(No Model.)

J. H. BARLOW.

CARTRIDGE SHELL CRIMPER.

No. 553,024. Patented Jan. 14, 1896.

Fig. 1.

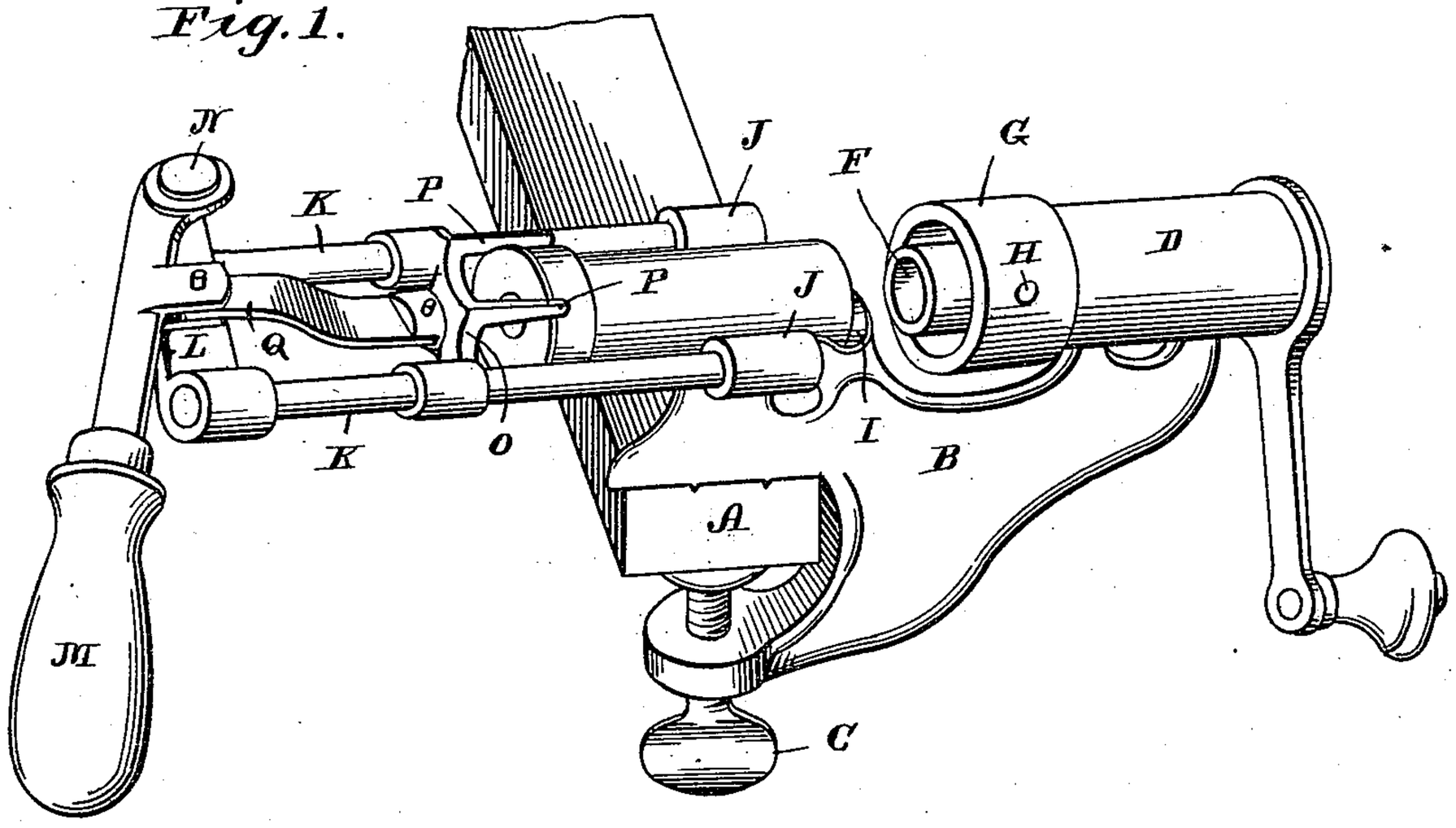

Fig. 2.

