

(No Model.)

C. D. GODCHARLES.  
NIPPER BAR FOR NAIL MACHINES.

No. 315,403.

Patented Apr. 7, 1885.

Fig. 1.

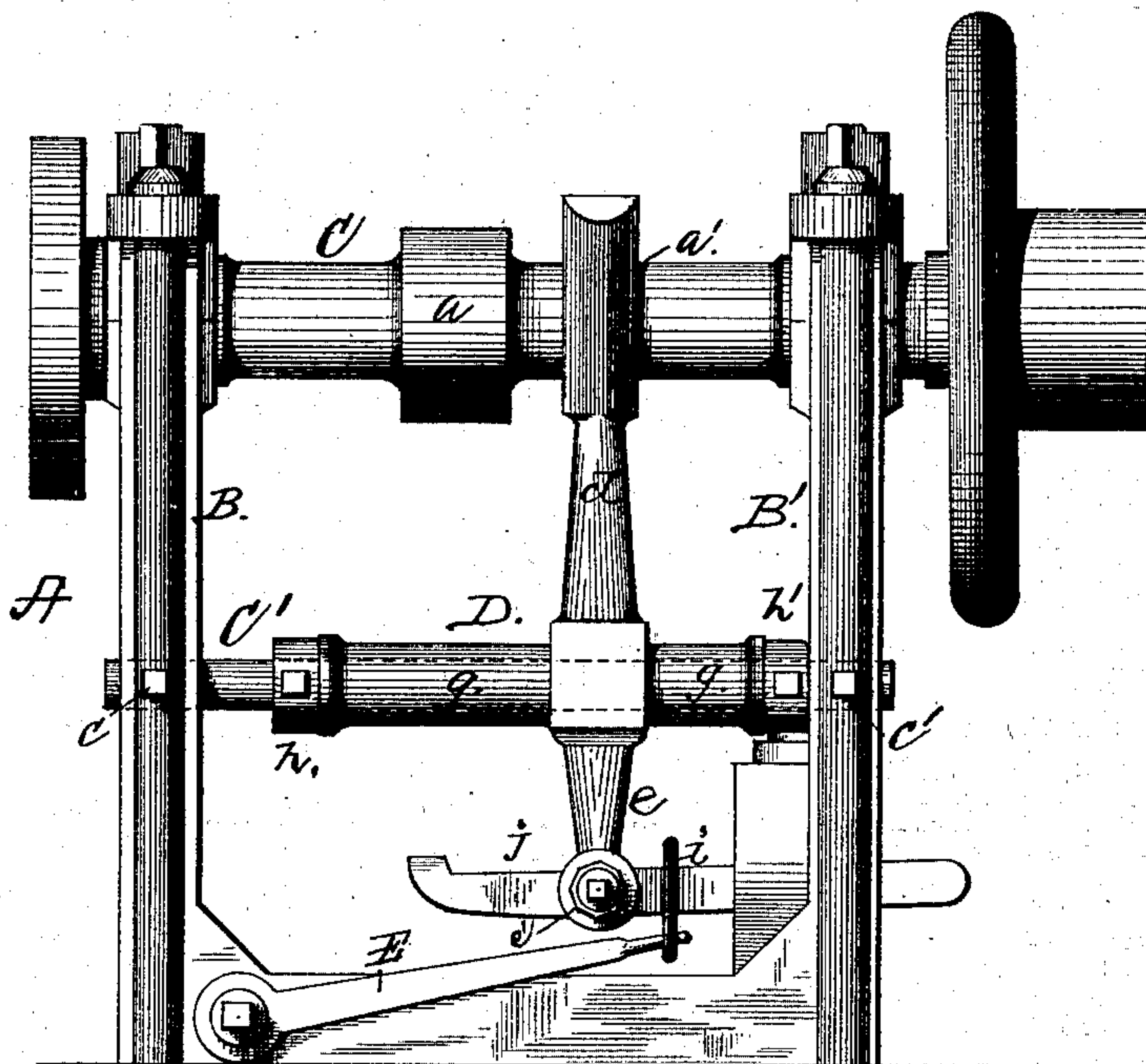


Fig. 2.

