

No. 754,754.

PATENTED MAR. 15, 1904.

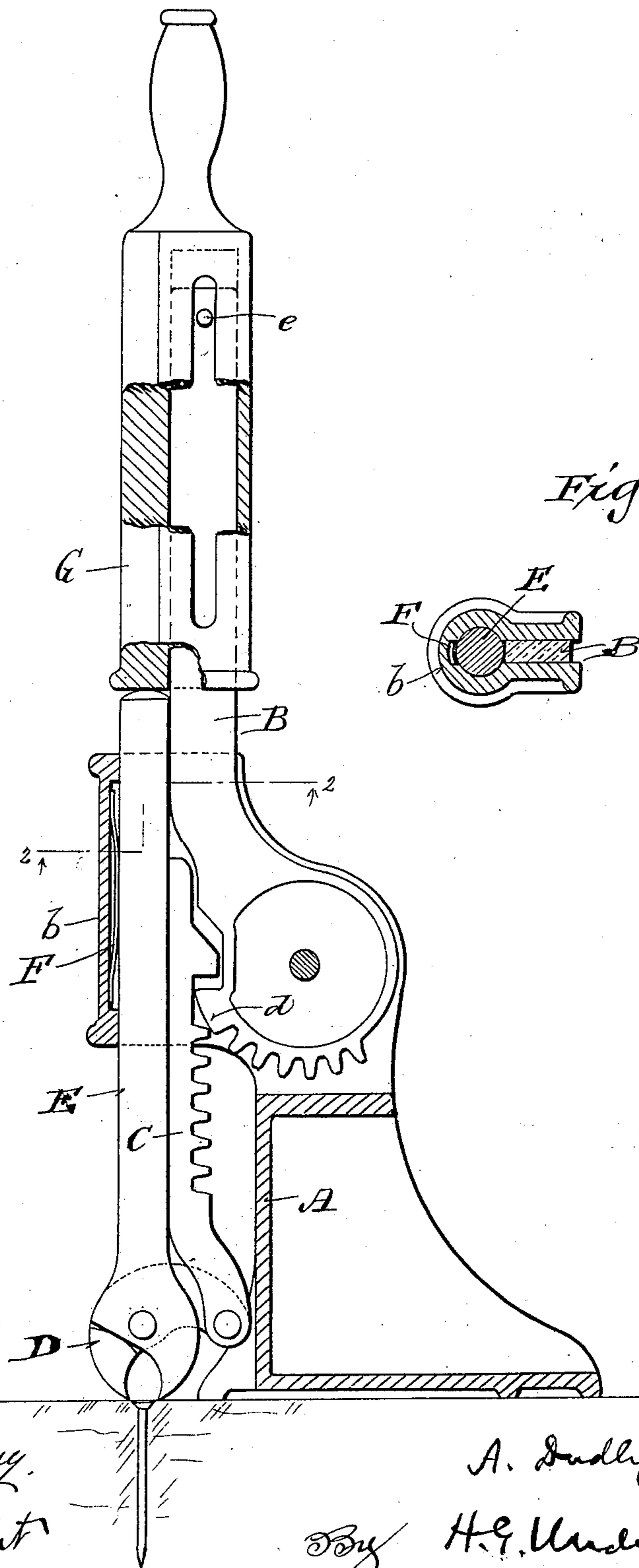
A. DUDLY, SR.
NAIL EXTRACTOR.

APPLICATION FILED JULY 16, 1903.

NO MODEL.

Fig. 1.

Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT DUDLY, SR., OF MENOMINEE, MICHIGAN.

NAIL-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 754,754, dated March 15, 1904.

Application filed July 16, 1903. Serial No. 165,744. (No model.)

To all whom it may concern:

Be it known that I, ALBERT DUDLY, Sr., a citizen of the United States, and a resident of Menominee, in the county of Menominee and State of Michigan, have invented certain new and useful Improvements in Nail-Extractors; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed, the object of said invention being to provide simple, economical, and powerful nail-extractors by which to draw nails without bending the same.

Figure 1 of the drawings represents a side elevation of a nail-extractor in accordance with my invention having parts thereof broken away and in section; and Fig. 2 a horizontal section of the extractor, this view being indicated by line 2 2 in the first figure.

Referring by letter to the drawings, A indicates a cast-metal standard having an upper forward overhanging guide extension *b*, intercepted by a recess in which a rear lever B is pivoted and has its play. The pivot end of the lever is offset and rounded, a portion of the same being provided with a series of spur-teeth that come in and out of engagement with a vertical rack-bar C, guided in the recess aforesaid. The offset rounded and toothed end of the lever is also provided with a lug *d*, having the same radius as the teeth which it precedes on the lifting stroke of said lever, the rack-bar being provided with a recess with which said lug engages. The rack-bar is offset at its lower end, where it is pivotally connected to a jaw D, that is likewise connected to the lower jaw end of a plunger E, guided in the upper forward cylindrical portion of the standard A parallel with said rack-bar. A friction-spring F is arranged in the guide portion of the standard under compression against the plunger, and a longitudinally-slotted rammer G has reciprocative engagement on the

outer end of the lever B, a lateral stop-pin *e* of said lever being engaged with the rammer-slot.

The standard being properly positioned and the lever swung up to bring the reciprocative rammer thereon over the plunger, the lever-lug *d* is sufficiently clear of the corresponding rack-bar recess to permit of said plunger being driven down to bring its jaw end and the jaw D below the head of the nail to be pulled, after which said lever is swung back to cause a grip and draw of said nail. The friction of spring F retards movement of the plunger during the time the jaw D is being swung, by means of upward movement of the rack-bar, to cause a grip on the nail, said rack-bar being first lifted by the lever-lug *d* and thereafter by the lever-teeth, these teeth coming properly into mesh with those of said bar from which they have had clearance for a time. There being straight upward lift of the rack-bar and plunger parallel thereto, the nail is drawn without bending.

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

1. A nail-extractor comprising a standard, a plunger guided in the standard and having its lower end in the form of a jaw, another jaw in pivotal connection with the jaw end of the plunger, a rack-bar guided in said standard parallel to said plunger and pivotally connected to the pivotal jaw, a lever having an offset rounded and spur-toothed end pivoted in the aforesaid standard to be engageable with the rack-bar, said end of the lever being provided with a radial lifting-lug engageable with a recess in said rack-bar, and a plunger-rammer reciprocative on said lever.

2. A nail-extractor comprising a standard a plunger guided in the standard and having its lower end in the form of a jaw, a friction-spring arranged under compression against the plunger, another jaw in pivotal connection with the jaw end of said plunger, a rack-bar guided in said standard parallel to the aforesaid plunger and pivotally connected to

the pivotal jaw, a lever having an offset rounded and spur-toothed end pivoted in the aforesaid standard to be engageable with the rack-bar, said end of the lever being provided with
5 a radial lifting-lug engageable with a recess in said rack-bar, and a plunger-rammer reciprocative of said lever.

In testimony that I claim the foregoing I

have hereunto set my hand, at Menominee, in the county of Menominee and State of Michigan, in the presence of two witnesses.

ALBERT DUDLY, Sr.

Witnesses:

O. J. DUDLY,
FRED WALLACE.