

(No Model.)

2 Sheets—Sheet 1.

J. A. SEITZ.  
STOP FOR POWER PRESSES.

No. 352,575.

Patented Nov. 16, 1886.

FIG. 1

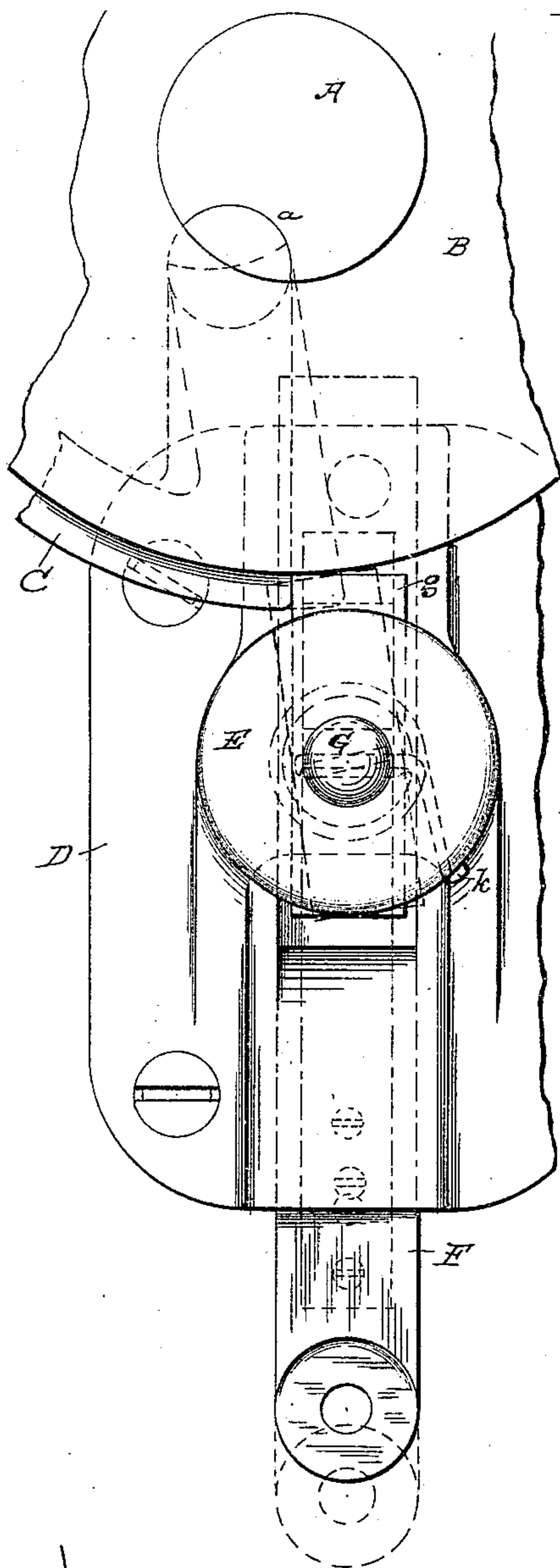


FIG. 2

