

(No Model.)

M. BROCK.
TACK DRIVING IMPLEMENT.

No. 516,074.

Patented Mar. 6, 1894.

Fig. 1.

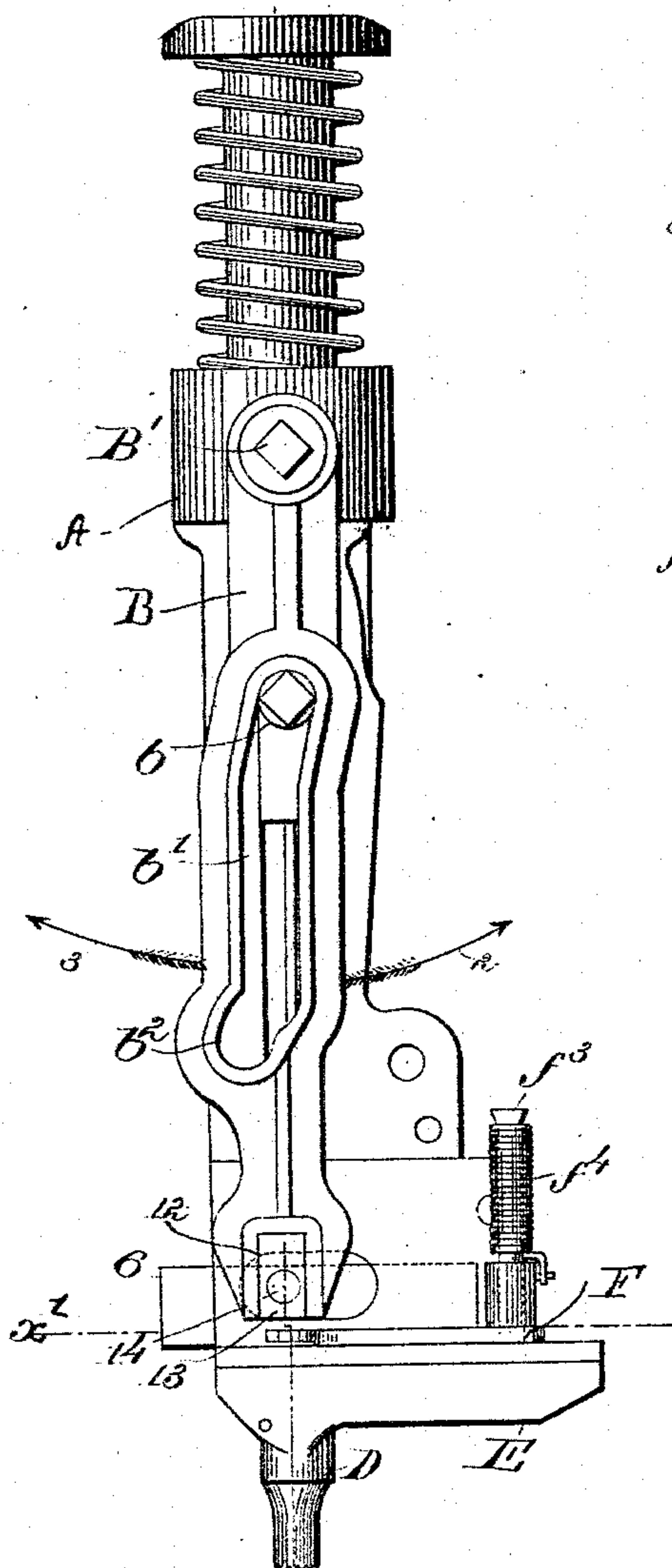


Fig. 2.

