W. HAWKINS & W. F. DODGE.

Machine for Cutting Printers' Leads.

No. 163,998. Patented June 1, 1875.

Fig 1.

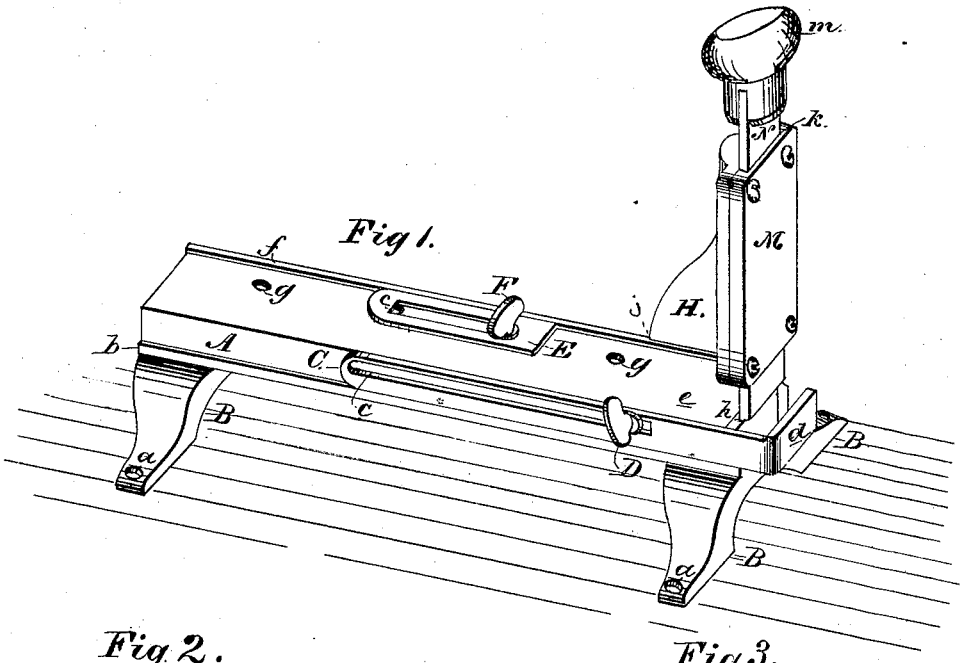


Fig 2.

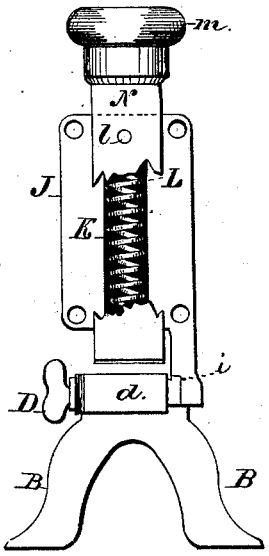
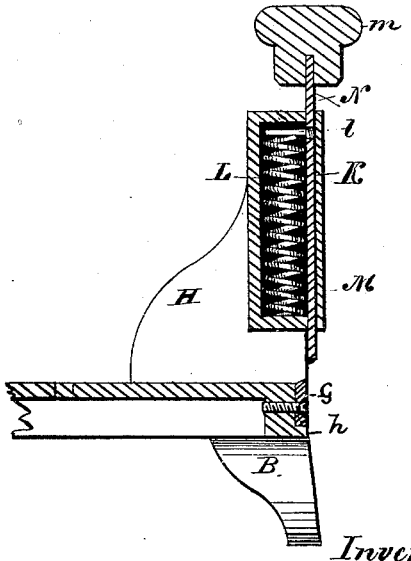


Fig 3.



Witnesses;
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UNITED STATES PATENT OFFICE.

WILLIAM HAWKINS AND WILLIAM F. DODGE, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN MACHINES FOR CUTTING PRINTERS' LEADS.

Specification forming part of Letters Patent No. **163,998**, dated June 1, 1875; application filed June 30, 1873.

