

(No Model.)

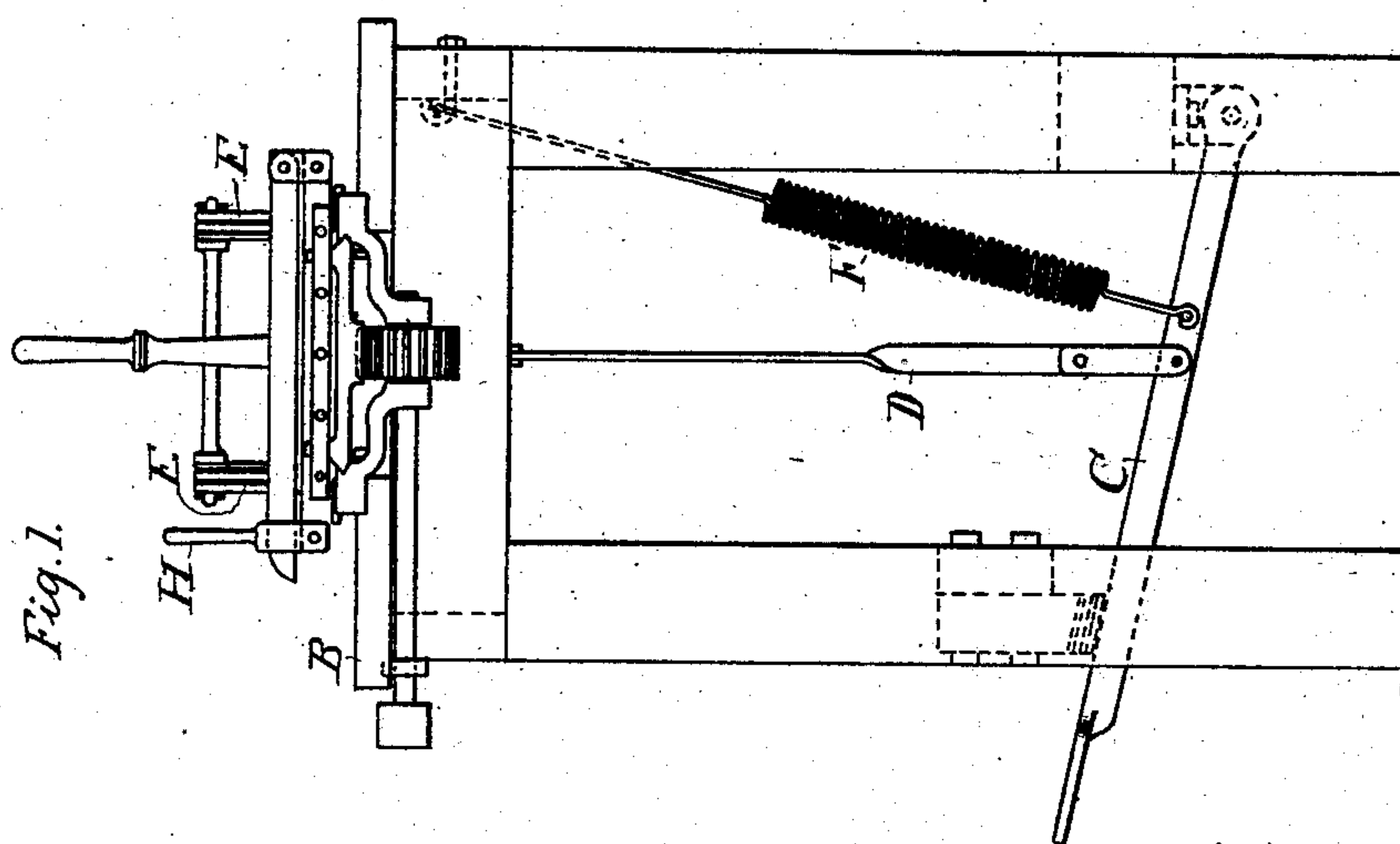
