

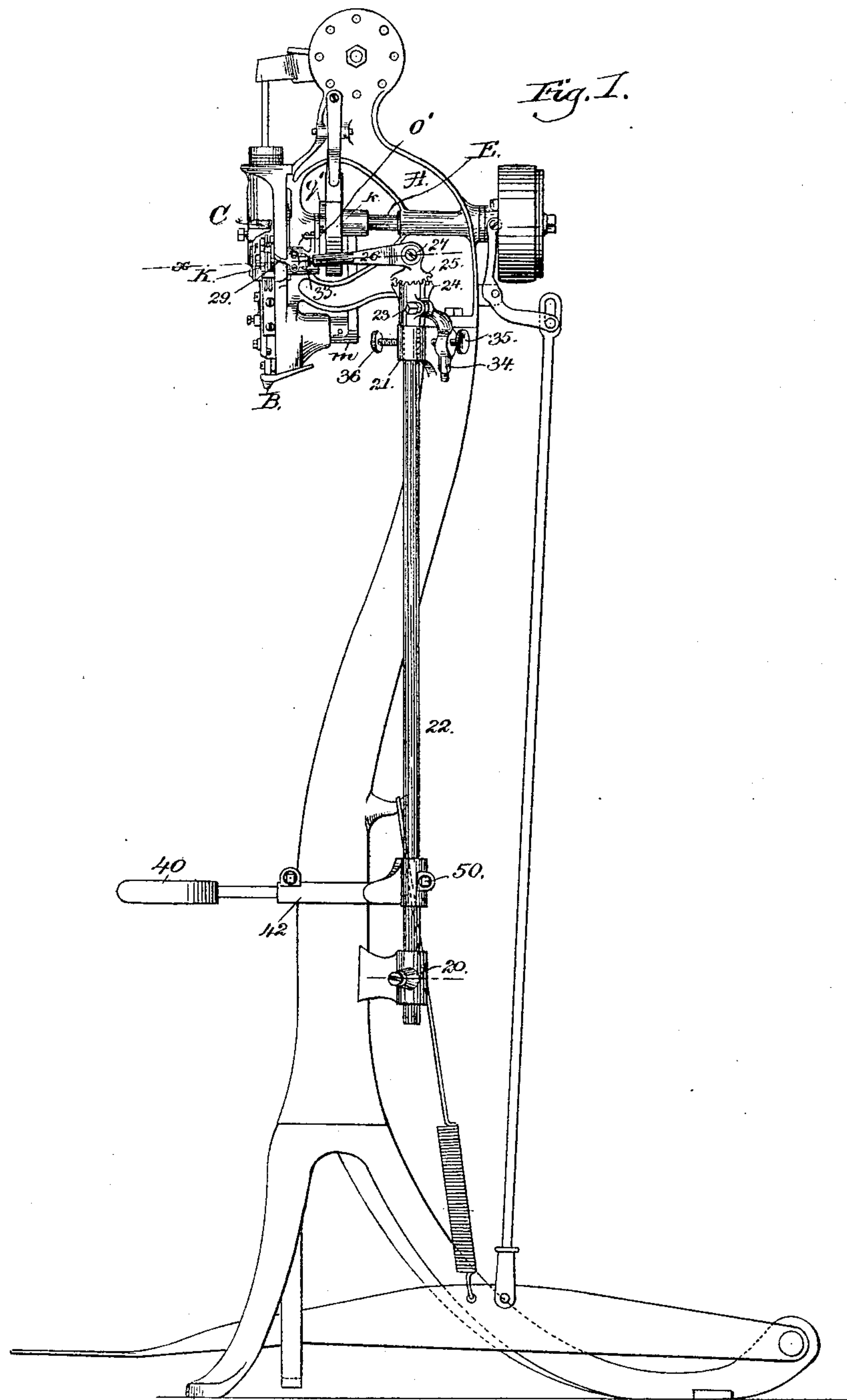
(No Model.)

2 Sheets—Sheet 1.

L. GODDU.
NAILING MACHINE.

No. 388,128.

Patented Aug. 21, 1888.



Witnesses.
Fred. S. Greenleaf.
Frederick L. Emery.