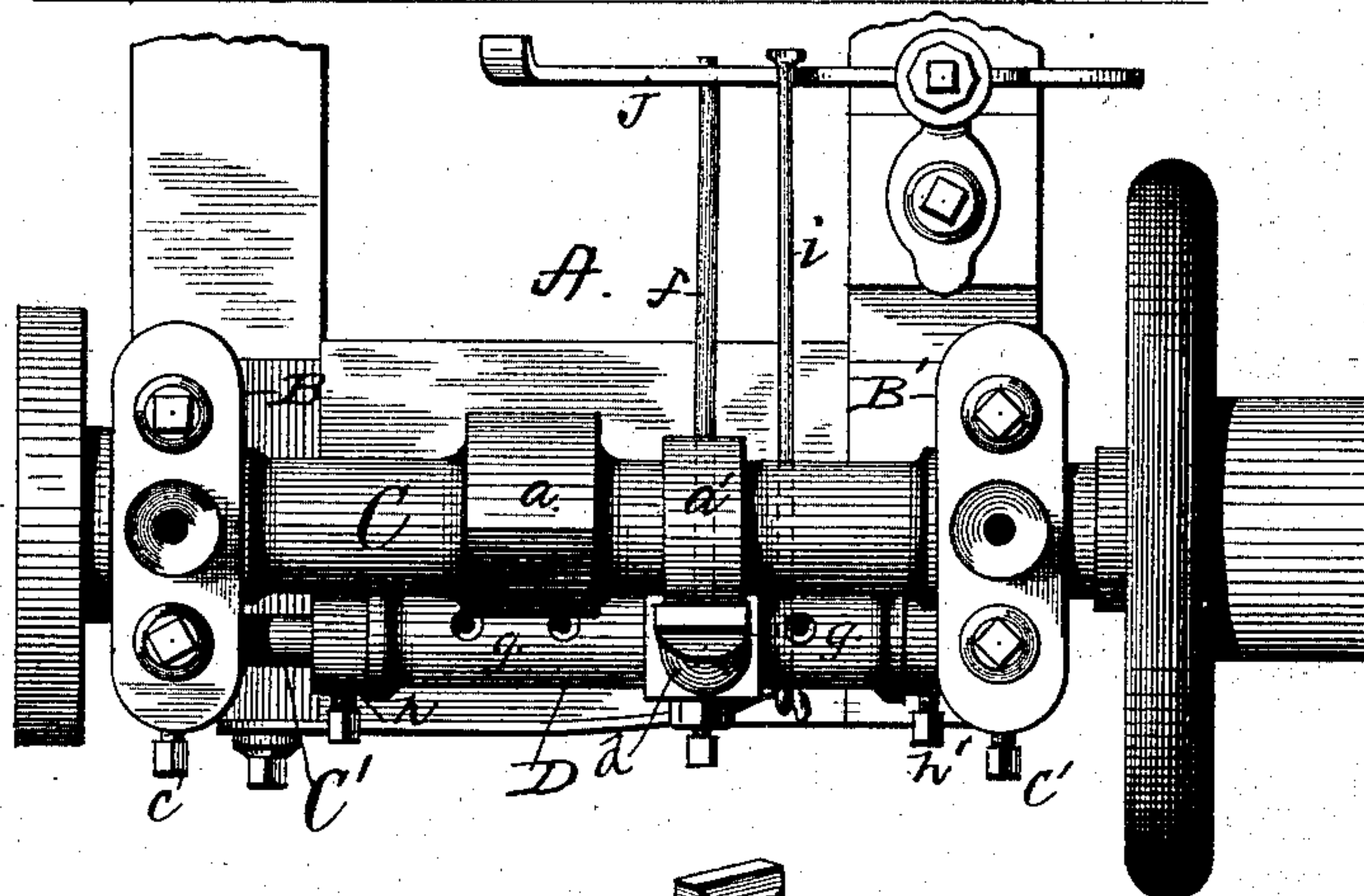
