

JOHN C. GOULD.

NAIL PLATE FEEDING MACHINES.

No. 120,190.

Patented Oct. 24, 1871.

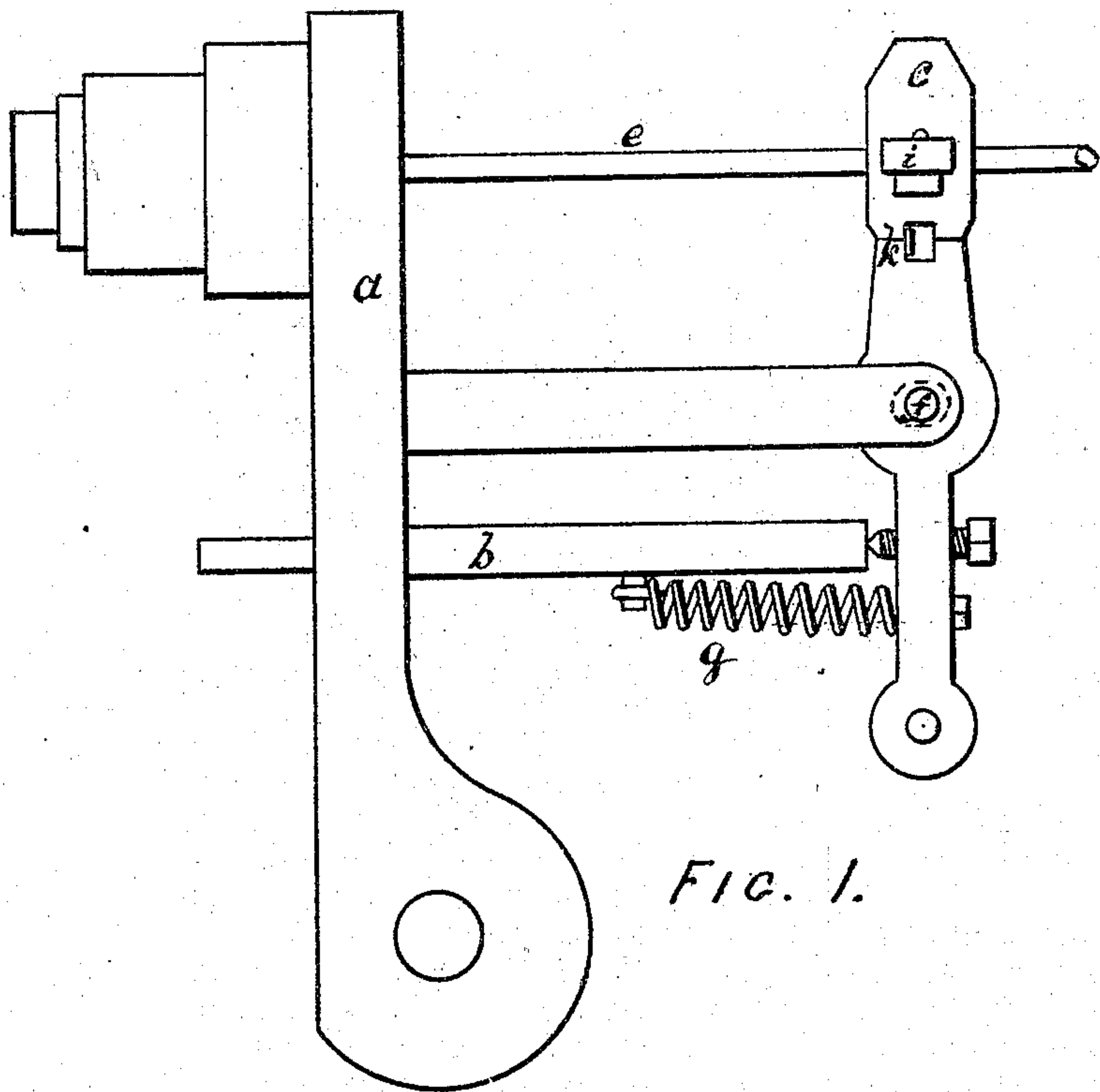


FIG. I.