Inventor.
by Louis Goddu.
Lemby & Gregory, Attys

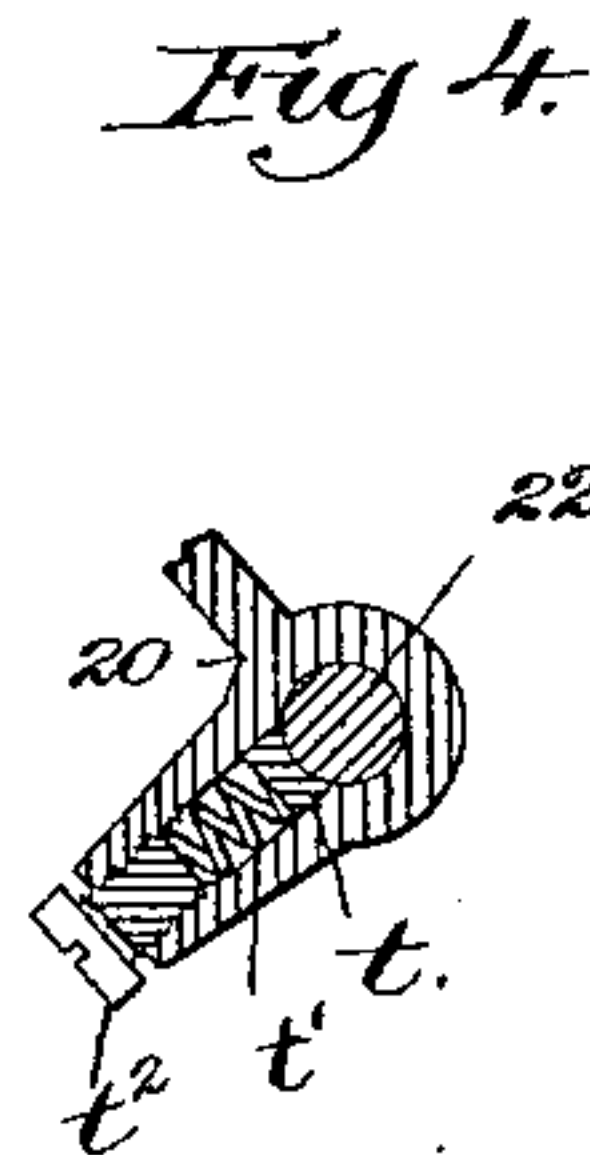
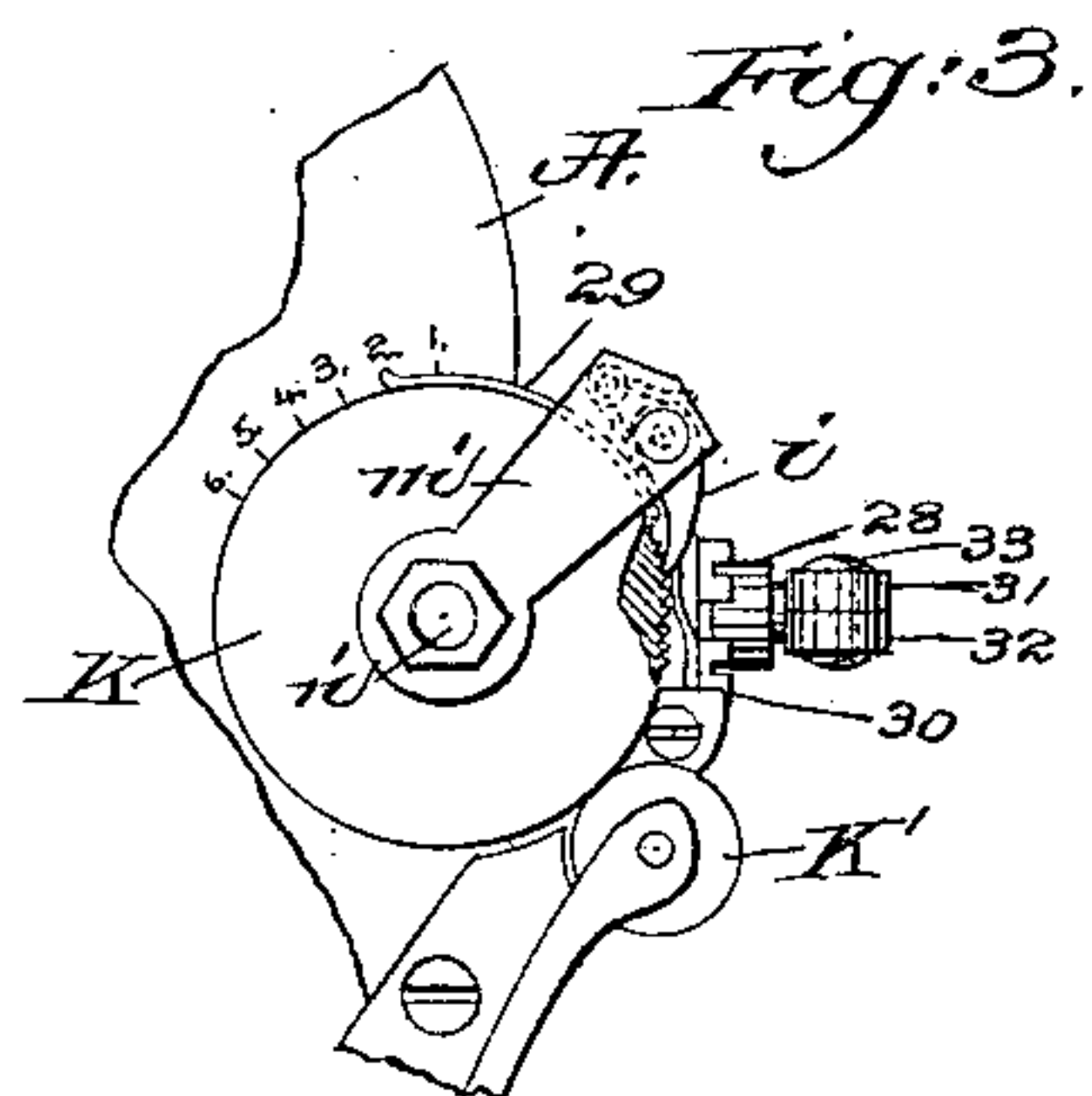
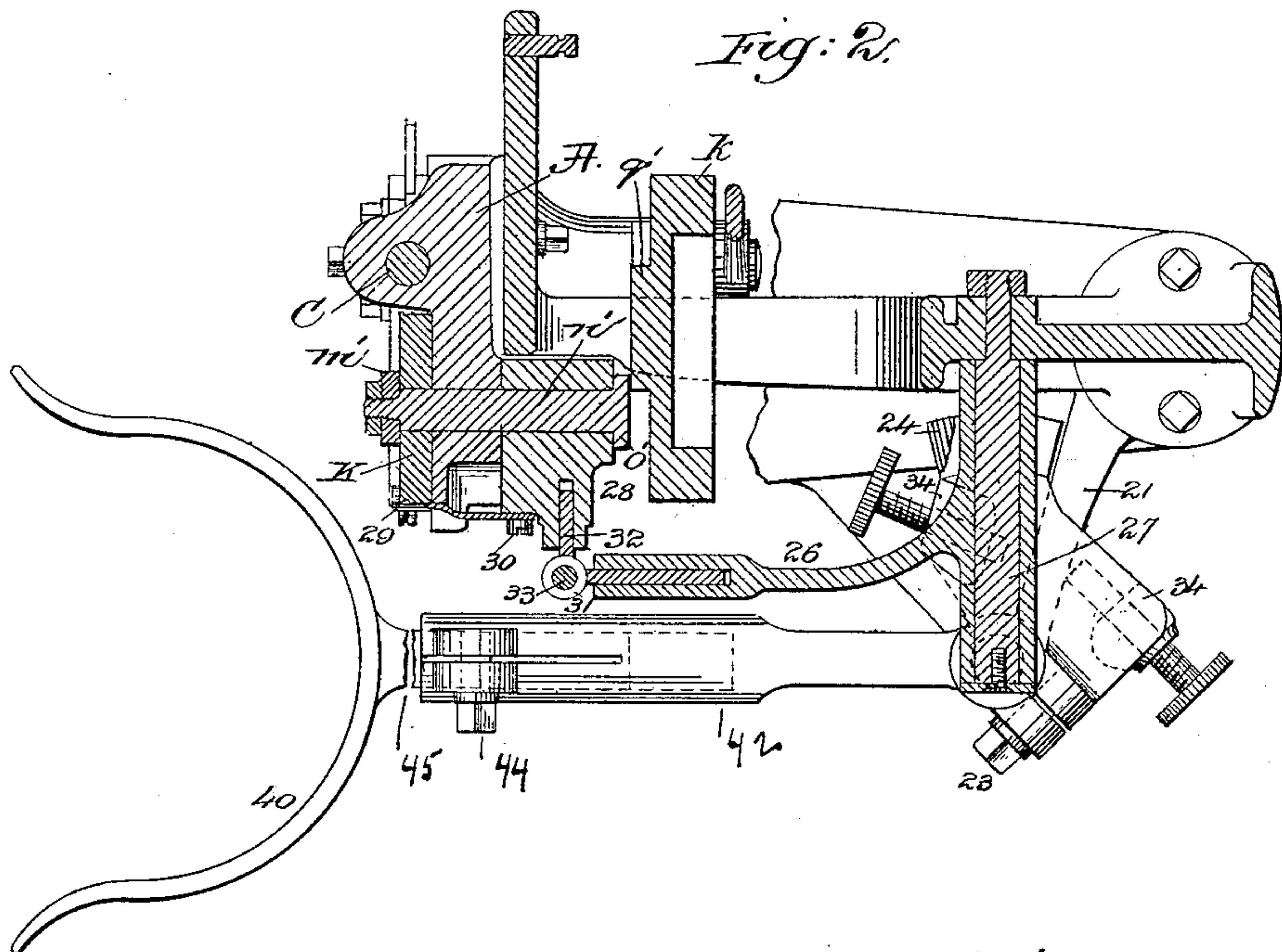
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Fred. S. Greenleaf.
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Inventor.
Louis Goddu.
By Leroy Gregory attys.

UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF WINCHESTER, ASSIGNOR TO JAMES W. BROOKS, OF CAMBRIDGE, PRINCIPAL TRUSTEE, AND FRANK F. STANLEY, OF BOSTON, MASSACHUSETTS, ASSOCIATE TRUSTEE.

NAILING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 388,128, dated August 21, 1888.

Application filed April 30, 1888. Serial No. 272,318. (No model.)

To all whom it may concern:

Be it known that I, LOUIS GODDU, of Winchester, county of Middlesex, State of Massachusetts, have invented an Improvement in Nailing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve that class of machines employing wire, threaded or otherwise, and which when its end is driven into the work, held, preferably, in the hand of the operator, as when laying on outsoles, is cut off, the principal feature of my present invention being to enable the feed of the wire or fastening material to be readily varied in length by the operator, according to the thickness of the stock. To accomplish this, I have interposed between the wire-feeding wheel and the pawl for moving it a shield and intermediate mechanism in operative connection with a treadle or equivalent lever or arm, under the control, preferably, of the leg of the operator, whereby, while the machine is running and while the operator holds the shoe in his hands and turns it under the usual nose of the machine, the length of nail or fastener inserted into the work may be varied at will, according to the thickness of the sole.

Figure 1 in side elevation shows a nailing-machine embodying my invention; Fig. 2, an enlarged section below the line x , Fig. 1; Fig. 3, a detail, to be referred to; and Fig. 4, a sectional detail of the bearing 20 in the line x , to show the friction device.

The head A, fitted to an upright or column; the driver-bar C, shown in section in Fig. 2 and provided at its lower end, in the usual manner, with a driver; the feed-wheel K, loose on the shaft n' ; the presser-wheel, herein marked K'; the nose B; the pawl i ; the pawl-carrier m' , fast on the shaft n' , to move the said pawl and rotate the feed-wheel K intermittingly; the main shaft E; the cam q' ; the cam k , and the arm m , for actuating the usual cutting mechanism, are all substantially as in United States Letters Patent No. 122,377, wherein like letters are used to designate like parts.

None of the parts referred to are herein included in the claims, except the feed-wheel, and,

being common and well known, need not be herein further described.