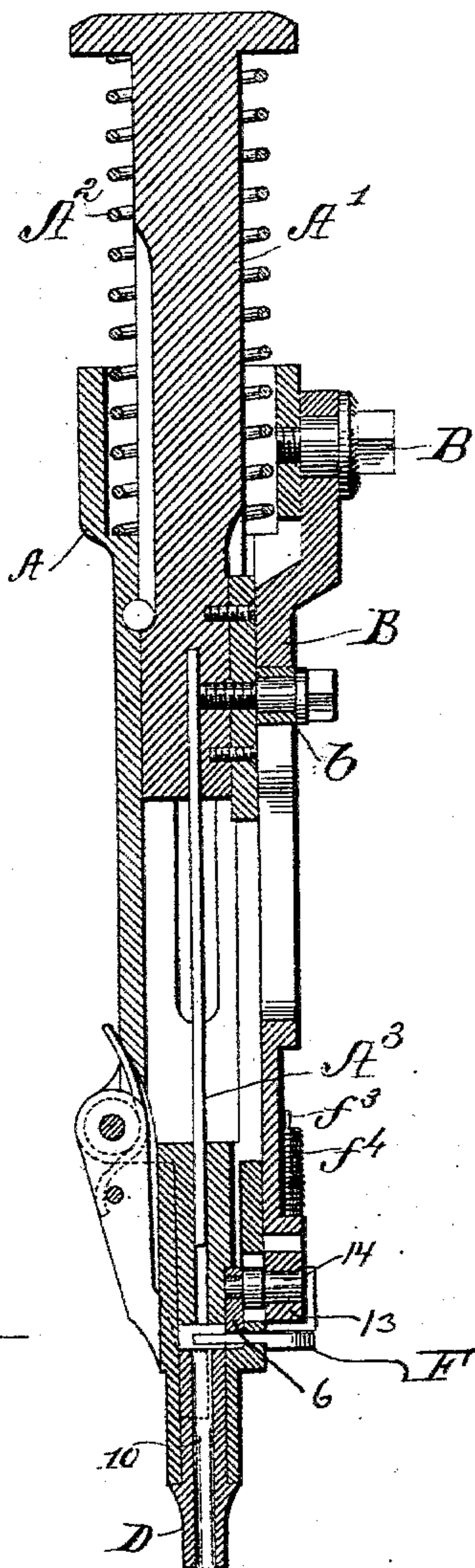
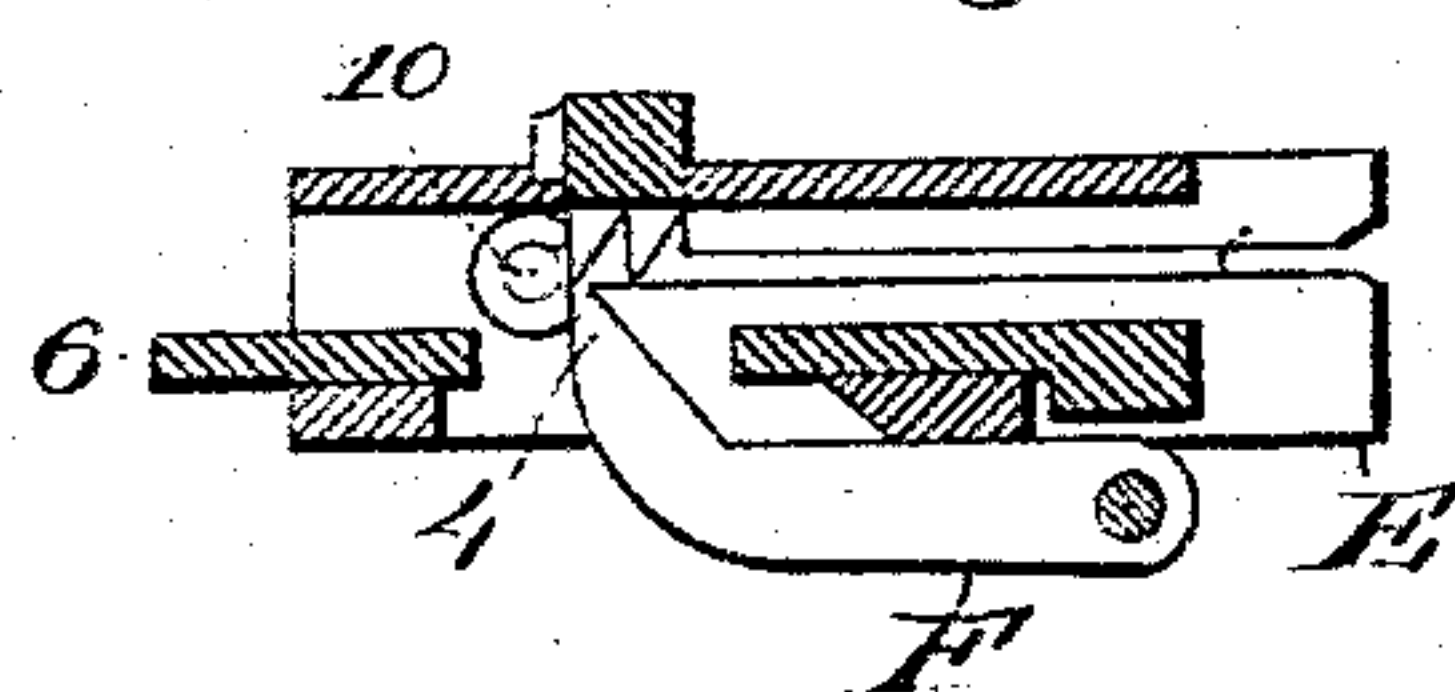


Fig. 3.



Witnesses:

Fred S. Gumb of
Edward F. Allen

Inventor:

Matthias Brock
by Leroy & Gregory attys

UNITED STATES PATENT OFFICE.

MATTHIAS BROCK, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE MCKAY & COPELAND LASTING MACHINE COMPANY, OF PORTLAND, MAINE.

TACK-DRIVING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 516,074, dated March 6, 1894.

Application filed July 20, 1891. Serial No. 400,081. (No model.)