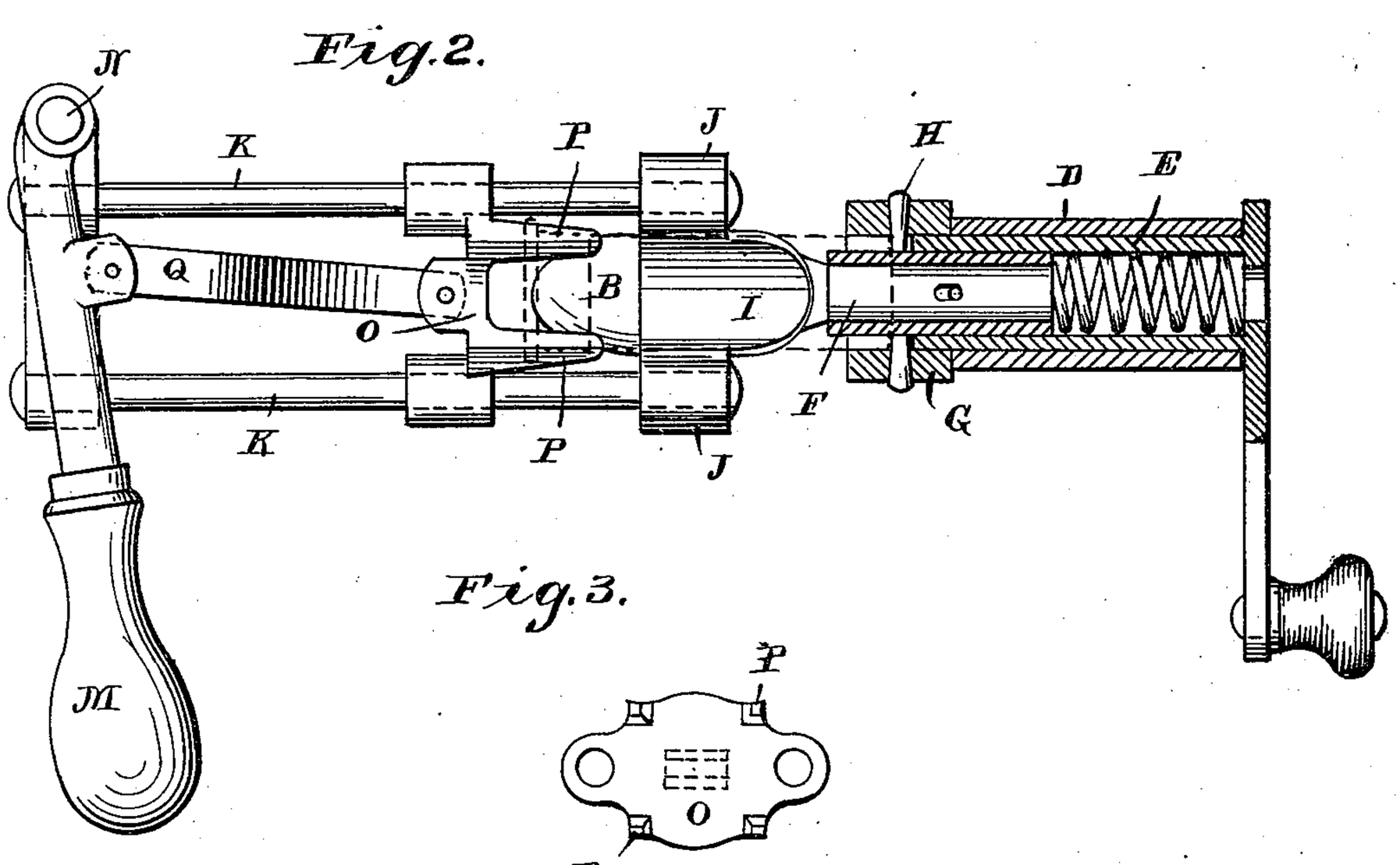

Fig. 3.

Witnesses

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JOHN H. BARLOW, OF NEW HAVEN, CONNECTICUT.

CARTRIDGE-SHELL CRIMPER.

SPECIFICATION forming part of Letters Patent No. 553,024, dated January 14, 1896.