In accordance with my invention, I have provided the machine with bearings 20 21, in which is placed an upright rock-shaft, 22, which at its upper end has clamped to it by a screw, 23, the hub of a segmental gear, 24, which engages a segmental gear, 25, forming part of an elbow-lever, 26, mounted on a stud, 27, secured to the frame. (See Fig. 2.)

The free end of the lever 26 is connected loosely to the hub 28, carrying the measuring-shield 29, which is attached to the hub by screws 30 and interposed between the uniformly-reciprocating pawl i and the periphery of the feed-wheel K.

As herein shown, the connection between the lever 26 and hub 28 is made by two eyes, 31 32, jointed together by a rivet, 33, making a loose extensible joint.

The hub of the gear 24 has two depending lugs, 34 34, which straddle the bearing 21, and these lugs receive in them adjusting-screws 35 36, which serve as adjustable stops by which to determine the extent of oscillation of the rock-shaft 22, one of the said stops determining the position to which the shield 29 may be moved in one and the other the distance to which the said shield may be moved in the opposite direction of its stroke.

The frame-work A (see Fig. 3) is provided with a scale marked 1 2 3, &c., to designate thickness of stock or lengths of nails required for the stock.

The inner end of the shield 29 will preferably be turned up slightly to serve as a sort of pointer to travel over the scale, the farther the inner end of the scale to the left in Fig. 3 the more teeth of the feed-wheel K exposed to the action of the pawl i and the longer the fastening, and vice versa.

The operator will in practice set the stop 35 to give the maximum length of fastening and the stop 36 the minimum length of fastening for a lot of boots and shoes to be made. This done, the operator, with his knee or leg in the socket 40 or against the independent end piece or extension of the arm 42, preferably made adjustable vertically by screw 50 on the shaft 22, moves the said rock-shaft to, through it and

its connections, move the shield 29 in one or in the other direction, as the pawl *i* is to be moved to thus expose a greater or less number of the teeth of the feed-wheel to feed the wire, the wire being thus fed for a greater or less distance, according to the length desired for the fastening, that depending on the thickness of the stock.

Adjustment of the arm 42 up or down on the shaft 22 adapts it to the knee or leg of the particular operator using the machine, and by the screw 44 the shank 45 of the socket 40 may be pushed toward or from the shaft 22, or be tipped or moved more or less in the part 42.

In order that the shaft 22 when turned into position to insure a given length of nail will remain in such position so long as the same length of nail is desired, I have provided a friction device composed of a block, *t*, spring *t'*, and screw *t''*, the block *t* bearing against the said shaft.

I claim—

1. In a nailing-machine, the feed-wheel K, the pawl-carrier, pawl to move it, the measuring-shield, the rod or shaft 22, and intermediate connections between it and the said shield, combined with the knee-lever vertically adjustable on the said shaft and under the control of the operator, and adapted to be readily moved to cover more or less of the teeth of the feed-wheel while the machine is running, to thus vary the length of the nail or fastening, as may be required.

2. In a nailing-machine, the feed-wheel K, the pawl-carrier, pawl to move it, the measur-

ing-shield, the rod or shaft 22, and intermediate connections between it and the said shield, combined with the knee-lever made in two parts, one adjustable on or with relation to the other and under the control of the operator, and carried by the said shaft, and adapted to be readily moved to cover more or less of the teeth of the feed-wheel while the machine is running, to thus vary the length of the nail or fastening, as may be required.

3. The feed-wheel, the shield 29, the lever 26, and the segmental gear 34, and adjustable stops 35 36, combined with the rock-shaft 22, and with means under the control of the leg of the operator to move the said rock-shaft, substantially as described.

4. In a nailing-machine, the rod or shaft 22, to control the feed of the wire, combined with the arm 42, adjustable thereon, and with the independent longitudinally-adjustable end piece carried thereby, substantially as described.

5. In a nailing-machine, the rod or shaft 22, to control the feed of the wire, and a leg, lever, or arm to actuate it, combined with a friction device composed of a block, spring, and screw to hold the said shaft in adjusted position, substantially as described.

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

LOUIS GODDU.

Witnesses:

GEO. W. GREGORY,
B. DEWAR.