To all whom it may concern:

Be it known that we, WILLIAM HAWKINS and WILLIAM FOSTER DODGE, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Hand-Machines for Cutting Printers' Leads; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The object of our invention is the construction of a machine for cutting printers' leads, principally of cast-iron, with such a configuration of parts as will permit all the immovable portions to be finished by ordinary machinery, and which shall combine cheapness, simplicity, and strength with rapidity and certainty in operation; and the novelty therein consists, first, in the peculiar construction of the standard which carries the knife; and, second, in the machine as a whole.

In order to enable those skilled in the art to construct and operate our machine, we proceed to describe the same, calling attention to the drawings, in which—

Figure 1 is a side elevation, partly in perspective, of our machine; Fig. 2, a front elevation with the face-plate removed, and Fig. 3 a vertical central section of the standard and its apparatus.

Like letters denote similar parts in each figure.

The main or supporting part of our device consists in a narrow table, A, of proper size, supported on suitable legs B, cast in one piece. The legs have screw-holes *a*, by which the machine may be fastened by wood-screws to a bench or other convenient object. Upon one side the table is cut away a little, so as to leave a shoulder or ledge, *b*, running its entire length. Resting upon this shoulder, and extending along it, is a gage, C, having a longitudinal slot, *c*, and held in any desired position by a set-screw, D, which passes through the slot into the side of the table. This gage has also a head, *d*, turned at right angles across the front end of the table, and rising sufficiently above the top *e* thereof to afford a rest for the end of a lead pressed against it. The top of the table is cut away, so as to leave a shoulder or ledge, *f*, on one side of it, running its whole length; and upon this top, and resting against said shoulder *f*, is placed a short gage, E, secured in position by a set-screw, F, working in a slot in said gage, and fitting into any one of a series of holes, *g*, in the top of the table. It will be observed that our construction of the table, and indeed of all parts of our machine, is such that all the surfaces which are required to be smooth and in accurate planes may be worked by ordinary machinery, and no hand-work is required upon any portion, except in putting the parts together. The front end of the table is also cut away, leaving a shoulder or ledge, *h*, Fig. 3; and resting upon the same is secured the stationary knife G, having a shoulder, *i*, Fig. 2, corresponding with the shoulder *f*, before described, fastened by a single screw, and prevented from turning out of place in use by the shoulder *h*, before named, and by being at one end recessed into the standard H. This standard, which is a single casting, is cut away upon the inside near the bottom, leaving a shoulder, *j*, which rests upon the shoulder *f*, and is secured to the side of the table at its front end by screws. This standard has a lateral wing, J, extending across the width of the table, containing on its face a semi-cylindrical chamber, K, intended to receive a spiral spring, L. A face-plate, M, being a casting of the same shape and size as the face of the wing, and having recesses *k* at top and bottom, in which to allow the play of the knife N, is secured to the face of the wing by screws. This knife has upon one of its sides a stud, *l*, of a size and shape corresponding with the chamber K, which, in use, fits into and traverses in said chamber above the spring. The knife has a wooden handle, *m*, suitable to be struck by the hand, and a beveled edge, *n*, so as to cut with a drawing cut toward the standard side of the machine.

In operation, the leads are held upon the top of the table, resting against the shoulder *f*, with one end pressed against the end of the gage E, and are cut, with a single blow of the hand, to the desired or uniform length. For cutting very short lengths, the gage C is used, as in cutting up old leads for spaces.

The advantages of our machine in operation,

in ready removal of the knives, and in other particulars, will be at once comprehended.

Having thus described our machine, what we claim as new therein, and our invention, is—

1. In a printer's lead-cutter, a standard for carrying the knife, composed of the part H, adapted to be secured to the side of the table, a wing, J, turned transversely across and over the table, having a recess adapted to receive a spring and a removable face-plate, M, substantially as described and shown.

2. The printer's lead-cutter, substantially as described, wherein a knife, composed of a single piece, to which a striking-handle is secured, and reciprocating between a wing-standard and a removable face-plate, and a table having a side ledge, adapted to hold and guide a gage, are all constructed, combined, and arranged to operate substantially as set forth.

This specification signed and witnessed this 23d day of June, 1873.

WILLIAM HAWKINS.
WM. FOSTER DODGE.

Witnesses:
H. F. BALDWIN,
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