Application filed March 8, 1895. Serial No. 541,056. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BARLOW, a citizen of the United States, and a resident of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Cartridge-Shell Crimpers, of which the following is a specification.

My invention relates to new and useful improvements in cartridge-shell crimpers, such as are employed to turn in a portion of the end of a shell after the same has been loaded.

It is the object of my invention to generally improve upon the several devices of this class now in use, to simplify and cheapen their construction, but more particularly to provide a positive and reliable straight-line closer whereby the grip-head for the shell moves in a straight horizontal line to and from the rotary crimping-head, and means for positively controlling the movement and position of the gripping-head by the medium of a lever with an intermediate link connection.

I do not claim to be the originator of the straight-line closer, as I am aware that a cartridge-closer having a horizontal movable cup supported upon parallel rods is old. This implement, however, has never become popular, though patented so long ago, owing to the cam-acting lever which is not as handy and convenient as the horizontal movement. Another great objection is that it does not actuate the return of the sliding grip to permit of the withdrawal of the shell, but depends upon the springs to actuate said head. Springs are objectionable for this purpose, for to compress them requires additional power in excess of that required to do the work, and they are a continual source of annoyance, becoming set, &c. There is also a continual loss of power in the cam movement, thus imparting the least power, when it should have the most, to iron over the shell and wadding firmly at the finish. As will be seen, the cam-fulcrum on the lever is lengthening from the pivotal point, losing continually from start to finish. I have overcome these and other objections existing in machines now upon the market by the use of the old and acknowledged superior horizontal pivoted lever, a horizontal movable grip-head, and a link connecting the two, (an intermediate device,) thus freely operating the head forward and back in a straight line upon the bearing and doing away with all springs, and obviating friction from cam movement, both of which are objectionable. It will be noticed, also, that with this construction the power of pressing in the shell is increased as the lever is pushed inward carrying the three pivotal points on to a straight line, thus giving great power with little exertion at the point where it is most required.

Upon the accompanying drawings, which form a part of this specification, the same letters of reference denote like or corresponding parts upon the several figures, of which—

Figure 1 is a perspective view of my novel crimper complete. Fig. 2 is a plan view, partially in section. Fig. 3 is a detail elevation of the slidable grip-head.

Referring to the letters of reference upon the accompanying drawings, A indicates a suitable support upon which the crimper is attached, B the crimper-frame, and C a thumb-screw by means of which the frame is secured to said support. Upon the right of the frame B is provided a bearing D, in which the rotary crimper-head is free to be rotated by its crank. Said head consists of a hollow shaft E, having a spring-actuated follower F fitted therein, an enlarged head G provided with pins H which serve to operate upon the shell and turn the latter in upon the wad. Adjacent to the head is a concave shell-support I, and formed therewith are a pair of brackets J J. To these brackets are secured a pair of guide-rods K K, and upon the outer end of said rods is secured a connection L, one end of which is slightly extended to form a support for the operating-lever M which is pivoted thereto, as at N. The guide-rods K, as is apparent, are secured upon the same horizontal plane and also in a direct horizontal line with the rotary crimping-head, thus producing a straight-line closer.

The grip-head O is slidably mounted upon the before-mentioned rods K K, and is provided with extended fingers P which serve to engage the cartridge-shell, as clearly appears in the drawings. The movement and position of this grip-head, and also the shell when inserted in said head, are positively controlled by the operating-lever M, before mentioned, by the link connection which is pivotally connected to the grip-head and said lever.

By the mechanism above recited it is obvious that a desirable and thoroughly practical straight-line closer is produced in a very simple and effective manner; also that a large range of sizes of cartridges can be crimped upon a single machine.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a crimper of the class described, the combination with a rotary crimping head H, the reciprocating head grips O, a pivoted operating lever M, an intermediate link connecting said grip head to the operating lever, the whole arranged to operate substantially as, and for the purpose specified.

Signed at New Haven, in the county of New Haven and State of Connecticut, this 2d day of March, A. D. 1895.

JOHN H. BARLOW.

Witnesses:
W. J. ATWATER,
D. W. LEWIS.