To all whom it may concern:

Be it known that I, MATTHIAS BROCK, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Tack-Driving Implements, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

10 This invention is intended as an improvement upon the class of tack driving implements represented in United States Patent No. 306,671, wherein the driver is connected with a vertically reciprocating plunger, and a lever or
15 device acted upon by the driver or a part moving in unison with it actuates the feeding mechanism to feed the strip, the said lever having such a construction in accordance with my invention that the feeding device will not
20 act to engage a tack to move the tack strip or to engage a part of the tack strip to feed a new tack into position until after the driver has made a driving descent.

Figure 1 represents in side elevation a tack driving implement embodying my invention. Fig. 2 is a section thereof in the dotted line x , and Fig. 3 is a section in the dotted line x' looking downwardly.

In the said drawings, A represents a suitable hand-piece, shell or case which contains a driver bar A', having secured to it a driver A³, the said bar being surrounded by a spiral spring A² which normally elevates it, keeping the driver up as represented in the drawings.

35 The lower part of the implement is shaped to receive a slide 6 provided with a pawl F having its point 4 extended into the head E of the machine, to which is connected the nail tube or nose D. The head E is provided with a longitudinal guide-way through which is fed the tack strip from which the tacks are cut off singly to be driven through the hole 10, see Fig. 3, in the nose D.

45 The tack strip used herein may be of any usual or suitable kind.

The point 4 of the feed device F is normally kept pressed toward the tack strip, so as to engage the bodies of the tacks or other part
50 of the tack strip in usual manner by a spiral spring f^4 on a stud f^3 .

The parts so far described are and may be substantially as in United States Patent No. 306,671, granted to me October 14, 1884, wherein like parts are designated by like letters and
55 figures.

In this present instance of my invention I have provided the tack driving implement with a lever B having its fulcrum at B' near its upper end and near the upper end of the
60 hand-piece A of the implement. The lower end of the lever B is slotted as at 12 to embrace a block 13 mounted loosely on a pin 14 carried by the slide bar 6, which constitutes part of the feeding mechanism, the other part
65 being the pawl F. The driver bar A' is provided with a suitable roller or other stud b , which enters a slot b' , b^2 in the lever B intermediate its fulcrum and its slotted lower end, the part b' of the slot being essentially parallel
70 with the longitudinal center of the lever and in line with its pivot and forked end, and the part b^2 of the slot being directed away from the point 4 of the feeding device, that is to say, said part b^2 is offset from part b' in a di-
75 rection away from the pivotal point of the feeding device or at an obtuse angle to the part b' , and its shape is such that the lever B will not be vibrated far enough in the direction of the arrow 2, (see Fig. 1) to carry
80 the point 4 of the pawl to the rear of a tack by or through the action of the roll b in the slot of the lever until the driver bar has had imparted to it a driving stroke, that is, a stroke low enough to effect the driving of a
85 tack from the nail tube or nose D, as it is only when the said roll is way down, due to a full driving stroke of the driver bar, that the said roll enters the angular or inclined part b^2 of the slot, and it is only when the roll
90 is in that part of the slot that the feeding device F is sufficiently retracted or moved backwardly to come properly into engagement with the body of a tack or a part of the tack strip so that at the next complete ascent of
95 the driver bar the lever B will be moved sufficiently far to the left, see Fig. 1, or in the direction of the arrow 3, to feed a tack forward in proper position under the then elevated driver and over the passage 10 in the nail tube
100 or nose.

In the class of tack driving implement re-

ferred to, great trouble has been experienced in practice due to improper feeding of the tack strip, that is, the feeding device engages and moves the strip when the driver bar makes but a partial descent, and as a result thereof, it frequently happens that two or more tacks are partially driven into the hole in the nail tube or nose, and the latter becomes so clogged that the operator has to stop work and punch out the nails or tacks, but by means of my improvement it is impossible to clog the nail tube or passage and under no circumstances is it found necessary to lose the use of the implement so long as it is supplied with tacks.

It will be noticed that I gain this my invention without adding to the parts of the machine, but to effect my improved operation and the advantages above stated, I have been obliged to fulcrum the lever B in a different position and differently with relation to its length and to materially alter the shape of the cam slot so as to actuate the lever in a different time and order with relation to the other parts of the implement.

Having described my invention, what I

claim, and desire to secure by Letters Patent, is—

The herein described tack-driving implement, it consisting of a shell or case, a reciprocating driver therein, a lever pivoted upon said shell or case, a feeding device comprising a slide-bar connected with the lower end of said lever, the said lever being provided with a cam-slot b' , b^2 , between its pivotal end and its end engaged with the feeding device, the portion b' of said cam-slot being in line with the pivotal end and the lower end of the said lever, and the portion b^2 of said cam-slot being off-set in a direction away from the pivotal point of the feeding device and obliquely to the portion b' , and a roll on the driver engaging said cam-slot to vibrate the lever, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MATTHIAS BROCK.

Witnesses:

G. W. GREGORY,
EMMA J. BENNETT.