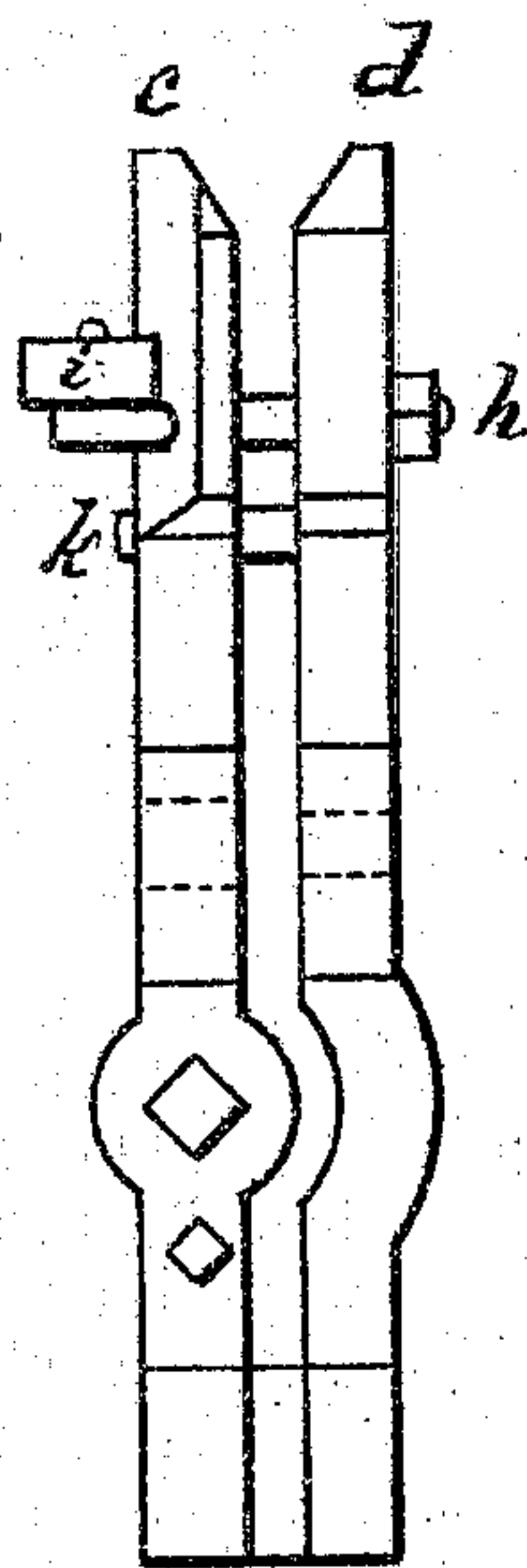


FIG. II.

