

(No Model.)

H. SEMPLE.

MACHINE FOR FINISHING BOTTLE NECKS.

No. 384,290.

Patented June 12, 1888.

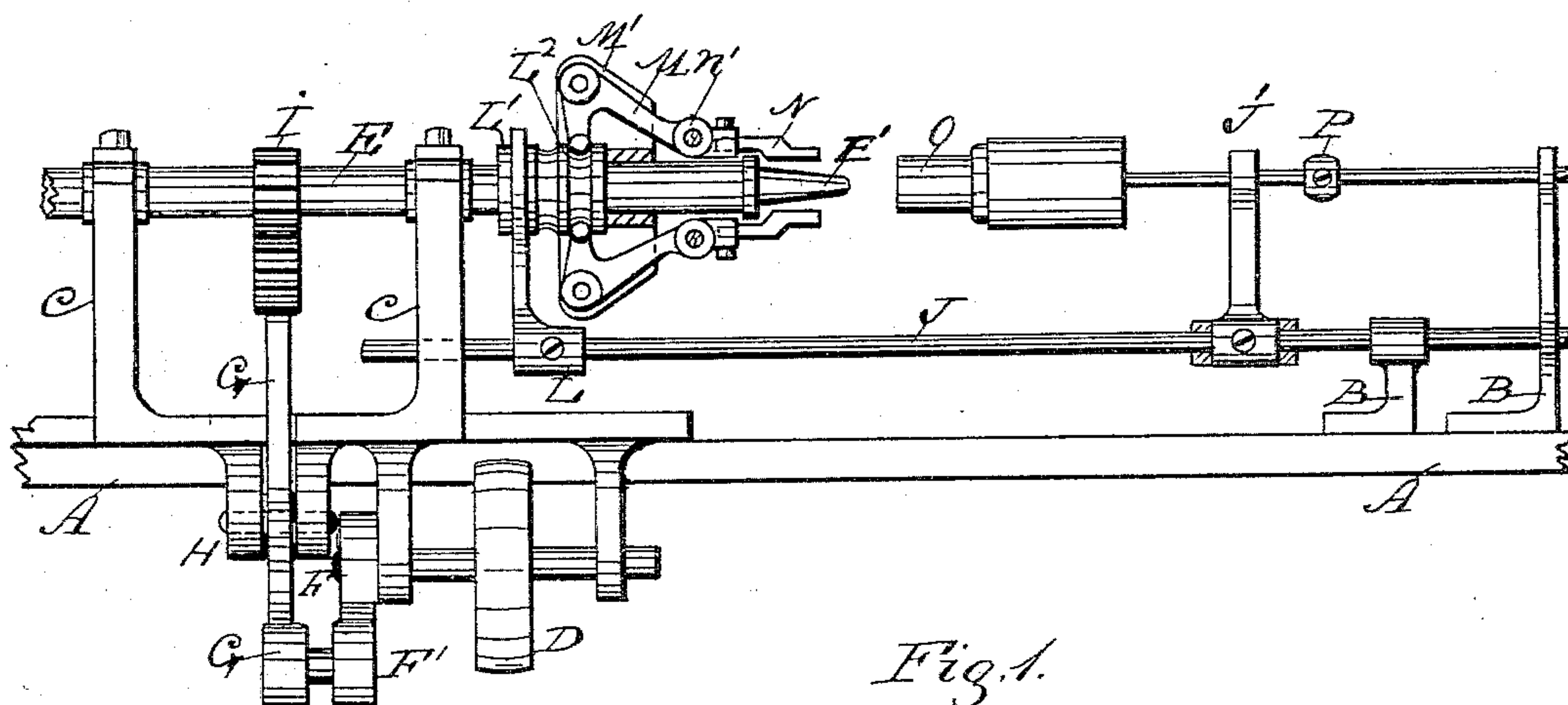


Fig. 1.

