(Model.)

J. F. MALLINCKRODT.

Machine for Inserting Goose Necks and Couplings into Flexible Hose.

No. 243,589. Patented June 28, 1881.

Fig. 1.

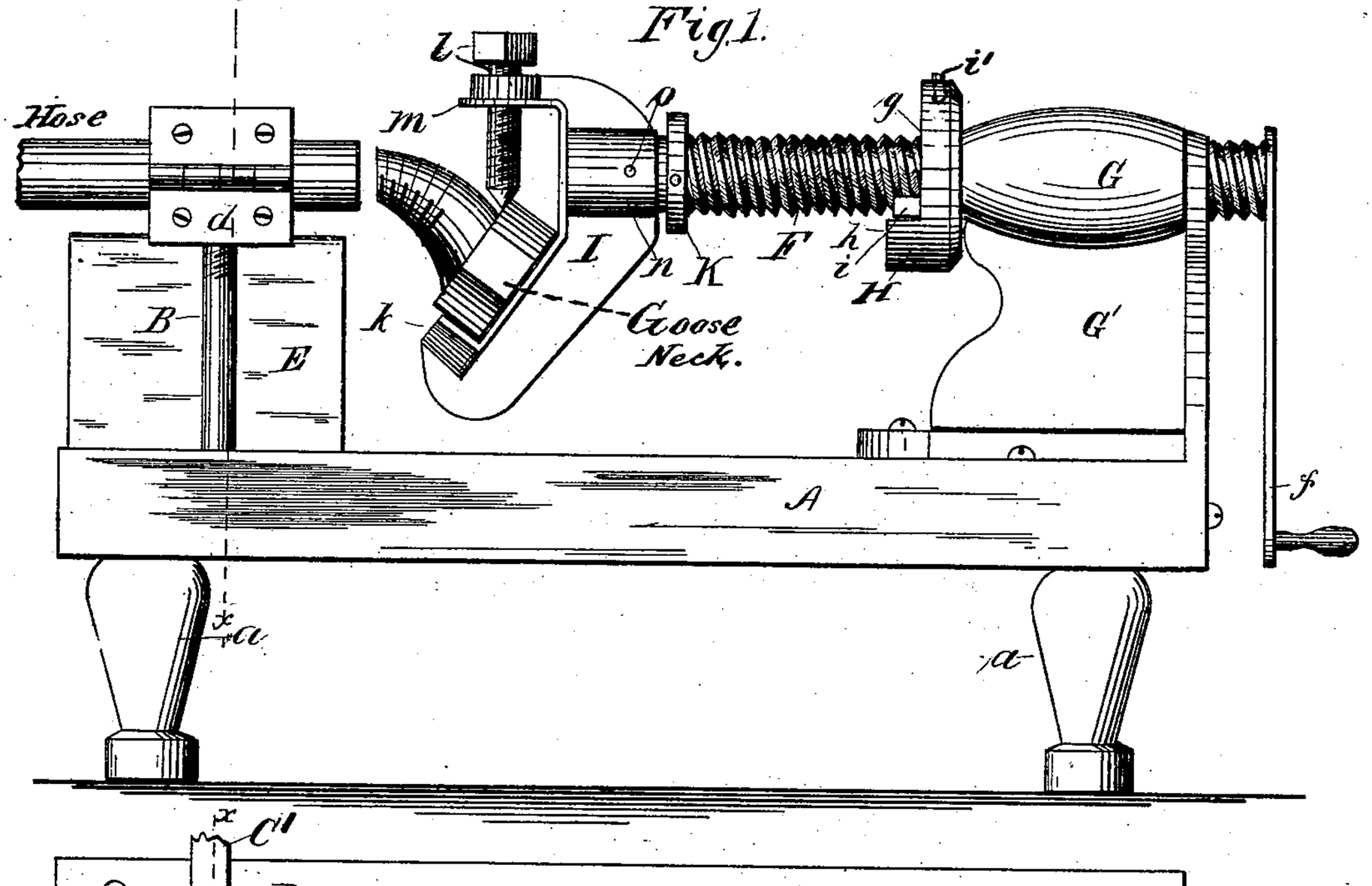


Fig. 3.