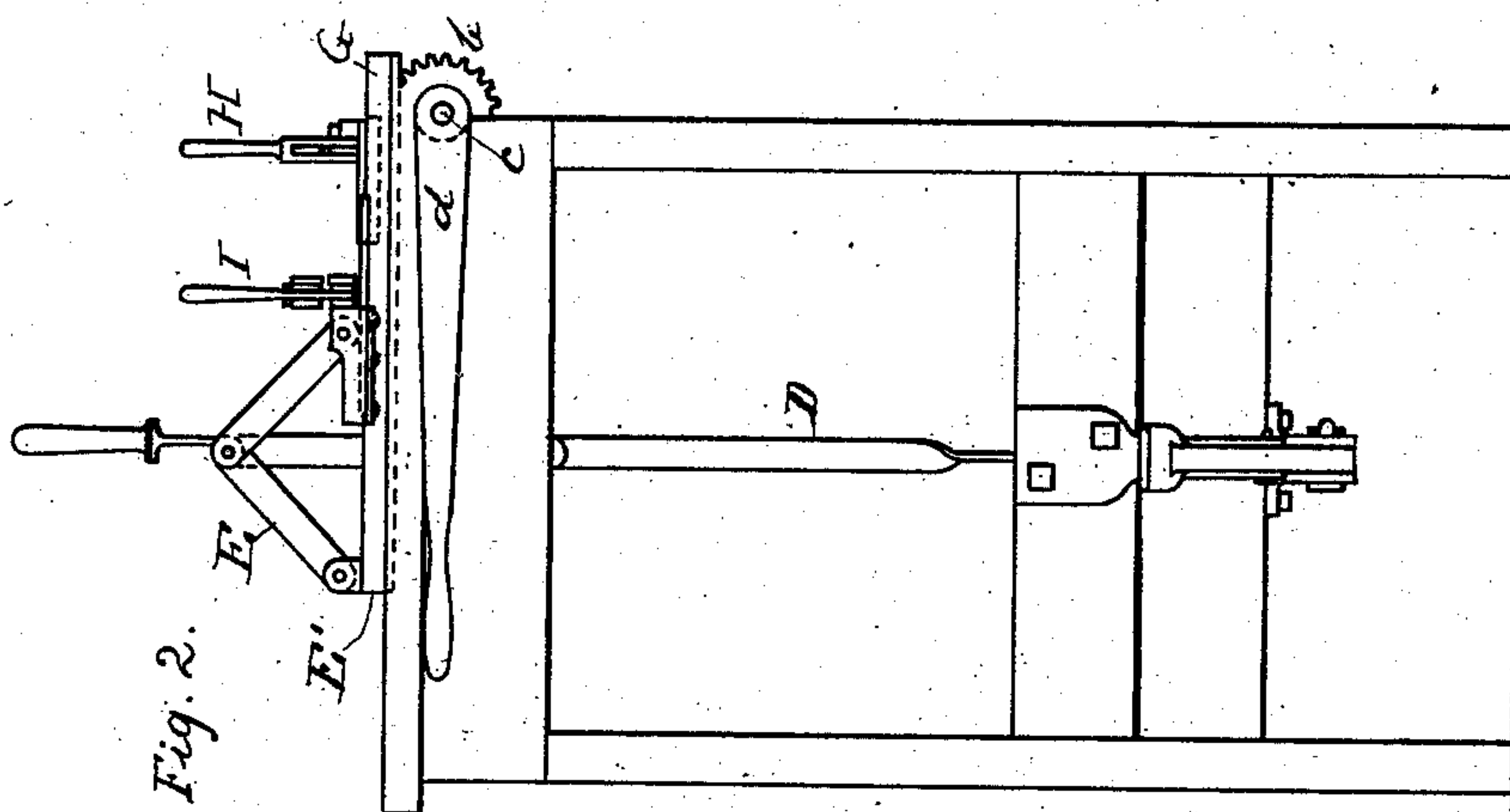
2 Sheets—Sheet 1.