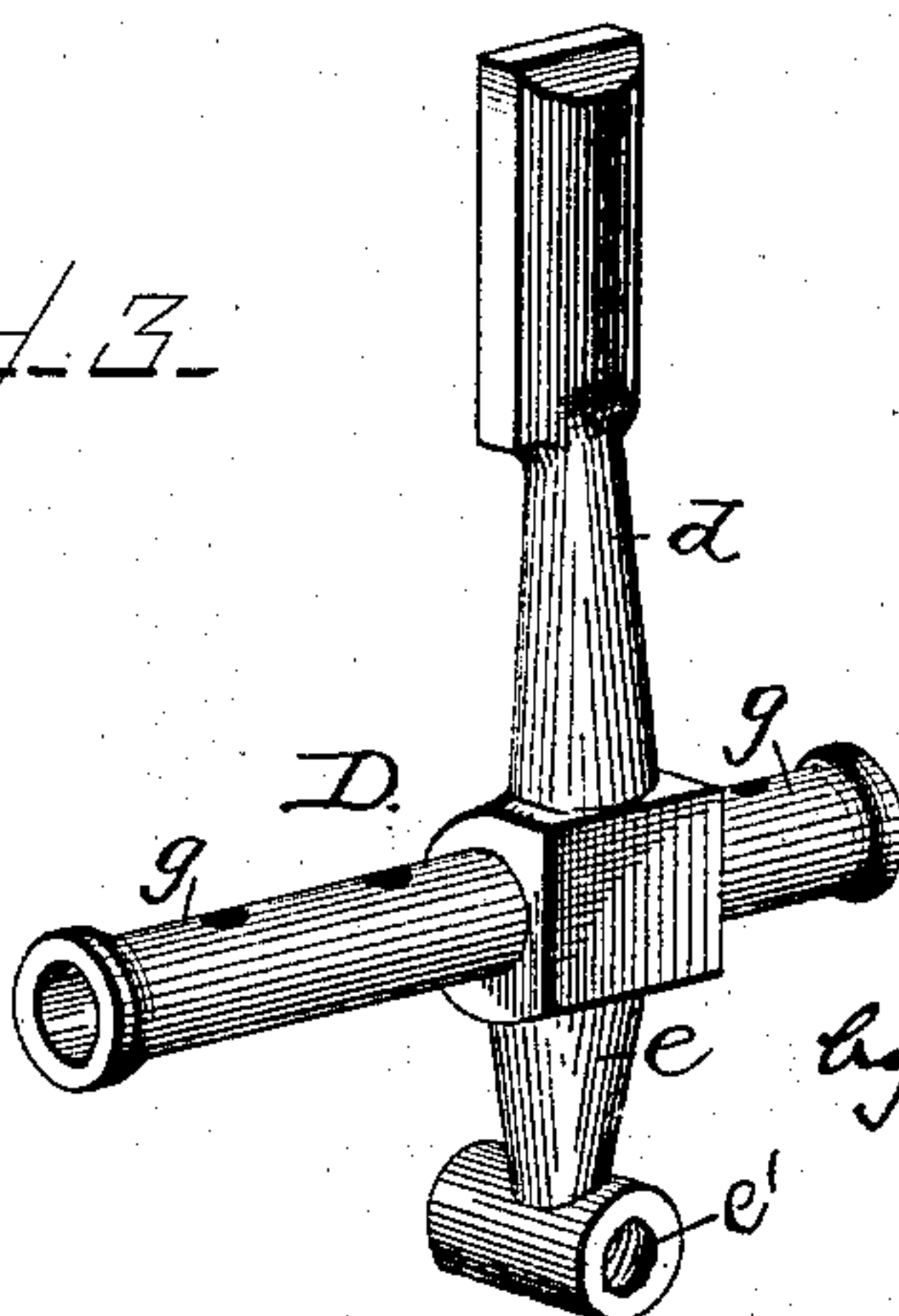