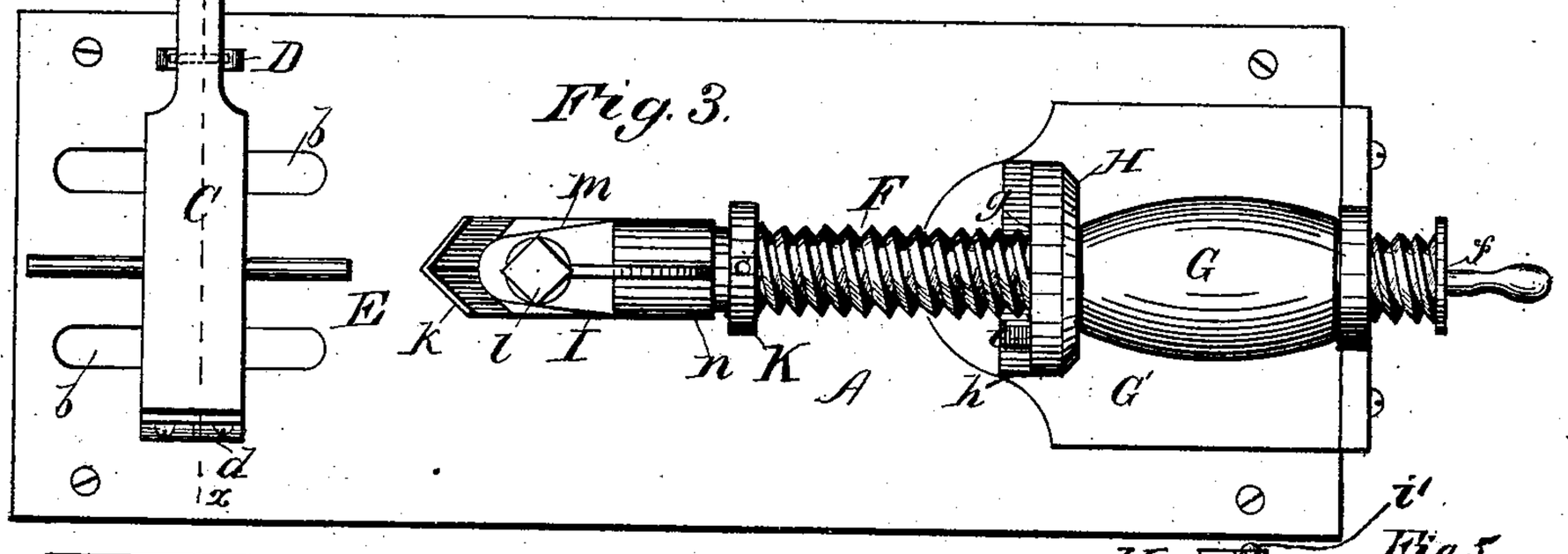


Fig. 2.

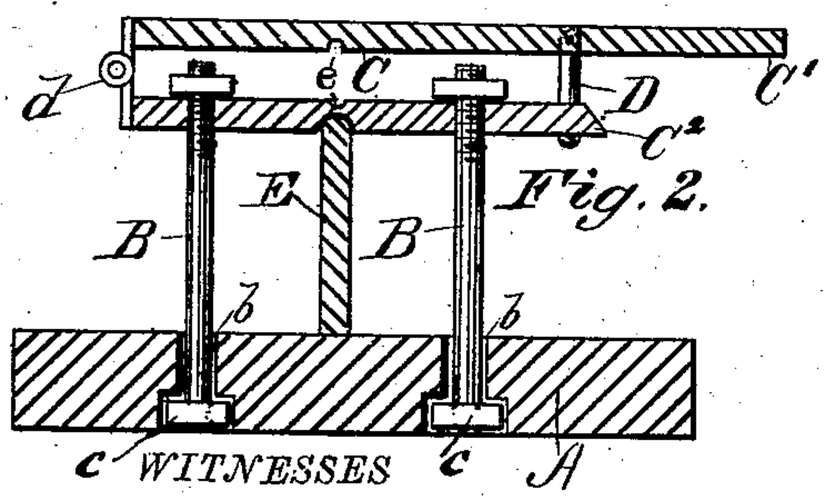


Fig. 4.

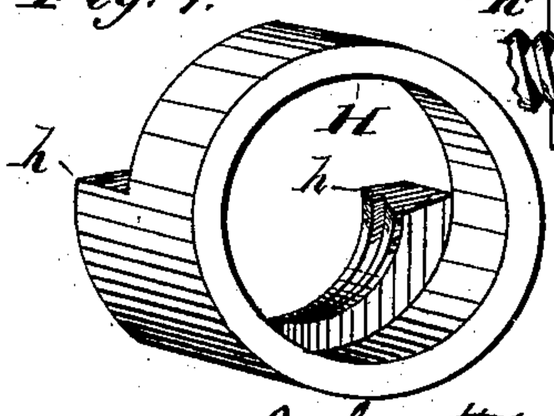
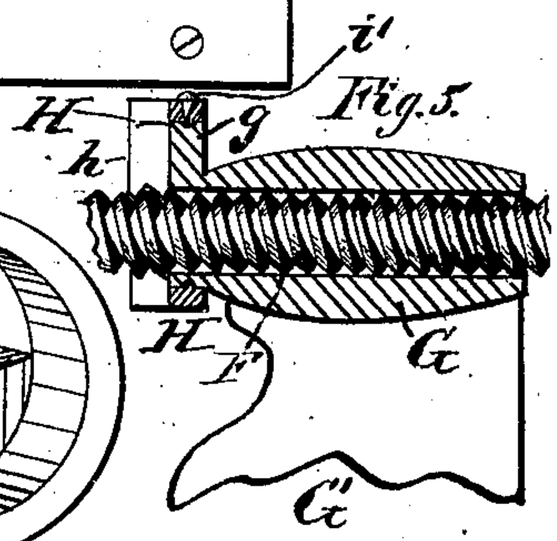


Fig. 5.