M. GARDNER.

MACHINE FOR CRIMPING AND PREPARING ELASTIC FABRICS.

No. 290,030.

Patented Dec. 11, 1883.



WITNESSES:

Adam Pro. White,  
W. J. Clagett

INVENTOR

Marshall Gardner  
BY Wm. H. Lotz.

ATTORNEY

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Fig. 3

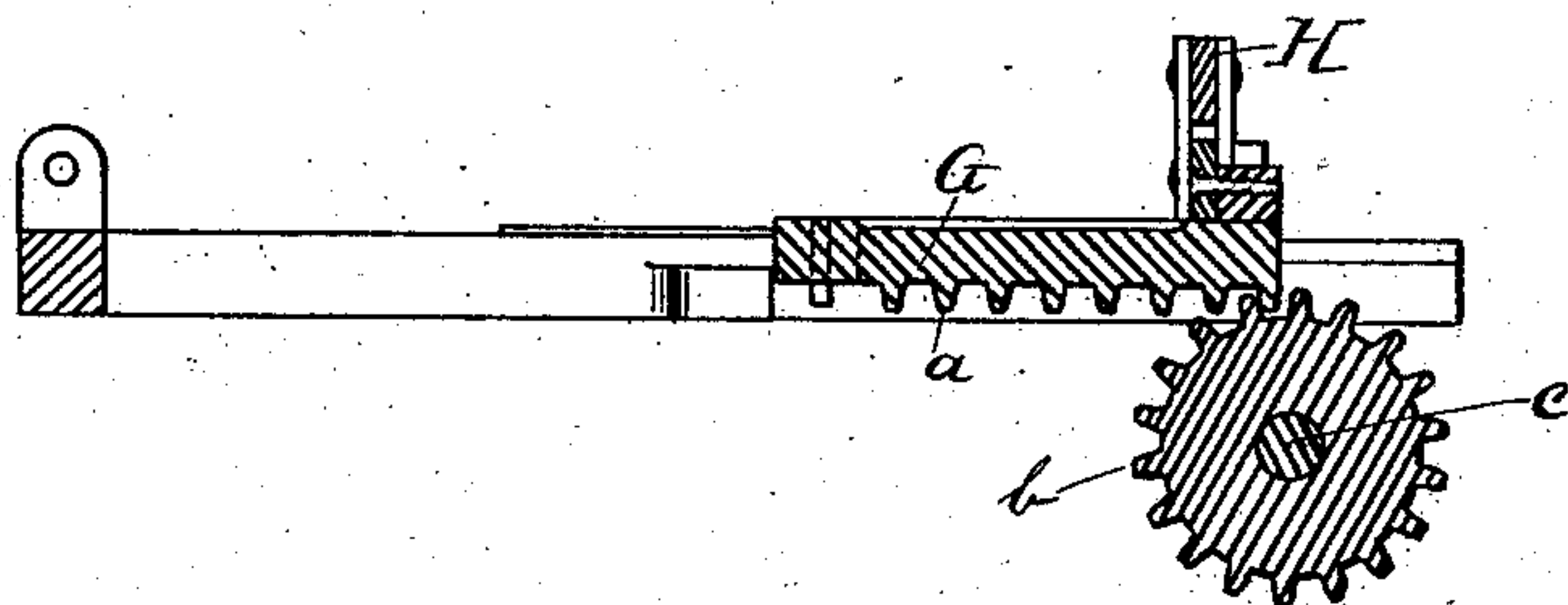
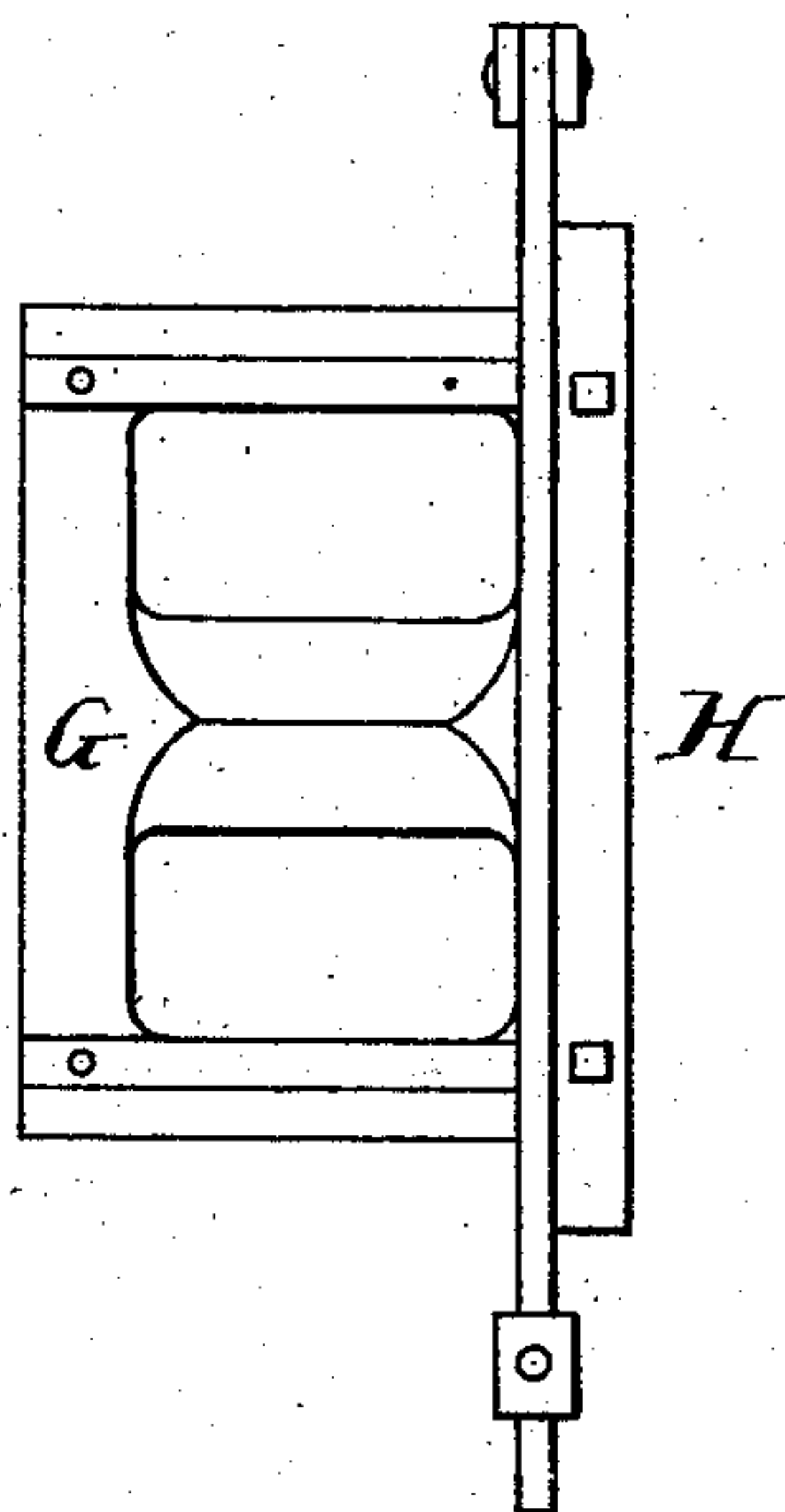


Fig. 4



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# UNITED STATES PATENT OFFICE.

MARSHALL GARDNER, OF CHICAGO, ILL., ASSIGNOR TO THOMAS H. BALL,  
HERMAN PRENZLAUER, AND SIMON FLORSHEIM, ALL OF SAME PLACE.