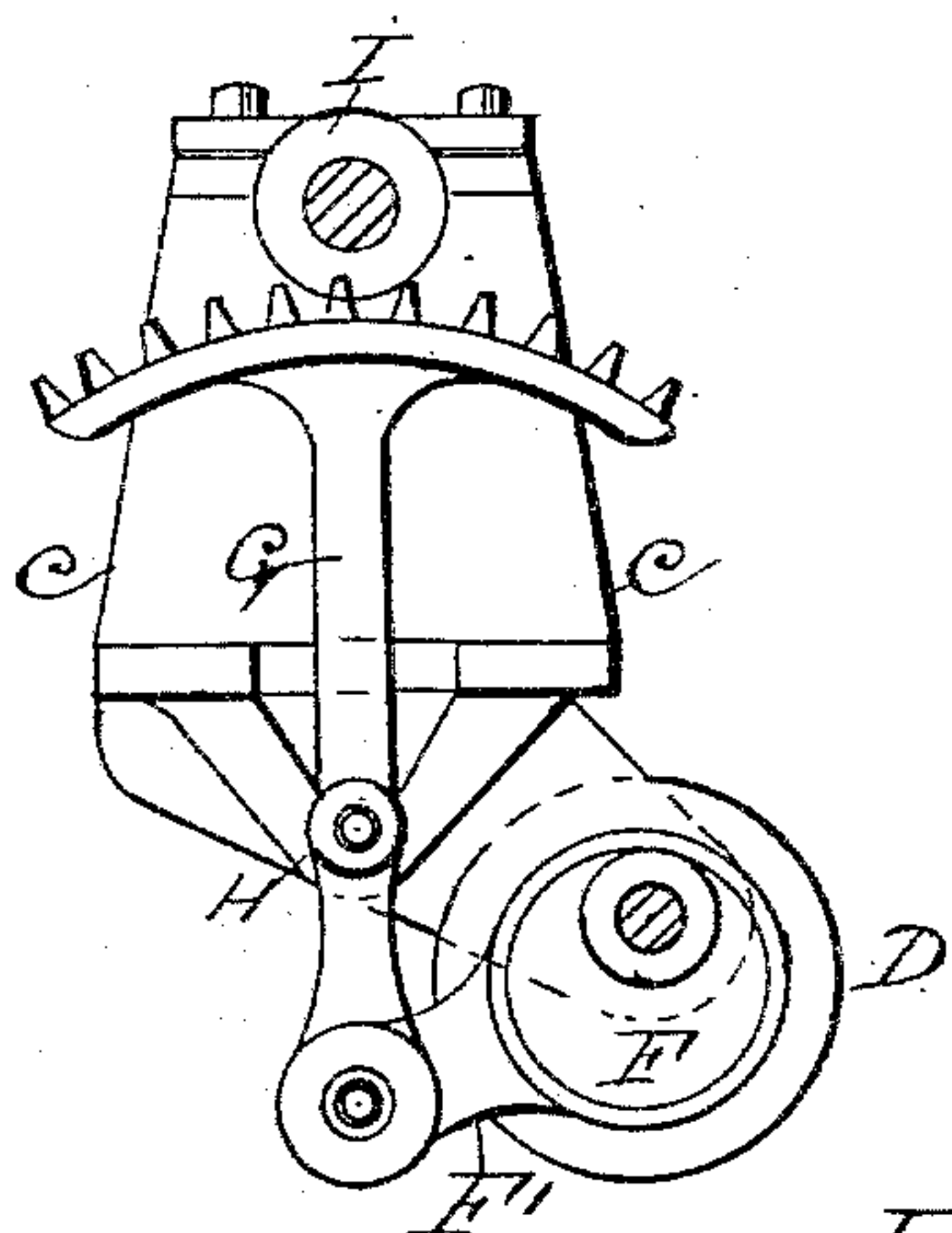


Fig. 2.

