the board as they are being washed.

In the drawings, A represents a rectangular tub, which forms also the frame for supporting the parts; B, the under and stationary board, of ordinary construction, preferably a little inclined from a horizontal, as shown; C, the upper movable rubber, its India-rubber face *a* being corrugated or not, as preferred; D, the upper and E the lower feed-roller; F, the driving-crank shaft, provided with a fly-wheel, G, and handle *s*, for turning it. H is the pitman attached to said shaft, and coupled with a connecting-rod, I, attached to the rubber, by which the latter is operated back and forth over the board. J is a rock-shaft, with an arm, *b*, extending downward therefrom, and pivoted to the pitman near its connection with the connecting-rod I. The function of this rock-shaft and arm is to produce a more uniform horizontal motion to the connecting-rod than a single long pitman would without such device. The rubber C is kept in proper engagement with the board beneath by means of spiral spring *c*, attached to projections *e* from each end of the rubber, and fastened to the outside of the tub, as shown in fig. 1. These springs yield sufficiently to allow the necessary reciprocations of the rubber, and its elevation, (as will hereafter be described,) while arranging the garments upon the wash-board B, preparatory to washing. Cams K K, of the form shown, are pivoted at each end of the rubber on the projections *e*, and connected by a rod, *f*. A lever, *g*, extending from one of the cams, enables them to be partially rotated on the axes *e*, (shown in red lines, fig. 2,) which elevates the rubber so as to permit the insertion of the garments beneath. When the machine is in operation the rod *f* is engaged in a hook, *i*, in the top of the rubber, which securely holds it in place. The feed-rollers D E may be arranged either in front or behind the rubber, the lower one being preferably of wood, corrugated, and mounted in fixed bearings, while the upper one, D, is made with an elastic surface, as India rubber, with its boxes adjustable vertically, by means of thumb-screws *j*, or equivalent. At the end of the axis of the lower roller, on the outside, is a ratchet-wheel, *k*, and a pivoted arm, *l*, to the latter of which is pivoted the double pawl *m*, constructed as shown, which may be turned so as to engage with either side of the wheel *k*, according to the direction in which the garments are required to be fed. To the end of the arm *l* is jointed a rod or pitman, *n*, which connects it at its other end with an arm or crank, *o*, on the end of the driving-shaft, by which, in connection with the pawl *m*, the feed-wheels are intermittently actuated. The pressure between the two rollers is regulated by the thumb-screws *j*, raising or depressing the boxes of the upper roller. In one corner of the machine is arranged a tub, S, for containing soap-suds or other detergent solution, with a flexible pipe, *p*, leading therefrom to the rubber C, to which its end is secured. A stop-cock, *q*, is provided at the eduction passage from this tub, by which the saponaceous liquid is permitted to gradually flow through the pipe *p*, which discharges it on the more elevated end of the wash-board, thus furnishing a continuous supply to the fabrics as they are being subjected to the action of the rubber. This arrangement is a matter of considerable importance, as by it the suds or other mixture is equally and uniformly distributed as the washing progresses. The rubber C being elastic, on account of the material of which it is composed, and adjustable by means of the spiral springs, prevents in a great measure the wear of the garments,



while its rapid reciprocations soon and effectually cleanse the most soiled articles. The use of the double pawl with the feed-rollers enables the clothes to be easily fed in either or both directions, as required. By the employment of the cams in connection with the spiral springs, the rubber C can be readily elevated for inserting the articles to be washed. By tightening the thumb-screws *j* the feed-rollers may be used as a wringer.

What I claim, is—

1. The combination of the reciprocating rubber C, stationary board B, springs *c*, with the connecting-rod I, rock-shaft and arm J *b*, arranged and operated substantially in the manner and for the purpose set forth.
2. I claim the receptacle *s*, provided with stop-cock *q* and flexible pipe *p*, in combination with rubber C, substantially as and for the purpose described.
3. I claim the feed-rollers D E, in combination with the ratchet-wheel *k*, double-acting pawl *m*, arm *l*, and pitman *n*, operating in the manner and for the purpose set forth.
4. I claim the cams K K, connected by rod *f*, in combination with the hook *i*, spiral springs *c*, and rubber C, for elevating the latter, arranged and operating substantially as specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY F. SEHNDERS.

Witnesses:

JAY HYATT,

J. R. DRAKE.