WITNESSES

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JOHN F. MALLINCKRODT, OF DENVER, COLORADO.

MACHINE FOR INSERTING GOOSE-NECKS AND COUPLINGS INTO FLEXIBLE HOSE.

SPECIFICATION forming part of Letters Patent No. 243,589, dated June 28, 1881.

Application filed April 4, 1881. (Model.)

To all whom it may concern:

Be it known that I, JOHN F. MALLINCKRODT, of Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Machines for Inserting Goose-Necks and Couplings into Flexible Hose; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my machine. Fig. 2 is a transverse vertical section through the hose-clamp, laid through the line *x x*, Figs. 1 and 3. Fig. 3 is a plan or top view. Fig. 4 is a perspective detail view, on an enlarged scale, of the collar for operating the screw-threaded shaft; and Fig. 5 is a longitudinal vertical section through the shaft-bearing and its collar.

Similar letters of reference indicate corresponding parts in all the figures.

My invention contemplates the construction of a machine or apparatus for screwing goose-necks or hose-couplings of any kind into lengths of rubber or other flexible hose; and it consists in the construction and combination of parts as hereinafter more fully set forth.

In the annexed drawings, A is the bed of the machine, which is elevated at a convenient height upon legs or supports *a*. The bed has two longitudinal parallel slots, *b b*, through which a pair of vertical rods, B B, are inserted vertically opposite to one another, and having heads at their lower ends, as shown at *c c*. The upper ends of the vertical rods or uprights B are nutted to the lower part of a clamp or "squeezer," C, the parts of which are hinged at *d*, and the upper part provided with a handle, C′, and a hinged bail or stirrup D, which may be slipped over a projection, C^2, on the lower part or jaw. Both jaws have a transverse groove, *e*, or they may be recessed, corrugated, or serrated in any suitable manner, to hold the hose firmly in place after it has been placed in the clamp.

The clamp C rests upon a standard or plank set on edge, E, which projects into a transverse groove in the under side of the lower jaw, and upon which the clamp is held in place by the nutted rods B B. By loosening the nuts the clamp may be moved forward or back upon its support or standard E, thus regulating its distance from the other part of the machine, which I shall now proceed to describe. This consists of a threaded shaft, F, having a crank, *f*, for rotating it. The shaft is inserted through a smooth tubular bearing, G, supported upon a bracket, G′, which is bolted or otherwise suitably secured upon the bed of the machine. The inner end of this bearing G forms an eccentric bearing, *g*, (as to the shaft F,) for a collar, H, of the shape and construction shown in Fig. 4 of the drawings. The upper part of this collar is cut away on its front side or face, forming a lower projecting semicircular rim, *h*, which is screw-threaded to fit the threads of shaft F.

i is a stud or lug, which projects from the eccentric *g* and forms a stop for the collar when it is rotated upon its eccentric, and *i′* is a short pin, which is inserted through the collar and projects down into a circumferential slot or groove in the fixed eccentric *g*, for the purpose of preventing the collar from slipping off of the eccentric endwise.

Upon the inner end of shaft F, opposite to and in a line with the adjustable clamp C, is the clamp or holding device I, for holding the goose neck that is to be screwed into the hose, which is held in the clamp. This device has a projecting flange or shoulder, *k*, in which the outer or bent end of the goose-neck rests, it being held firmly in place by a set-screw, *l*, inserted through the upper arm, *m*, of the device, the rear end of which has a collar, *n*, for its attachment to the shaft by means of the pin or bolt *o*. By withdrawing this pin the device I may be removed and any other suitably-constructed holding device substituted; or, when the machine is to be used for the insertion of couplings into the hose, one of the couplings is pinned onto the end of shaft F, in like manner as the device I, and in that position serves as a carrier for its mate to be screwed into the hose.

K is a collar, which is secured upon shaft F near its inner end, jus back of the holding device. After the coupling or goose-neck has been screwed into the hose the loose collar H is given half a turn, which releases its threads from those of the shaft, so that the latter may be pulled back through its tubular bearing G

without turning. When the fixed collar K strikes collar H the shaft will be in such a position relative to the latter that when collar H is again given a half-turn back its threads will once more engage with the threaded shaft, and this is ready to be screwed forward again for the insertion of another coupling.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The hose clamp or holder C, having handle C′, locking-stirrup D, and nutted rods B B, in combination with the support E and slotted bed or table A, substantially as set forth.

2. The combination of the tubular bearing G, having fixed eccentric *g* and stud *i*, screw-threaded shaft F, having crank *f* and fixed collar K, and recessed nut H *h*, riding upon the eccentric *g*, all constructed and combined to operate substantially in the manner and for the purpose herein shown and specified.

3. The combination, upon the slotted bed or table A, of the adjustable clamping device C, for holding the hose, clamping device I, for holding the goose-neck or coupling, and mechanism for operating the clamping device I, substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN F. MALLINCKRODT.

Witnesses:
B. H. COLVER,
C. F. LEIMER.