Fig. 3.



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# UNITED STATES PATENT OFFICE.

CHARLES D. GODCHARLES, OF MILTON, PENNSYLVANIA.

## NIPPER-BAR FOR NAIL-MACHINES.

SPECIFICATION forming part of Letters Patent No. 315,403, dated April 7, 1885.

Application filed August 21, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES D. GODCHARLES, a citizen of the United States of America, residing at Milton, in the county of Northumberland, in the State of Pennsylvania, have invented a new and useful Nipper-Bar for Nail-Machines, of which the following is a specification.

My invention has relation to improvements in nipper-bars for nail-machines, the object being to provide an attachment of the kind named which is durable in construction, and which may be fixed to a machine without liability of continual displacement, and which may be adjusted and secured to machines without inconvenience. My invention is fully disclosed in the following description, and is specifically pointed out, as required by statute.

In the accompanying drawings, Figure 1 is a view of the rear part of a nail-machine with my improved device attached. Fig. 2 is a plan view of the same, and Fig. 3 is a perspective of the improved nipper-bar.

The letter A represents the body or frame of a nail-machine, provided with the usual standards or posts, B B', having journaled therein the main shaft C, provided with the usual cam-surfaces, *a a'*, the former of which operates the gripping-lever of the machine, and the latter of which operates the nipper bar or lever.

The letter C' represents a shaft secured in bearings bored or otherwise formed in the standards or rear posts, B B', and rigidly secured therein by means of set-screws *c c'*.

The letter D designates my improved nipper bar or lever, formed of a single piece of cast metal, comprised of the laterally-extended sleeve *g*, and the lever formed of the upwardly-extending arm *d* and downwardly-extending arm *e*, provided with a hole, *e'*, in the end thereof to receive the rod which connects the lever with the nipper at the front of the machine. The sleeve *g* is bored out to accurately fit over the fixed shaft or bar C', and is provided with one or more oil-holes, as shown, through which oil may be applied. The inner face of the free end of the upwardly-extending arm *d* sets against the face of the cam *a'* on the main shaft C, and the downwardly-

extending arm *e* of the nipper bar or lever is connected with the nipper *j* by means of the rod *f*, one end of which is secured in the hole *e'* of the nipper-bar, and the other end of which is attached to the nipper, generally by simply setting the formed end of the rod in a perforation in the nipper. The nipper *j* is secured in the well-known manner in a pivoted post at the front part of the machine, and serves to catch and hold the nail as it drops from the knives for the action of the dies and header.

The letter E designates the spring fixed to the rear of the machine, and having attached to its free end the rod *i*, the other end of which rod is attached to the nipper *j*. The connection thus made serves to draw back the nipper after it has been pushed forward to grasp the nail by the action of the nipper bar or lever and the rod *f*.

On the fixed shaft C' are fitted two loose collars, *h* and *h'*, each of which is provided with a set-screw, whereby the collar may be set securely at any point on the fixed shaft.

The device is applied by slipping the sleeve *g* of the nipper-bar over the shaft C', then placing a collar on the shaft at each end of the sleeve, and then setting the shaft in the bearings in the rear posts of the machine. Thus applied, the shaft is firmly fixed in the bearings by means of the set-screws on the posts. The center of the lever is aligned with the perforation in the nipper, the bar *f* fitted in connection, and the collars set on the fixed shaft against the ends of the sleeve and there secured by the set-screws.

In all devices known to me which have heretofore been in use nipper-bars have either been secured rigidly to a cross-bar or shaft by means of a set-screw or they have been made a part of such shaft, and the device then suspended between the standards or posts of the machine by means of pointed screws let through the post and entering countersinks made in the ends of the shaft bearing the nipper-bar. These constructions are objectionable for the reason that the shaft bearing the nipper-bar soon becomes displaced or out of line, and has to be frequently reset or readjusted by screwing the end screws into the countersunk ends



of the shaft. The present means for securing or attaching the nipper-bar are objectionable also, in that the pressure of the screws in the direction of the line of the bearing-shaft has a tendency to and does strain the rear posts or standards of the machine. These objections are entirely overcome by my improvement. By securing the shaft by means of set-screws entering the posts from the rear, the posts are strengthened, since the shaft operates as a brace, and by making the nipper-bar to have its bearing upon a rigidly-fixed shaft and secured against side displacement by means of the collars and set-screws I avoid all the difficulties and annoyances attending the adjustment and fixture of the bar upon a shaft secured upon pointed screws. It will thus be seen that I add security to the integrity of the frame, and durability and preciseness to the operation of the nipper-bar.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination, the fixed shaft C', set in the rear posts of a nail-cutting machine, and provided with adjustable collars having set-screws, the nipper bar or lever D, formed with the laterally-extended sleeve *g* and lever-arms *d e*, the rod *f*, and nipper *j*, all substantially as described.

2. In combination with the main shaft of a nail-cutting machine, a fixed shaft or bar secured in the rear posts of the machine and provided with adjusting-collars, the nipper, and nipper-rod *f*, and the nipper bar or lever, formed with a laterally-extended sleeve to fit over the fixed shaft and held in position by adjustable collars, substantially as described.

In testimony whereof I have hereunto subscribed my name in the presence of two attesting witnesses.

CHARLES D. GODCHARLES.

Attest:

S. A. ANDREWS,  
A. G. HEYLMUN.