## MACHINE FOR CRIMPING AND PREPARING ELASTIC FABRICS.

SPECIFICATION forming part of Letters Patent No. 290,030, dated December 11, 1883.

Application filed September 11, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, MARSHALL GARDNER, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Crimping-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to new and useful improvements in machines for crimping and preparing elastic fabrics, and is designed more especially as an improvement upon the machine described in Letters Patent No. 266,074, granted October 17, 1882, to Thomas H. Ball.

The object of the invention is to provide convenient means for withdrawing the wire pins described in the Letters Patent referred to as being placed between the two thicknesses of the cloth previous to the crimping thereof; and to this end the invention consists of certain novel devices and combination of devices, as will be described and claimed.

Reference will be made to the accompanying drawings, in which Figure 1 is an end view of the machine; Fig. 2, a side view of the same; Fig. 3, a section, on an enlarged scale, of the movable clamp; and Fig. 4, a top plan of the same.

Like letters refer to like parts in each view.

In the drawings, A represents the frame of the machine; B, the plate upon which the operative parts thereof are situated; C, the foot-treadle; D, a pitman connecting said treadle with toggle-joints E, for operating the slide E', and F a spring for holding such treadle elevated, all constructed as are similar parts referred to in the Letters Patent named. It will be understood that the crimping of the cloth is accomplished in the same manner as described in Ball's patent, the cloth with the wire pins inserted therebetween being placed in suitable clamps, one of which, on being moved toward the other, does the crimping, and a removable clamp being then closed over the cloth to hold it in crimp until the necessary springs are inserted; but with Ball's machine it is necessary to remove the wire pins from between the cloth by hand and

each one separately, which has been found inconvenient and expensive, and I therefore propose to remove all of these pins simultaneously by the following mechanism, to wit: I construct a slide or platform, G, upon which is mounted a clamp, H, similar in construction to the Ball clamps, and I locate such platform upon the top of the machine, and preferably at a point near the front end thereof, arranging it to move longitudinally in any suitable guides. Upon the under surface of platform G is a rack, a, with which the teeth of a pinion, b, mesh, said pinion being suitably mounted on a shaft, c, and said shaft provided on its outer end with a lever, d. It will be readily understood that upon turning this lever the platform G and its clamp H will be carried to or from the stationary clamp I. The wire pins I employ in connection with my improvement are provided with heads or enlarged ends.

The operation is as follows: The wire pins being inserted between the two thicknesses of the cloth, the platform G is moved to such a position that said pins are brought between the jaws of the clamp H, the heads upon the ends of said pins being in contact with the front face of said clamp. The cloth being then crimped according to the Ball plan or otherwise, the lever d is turned, and through the medium of pinion b and rack a, formed on the under surface of platform G, said platform with its clamp is drawn away from the stationary clamp I and the pins are drawn from between the cloth. The removable clamp with the cloth is then removed from the machine, the springs inserted, &c.

Having thus described my invention, what I claim as new therein, and that for which I desire to secure Letters Patent, is—

1. In a crimping-machine, an adjustable clamp for withdrawing the wire pins from between the cloth, as described and shown.

2. In a crimping-machine, the combination, with clamps for holding and crimping the cloth, of an adjustable clamp for withdrawing the wire pins from between the cloth, as described and shown.

3. The combination, with the clamps for holding and crimping the cloth, of an adjustable

clamp for withdrawing the wire pins from between the cloth, and means for operating said adjustable clamp, as described and shown.

4. The combination, with platform G, carrying clamp H, and provided with rack *a*, of pinion *b*, shaft *c*, and lever *d*, as described and shown.

In testimony whereof I affix my signature in presence of two witnesses.

MARSHALL GARDNER.

Witnesses:

M. J. CLAGETT,  
LOUIS NOLTING.