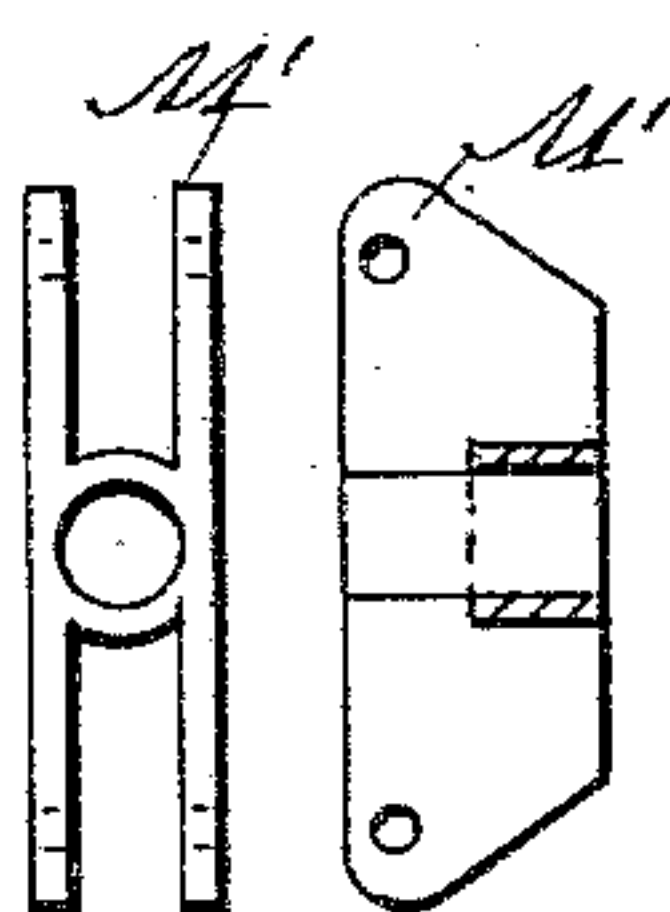


Fig. 3.

Witnesses.

Amos Young  
J. Blois Smith

Inventor.

Harry Semple  
by his Attorney  
John Hendry.

# UNITED STATES PATENT OFFICE.

HARRY SEMPLE, OF HAMILTON, ONTARIO, CANADA.

## MACHINE FOR FINISHING BOTTLE-NECKS.

SPECIFICATION forming part of Letters Patent No. 384,290, dated June 12, 1888.

Application filed November 14, 1887. Serial No. 255,152. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY SEMPLE, a citizen of Canada, residing at Hamilton, in the county of Wentworth, Province of Ontario, Canada, have invented a new and useful Machine for Finishing Bottle-Necks, of which the following is a specification.

My invention relates to improvements in bottle-finishing machines in which a shaft oscillates in a head-stock with and in conjunction with rotary arms.

The objects of my improvements are, first, to provide an adjustable oscillating plug for the purpose of fitting into the neck of a bottle while hot, and, second, to afford facilities for the operation of two adjustable oscillating jaws engaging with the bottle-neck and shaping the same. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of an entire machine. Fig. 2 is an end elevation of the machine through the center of head-stock, and Fig. 3 is an end and side elevation of arm-guide and socket.

Similar letters refer to similar parts throughout the several views.

The table or plate A, with head-stock C secured on the top, and the standards B, constitute the frame-work of the machine.

In the right-hand end of the shaft E, in bearings of head-stock, is a plug, E', oscillated by the drive-pulley D by means of an eccentric, F, with rod F', which gives an oscillating motion to the toothed segment-lever G, working in the fulcrum H, and transmitting power of an oscillating form to the toothed wheel I on shaft E, thus oscillating said shaft, which may extend out from left hand of head stock, thus forming a double machine.

When the rod J is brought toward the head-stock by means of collar P engaging against the nut-locked rest J', the said jaws close on the neck of the bottle O by means of the clutch-lever L in clutch L', closing the arms M. The knuckle-joints N' are so arranged that the jaws N, having a round shank on the end, can be held firmly and adjusted by means of set-screws, and set to any angle by said knuckle-joint. When the said rod is moved in an opposite direction, the said jaws, which are socketed in the socket-guides M', open out, on the principle of governors, thus throwing the feed-rod J back by the expansion of the arms.

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

1. In a bottle-finishing machine, the combination of an oscillating shaft, E, one end of which is provided with an adjustable plug for shaping the inside of bottle-necks, substantially as and for the purpose hereinbefore described.

2. In a bottle-finishing machine, the combination of an oscillating shaft provided with a clutch, L', collar L<sup>2</sup>, socket-guide M', arms M, knuckle-joints N', and adjustable jaws N, substantially as and for the purpose specified.

3. In a bottle-finishing machine, the combination of an oscillating shaft, E, with plug E', socket-guides M', arms M, with knuckle-joints and jaws, the clutch L', collar L<sup>2</sup>, and the rod J, substantially as set forth and described.

Dated at Hamilton, Ontario, this 29th day of October, A. D. 1887.

HARRY SEMPLE.

In presence of—

ALFRED YOUNG,  
J. BLOIS SMITH.