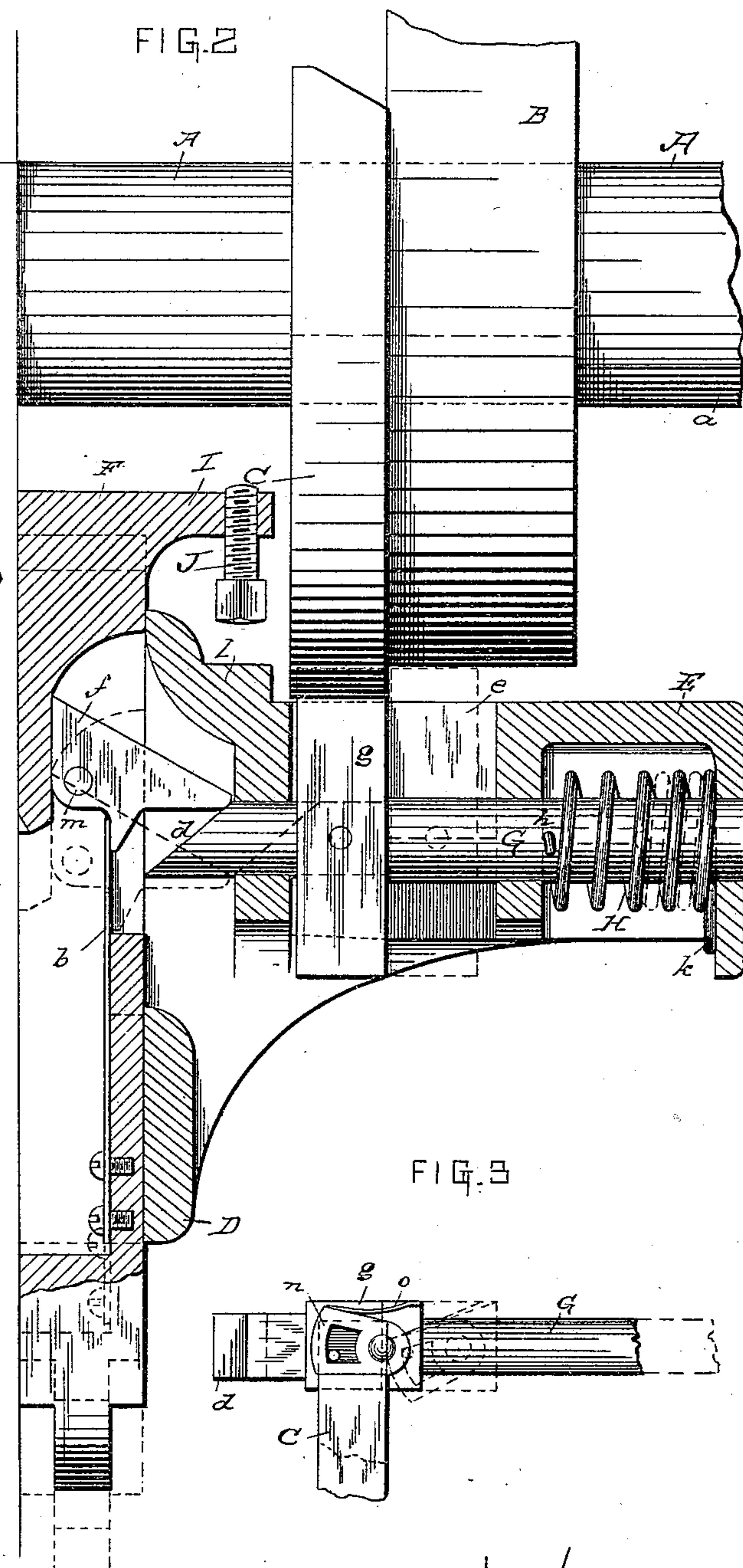
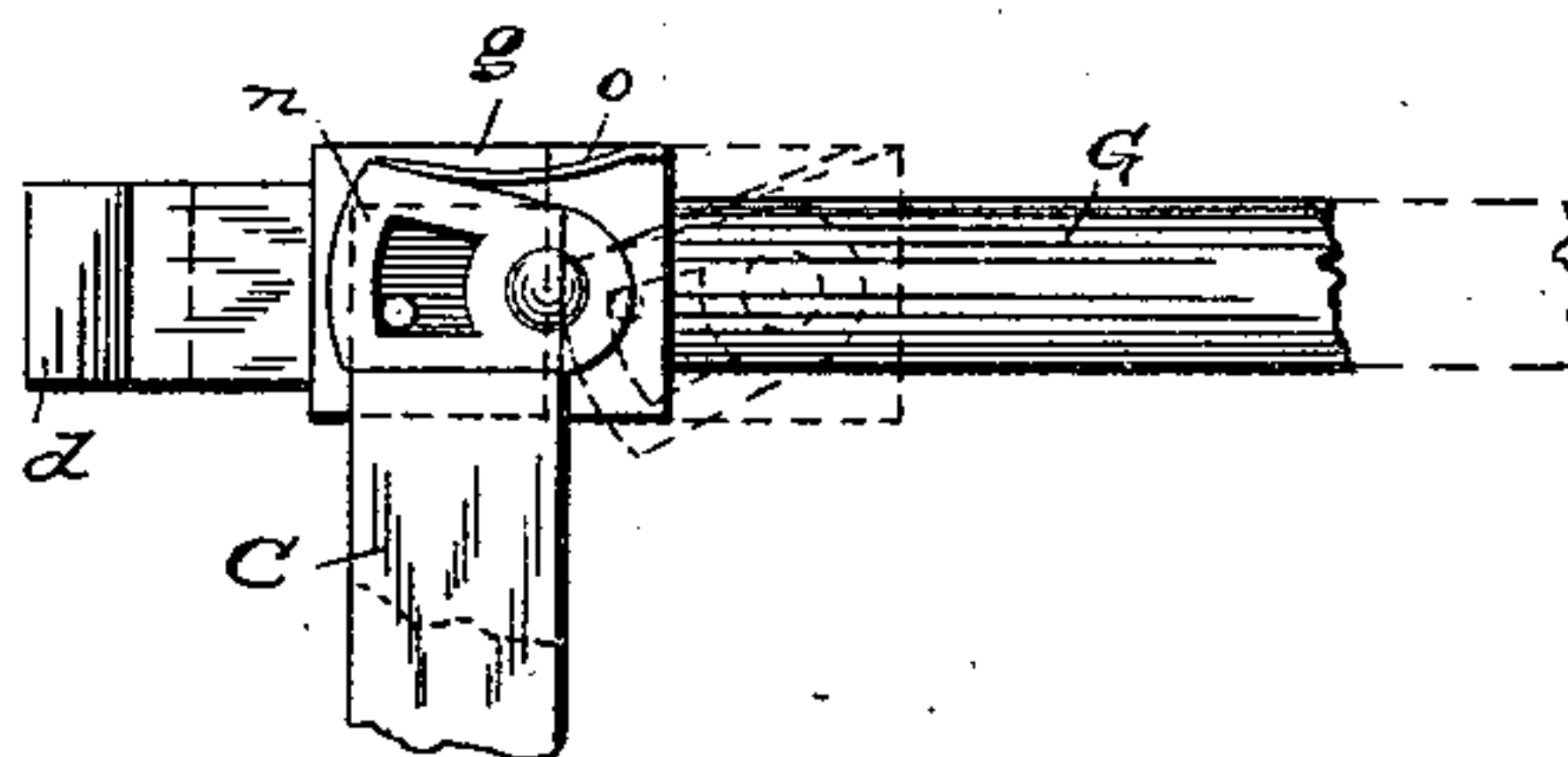


