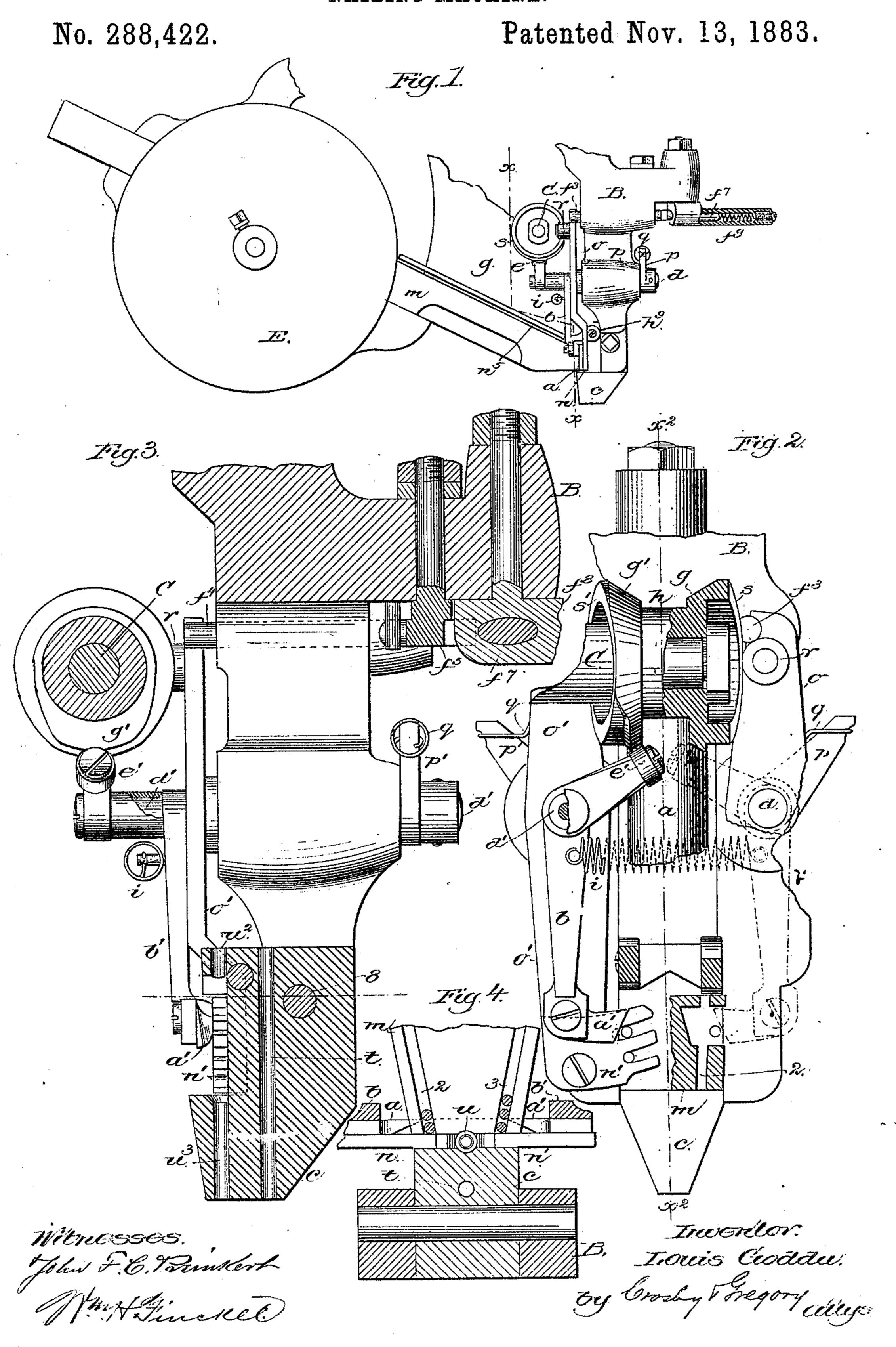
L. GODDU.

NAILING MACHINE.



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UNITED STATES PATENT OFFICE.

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NAILING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 288,422, dated November 13, 1883.

