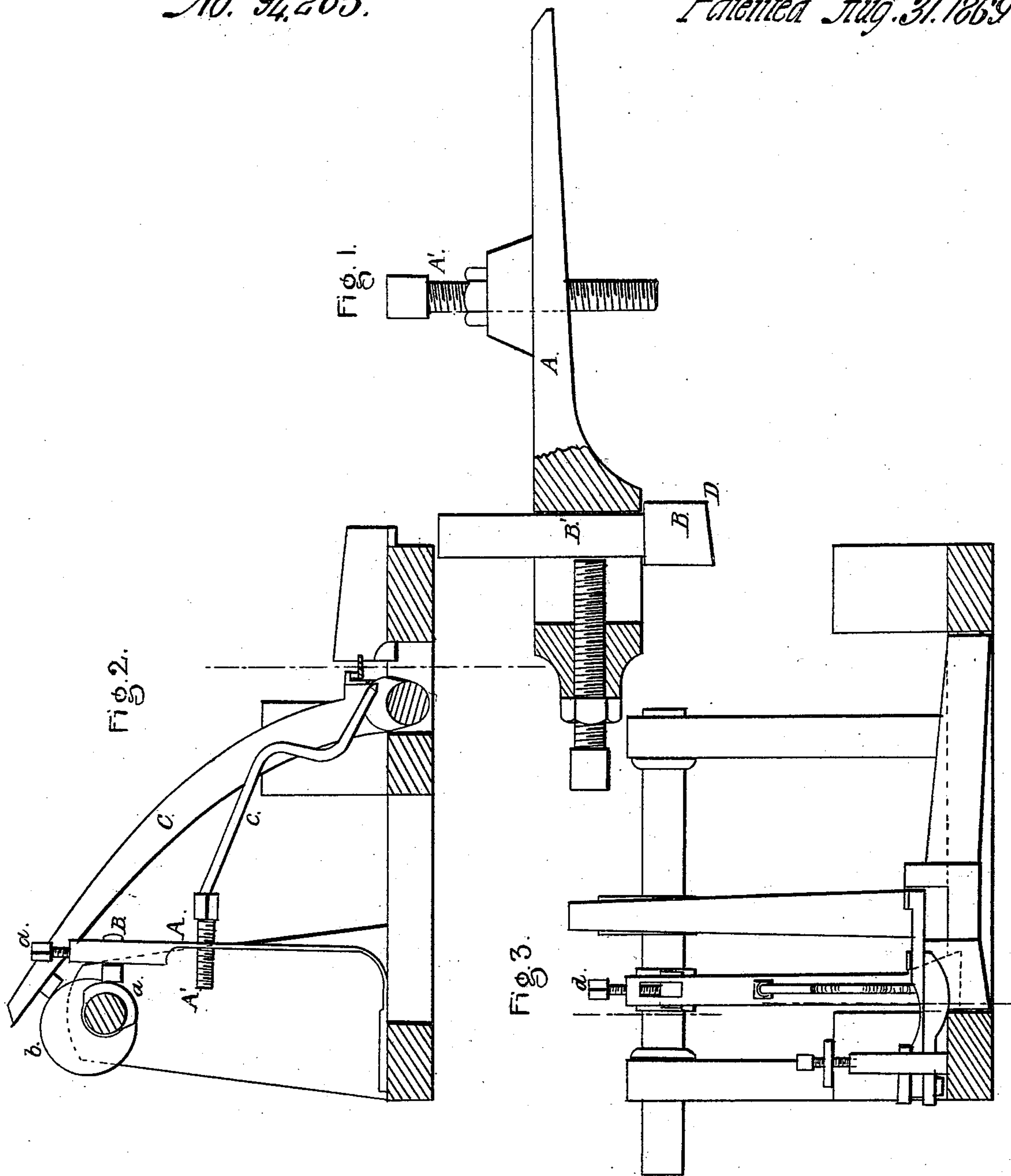


*J. Coyne,*

*Nail Machine.*

*No. 94,285.*

*Patented Aug. 31, 1869*



Witnesses:

*A. H. Panner*  
*W. R. Bradford*

Inventor:

*J. Coyne*  
*by* *Hum*  
*Attorney*

# United States Patent Office.

JOHN COYNE, OF ALLEGHENY CITY PENNSYLVANIA.

Letters Patent No. 94,285, dated August 31, 1869.

## IMPROVEMENT IN MACHINES FOR CUTTING NAILS.

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, JOHN COYNE, of Allegheny City, in the county of Allegheny, and State of Pennsylvania, have invented a new and useful Improvement in Nail-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in cut-nail machines, designed to provide an arrangement whereby the nippers will be prevented from opening before the grippers do, when the griping-cam becomes worn, and consequently lengthened in the part which holds the grippers together, thereby holding them in contact longer than when in the original and correct form.

The nippers being depended upon to discharge the nail, are prevented from doing so, if they open first, and the nails sometimes fail of being discharged, resulting in damage to the machine.

Figure 1 represents a side elevation, partly broken, of my improvement for regulating the movement of the nipper-rod and griping-jaw correspondingly.

Figure 2 exhibits a longitudinal section of a nail-machine, showing my improvement applied thereto.

Figure 3 is a plan view of said machine.

A is the lever-head, by which the nipper-rod is operated.

B is the rubber stay, located in the said slatted lever-head.

A' is the adjusting-screw, by which the nipper-rod *c* is rendered adjustable.

C is the griper-lever, which is lifted by the cam *b*.

As the surface of the griper-cam *b* wears away in a different degree from that of the nipper-cam *a*, it will cause their movements to be disproportionate in extent, and their relative action unequal. This result will cause the nipper to retire too soon, and prevent it from dislodging the nail, as it is generally expected to do.

By my device, the lever-head A, attached to the nipper-rod, is capable of supporting a rubber, B, which may be adjusted by means of a set-screw, *d*.

When the relative throw of the cams *a* and *b* becomes changed by wear, they may be readily graduated to correspond, and with great nicety of adjustment.

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

1. The combination of the slotted lever-head A and adjustable rubber B, arranged with reference to the other parts of the machine, as shown and described.

2. The combination of the above device, with the cams *a* and *b*, arranged as set forth, and co-acting to govern and regulate the relative movements of the nipper-rod and griper-lever, as specified.

JOHN COYNE.

Witnesses:

M. V. B. SALLADE,  
JOHN J. GREEN.