FIG. 3



Witnesses

Joseph A. Burtcher  
August Schroder

Inventor

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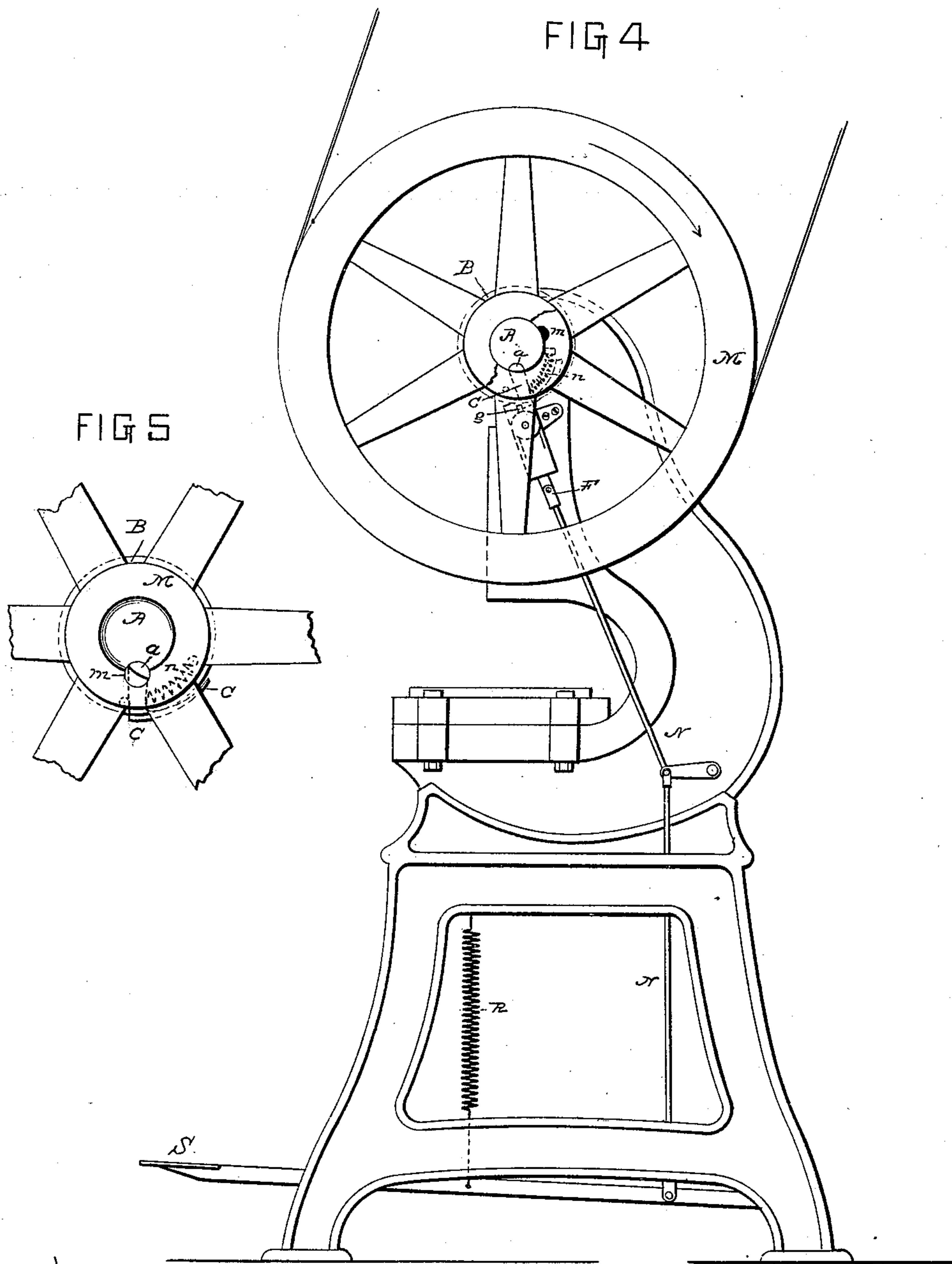
(No Model.)

2 Sheets—Sheet 2.

J. A. SEITZ.  
STOP FOR POWER PRESSES.

No. 352,575.

Patented Nov. 16, 1886.



Witnesses  
Florian Dahis  
August Schroder

Inventor  
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# UNITED STATES PATENT OFFICE.

JULIUS A. SEITZ, OF BROOKLYN, NEW YORK.

## STOP FOR POWER-PRESSES.

SPECIFICATION forming part of Letters Patent No. 352,575, dated November 16, 1886.

Application filed December 31, 1885. Serial No. 187,235. (No model.)

*To all whom it may concern:*

Be it known that I, JULIUS A. SEITZ, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in an Automatic Stop for Power-Presses, of which the following is a specification.

My invention relates to improvements in power-presses where the clutch is brought to act in conjunction with the fly-wheel to carry the parts around and leaving them at a fixed point, thus overcoming the possibility of the parts being carried around more than once, unless arranged for so doing. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation, and Fig. 2 a sectional view, of the improved automatic stop as applied to a clutch manufactured by E. W. Bliss. Fig. 3 is a modified form of a part of the stop-motion. Fig. 4 is an elevation of a power-press showing automatic stop applied, and Fig. 5 is a view showing the clutch released from automatic stop and acting with the fly-wheel.

Similar letters refer to similar parts throughout the specification.

In the drawings, A represents a crank-shaft, upon which is a fly-wheel, M, receiving its motion through the means of belting.