Application filed September 11, 1883. (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 5 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 is an improvement on the 10 machine represented in United States Letters Patent No. 265,227, granted to me September 26, 1882, and has chiefly to do with the apparatus for separating the headed nails or fastenings singly from the roadways and trans-15 ferring them into line with the driver-passage. In this invention I employ both a separator and a transferrer in connection with each roadway of the chute, the separator first operating to enter between two nails, while the transfer-20 rer closes the end of the roadway, and, having been entered between the nail next to be driven and the one next back of it, the transferrer is moved away from the end of the chute, permitting the separator, in its further forward 25 movement across the roadway, to push the nail next its beveled face off the end of the said chute directly in front of the end of the transferrer, so that the latter, as it next comes forward, will strike the said nail and move it into 30 the driver-passage, which passage is located just where the end of the transferrer stops when it is in its position to fully close the end of the roadway from which it took its nail. Before the transferrer is drawn back from its 35 forward position to take another nail, the separator is drawn fully back and again started forward far enough to enter its point between the endmost nail and the one next to it, thus making it impossible for the nails to come to-40 gether between the separator and transferrer. The transferrer not then active, but closing the roadway from which nails are not at the time being taken, remains at rest at the end of the said chute and roadway, and the end of 45 the said transferrer remains at rest at the driver-passage.

Figure 1 is a detail showing parts of the patented machine referred to with my improve-

ments added. Fig. 2 is an enlarged view, looking at Fig. 1 from the left of the section- 50 line x x, some of the parts being, however, broken out, some parts in duplicate being also shown in dotted lines. Fig. 3 is a section of Fig. 2 along the dotted line x^2 , Fig. 2. Fig. 4 is a detail showing the end of the chute, its 55 roadways, the separators, transferrers, and driver-passage.

In the drawings, the vibrating head B, driver-bar a, the nail-receiving drum E, the chute m, the stops f^3 f^4 , sector f^5 , tube f^8 , spring- 60

pressed pin f^{τ} therein, throat c, shaft C, cover n^5 , and joint at h^9 are all as in my said patent, and need not therefore be herein further par-

ticularly described.

The part f^8 , turned to the right or left be- 65 fore changing from one to another length of nail, compresses the spring in the said tube against the pin f^7 , and stores up power sufficient to turn the sector f^s and move the stops as soon as the cams for moving the levers o o' 70 turn the same far enough to permit the said levers to pass beyond the ends of the said stops. as fully described in the said patent and in my application, Case A, No. 106.133, filed concur-

rently with this.

The chute m has two roadways, 23, and a suitable cover, n^5 . The division-wall between the roadways presents a vertical flat end, which, at a point intermediate the ends of the said roadway, has in it part of the driver-pas- 80 sage u, which is in continuation of the driverpassage u^2 , above the nose c. In connection with the roadway 2 is a separator, a, attached to the lower end of a lever, b, having a sleevehub which surrounds a stud, d, the said sleeve 85 having a second arm provided with a roller, e, which is acted upon at suitable times or intermittingly by a cam, g, forming part of a sleeve, h, fast on the shaft C and partaking of its movements. The roller e is kept against 90 the cam g by a spring, i, which at its other end is connected with a pin on a lever, b', (shown in dotted lines, Fig. 2,) like b.

One face of the separator is beveled, as shown in Fig. 4, and at its side is a transferrer, 95 n, attached to a lever, o, (see Fig. 1,) having

a solid or fast stud, d, which is extended through bearing-passages made in the head B, the end of the said stud so extended through the head having fastened to it an arm, p, (see 5 Fig. 4,) which is attached to a corresponding arm, p', by means of a spring, q, the arm p' being attached to a stud, d', having fast on it the lever o', which carries the transferrer n', which co-operates with the roadway 3. The studs d d' are prolonged at the outer sides of the levers o o', to form studs for the reception of the two like levers, b b', having arms provided, respectively, with rolls e e', to be acted upon by the cams g g', both alike on the 15 sleeve h.

The lever b' has a separator, a', which cooperates with it and roadway 3. In Fig. 2, I have shown the lever b' by dotted lines.

Each lever o o' has a roller-stud, r, which is adapted to be acted upon at desired times by one of the cam-faces s or s' of the sleeve h.

It will be understood that the parts b', &c., marked by like letters without and with the prime mark, are in operation just the same, the only difference being that one set works with one roadway, 2, and the other with the other roadway, 3.

The nose c has an awl-passage, t, and a driver-passage, u^3 , and is bolted to the head B by a bolt at 8. The transferrer is slotted at its ends.

I claim—

1. The chute provided with the two roadways, and the nose having the driver-passage, combined with the two separators, to act upon and separate the endmost nails of the series of nails from those next back of them, and the transferrers to take the said nails and transfer them at the proper times in opposite directions toward and to the driver-passage, 40 substantially as described.

2. The chute provided with the two roadways, and the nose having the driver-passage, combined with the two separators, to act upon and separate the endmost nails of the series of 45 nails from those next back of them, and the transferrers to take the said nails and transfer them at the proper times in opposite directions toward and to the driver-passage, and with means, substantially as described, to enable the operator to control the selection of nails from one or the other of the said roadways.

In testimony whereof I have signed my name to this specification in the presence of two sub- 55

scribing witnesses.

LOUIS GODDU.

Witnesses:

G. W. GREGORY, B. J. NOYES.