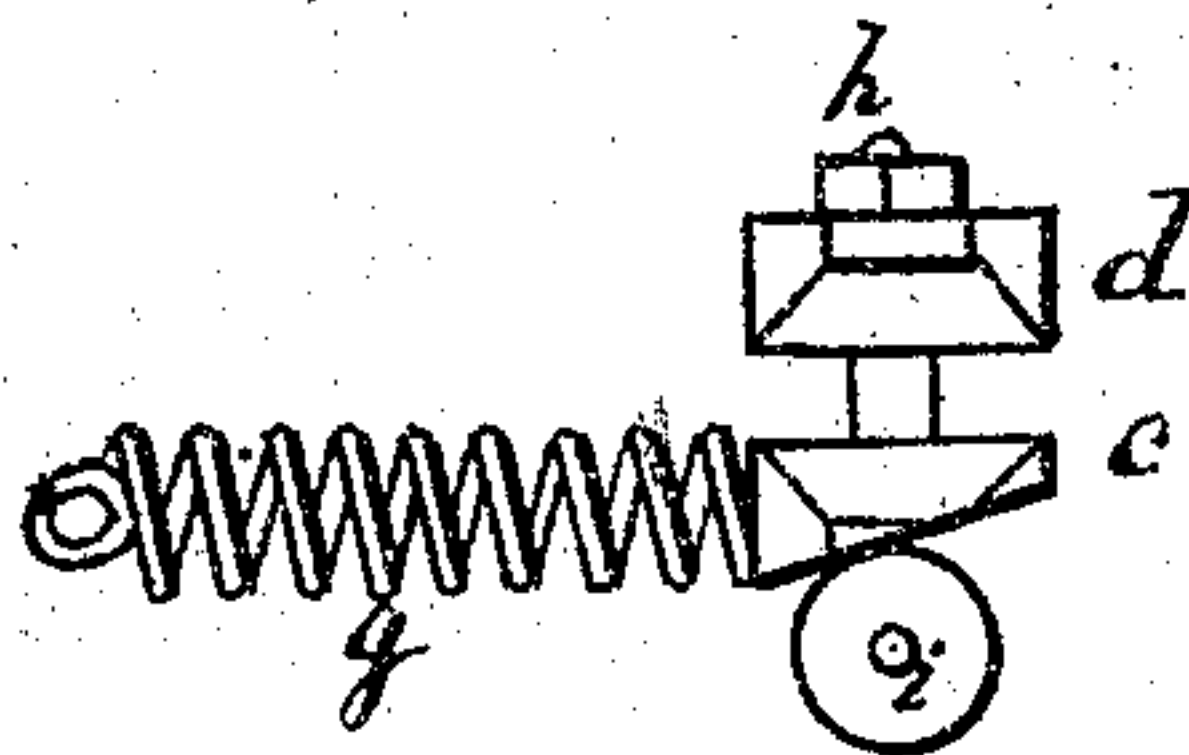


FIG. III.

WITNESSES.

Amos H. Hall.

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JOHN C. GOULD, OF OXFORD, NEW JERSEY.

IMPROVEMENT IN NAIL-PLATE-FEEDING MACHINES.

Specification forming part of Letters Patent No. 120,190, dated October 24, 1871.

To all whom it may concern:

Be it known that I, JOHN C. GOULD, of Oxford, in the county of Warren and State of New Jersey, have invented a certain new and useful Improvement in Nail-Plate-Feeding Machines, of which the following is a specification:

The said invention relates to self-acting feeders to nail-making machines, such as I have heretofore invented, and for which Letters Patent have been issued. The improvement consists in obtaining the feed by means of a pair of levers, in place of the ordinary fork-springs, that grasp the nipper-rod tightly when moving toward the knives and relax when moving back, so as to slip the required distance for the next nail.

To enable others skilled in the art to which it appertains to make and use my invention, I will proceed to describe its construction and operation with reference to the drawing.

Figure 1 is a side view of the apparatus attached to the vibrating lever that carries the nose-piece of a nail-plate feeder. Fig. 2 is a transverse view, showing the edges of the two levers in place of the ordinary fork-springs; and Fig. 3 is a top view of the same.

When the vibrating lever *a*, that carries the nose-piece and plate, moves toward the machine the "push-up" rod *b* strikes the frame of the machine or some other permanent object answering the same purpose, and thus pushes the lower end of the fork-levers *c* and *d* outward, and the upper ends that grasp the nipper-rod *e* are moved toward the machine. The levers *c* and *d* are pivoted together at the bottom, and turn together on the bolt *f* at about their centers; but the lever *c* is loosely fitted on the bolt *f*, as shown by dotted lines in Figs. 1 and 2, so that it need not remain

in line with the other as the pair vibrate together. The action of the spring *g* is to return the push-up rod and the fork-levers to their original positions, and in addition to this it also tends to throw the upper end of the lever *c* back of the line of *d*; and as the two are connected at their upper ends by a stud-bolt, *h*, fastened to *d* and passing loosely through a slot in *c*, and carrying a roller, *i*, that bears upon the sloping surface of *c*, as shown in Fig. 3, the consequence of the backward motion of *c* is to cause the two levers to approximate more closely at their upper ends and tightly clasp the nipper-rod there placed between them. The clasp of the nipper-rod by the motion of the fork-levers, relatively to each other, by means of the inclined surface of the back of *c* working in connection with the roller *i*, as has been described, may be accomplished without the use of the roller, by means of a sliding wedge or a vibrating lever operating like a toggle. When the feed moves forward the greater the resistance the tighter the nipper-rod is held; and in the reverse movement the slipping is facilitated by the same construction, and also by the spring *k* fastened to *d* and working against *c*, in opposition to the extent of its adjustment to the action of the large spring *g*.

I claim as my invention—

The combination of the vibrating lever *a*, the push-rod *b*, the pair of clamps or forks *c* and *d*, the latter constructed substantially as described, with the bolt *h* and roller *i*, as and for the purpose specified.

JOHN C. GOULD.

Witnesses:

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NATHAN LEWIS.

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