B is a fixed collar upon the shaft, through which passes a key, *a*, semicircular in section and let into said shaft, so that a portion of its surface is concentric with the circumference of the shaft, as shown in Fig. 5. At one end of the key there is formed an angular lever or arm, C, which is moved forward, when not in contact with the block *g*, by the spring *n*, acting against a stop secured to plate or collar B, thus forcing the key *a* to enter the recess formed in the fly-wheel when passing over same and carry the shaft around with it, as shown in Fig. 5. This part of the mechanism, which is old, constitutes the clutch and acts only in conjunction with the automatic stop to accomplish the desired result.

The letter D represents a bracket-frame having a recess, in which slides a bar, F, and a slot, *e*, to guide the block *g*; also a pocket to receive the spring H. The bar F is provided with the latch *f*, one side of which projects beyond its face and acts on the incline *d*, formed on slid-

ing bar G, in its downward movement; but in its upward movement it turns inward and passes by the bar G without giving motion to it.

On the lower side of the latch there is formed a lug, on which the spring *b* acts to force the same outward. The lower end of the bar F is adapted to be secured by rods N to the foot-lever S, whereby it receives its downward motion from the operator, the spring R returning the lever to its normal position when relieved of pressure. The bar G is adapted to move at right angles to the bar F, and has one end beveled, as at *d*. The block *g* is attached to the bar G in any suitable manner, and guided in its movements by the block *e'*. To the bar G is attached one end of a spiral spring, H, as shown at *h*, the other end being caught under the bracket, as shown at *k*. The spring, as shown, has two functions: first, to partially rotate the bar G so as to catch the block *g* back of the angular arm on the key *a* when pushed forward by the latch on bar F; second, to return the bar G to its normal position after being released by the arm on key *a*. In operation, the parts being shown in the position as in Figs. 2 and 5, the operator presses on the treadle S, which, through the connecting-rods N, draws down the bar F, and, through the means of the latch *f*, moves forward the bar G, carrying the block *g*, which is obstructing the path of the arm C. At the moment the block *g* is pushed beyond the arm C it is instantly turned to one side by means of spring H, thus locking itself from returning, and allows the key *a* to be thrown in recess *m* in the fly-wheel. When it comes opposite the key, it will enter by means of the spring N, and carry the shaft with it. When the end of arm C of the key *a* has passed the block *g*, the latter is returned to its normal position with the bar G by means of spring H, thus allowing the block *g* to again come in the path of arm C and obstruct its passage to throw the key out of fly-wheel and stop the rotation of shaft A. The bar F is adapted to return at any time to its normal position without effecting the movements of bar G, no matter what its position may be. Thus an operator by this mechanism may cause the crank to make one or more revolutions, as he desires. In making one revolution, the operator presses on the treadle and, whether mindful or not to take the pressure off, the



attachment by its automatic action throws out the key at each revolution. However, should it be desired to have the shaft revolve continuously, the set-screw J, in the lug formed on the bar F, is adjusted so that when the bar is drawn down it throws the bar G forward far enough to allow block g to clear the arm C, and at the same time not clear the bar G. In carrying out this last feature, it is necessary to keep a pressure continually on the treadle.

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

1. In a power-press, the combination, with the clutch mechanism, of a block having a reciprocal and side movement, and adapted to be moved positively in one direction by means of a bar provided with an inclined face, and returned automatically by a spring to the path of the clutch mechanism, whereby the motion of the same is positively controlled in starting and stopping the revolutions of the press-shaft.

2. In a power-press, the combination, with the clutch mechanism, of a bar actuated by means of a treadle and adapted to move in one direction a block by means of a movable inclined-faced tappet or latch, and return to its normal position at any time, while the block is in or out of action, without disturbing the position of same, as and for the purpose set forth.

3. In combination with the clutch mechanism of a power-press, a block adapted to be moved by a sliding bar, which can be limited in the amount of its movement by an adjustable stop, and the relation of the block to that of the clutch mechanism so adjusted that the shaft may be run continuously or stop at each revolution.

JULIUS A. SEITZ.

Witnesses:

JOS. A. BURTSCHER,  
AUGUST SCHRODER.