

J. McDERMOTT.
ELASTIC PRINTING APPARATUS.

2 Sheets—Sheet 1.

No. 73,359.

Patented Jan. 14, 1868.

Fig. 1

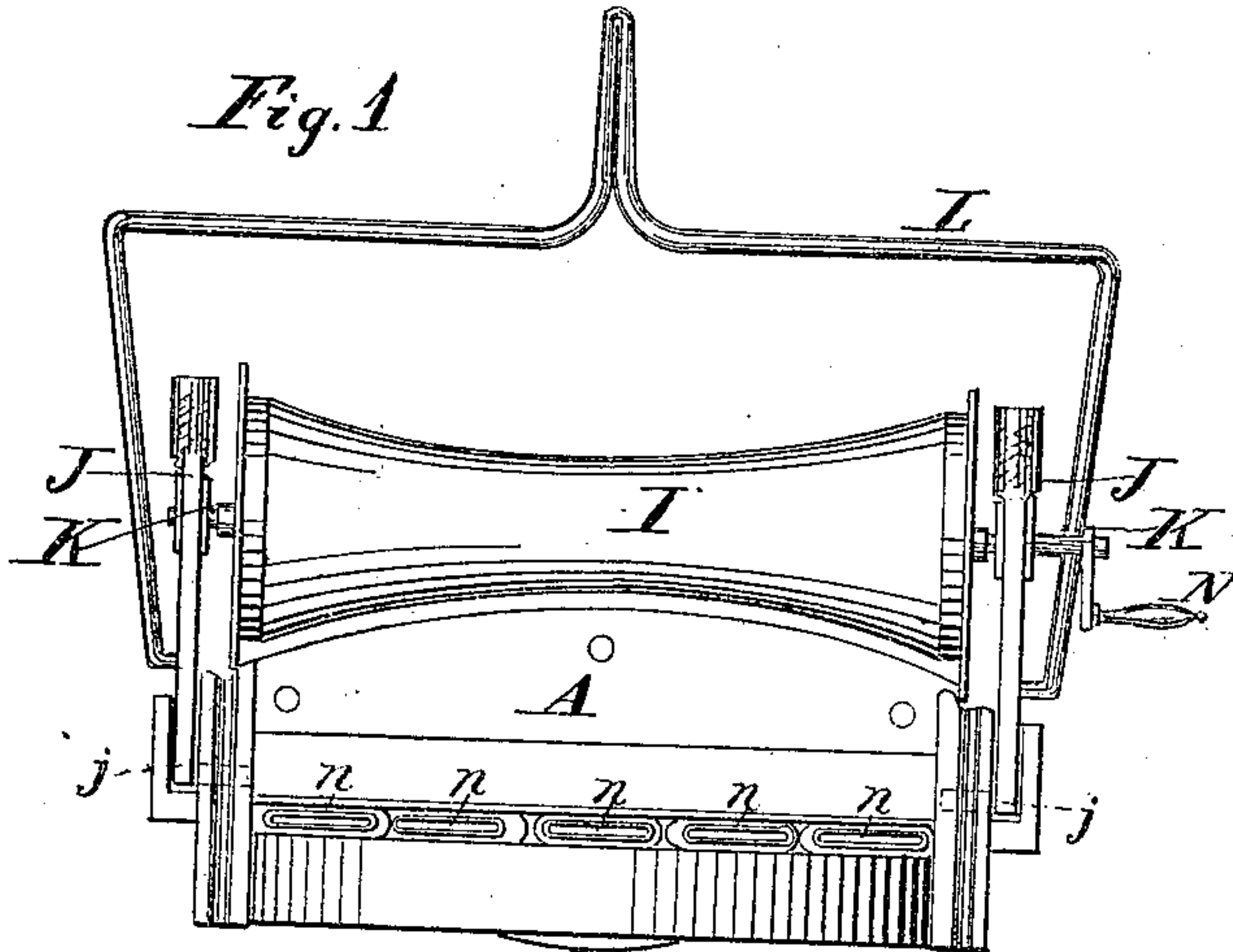


Fig. 2

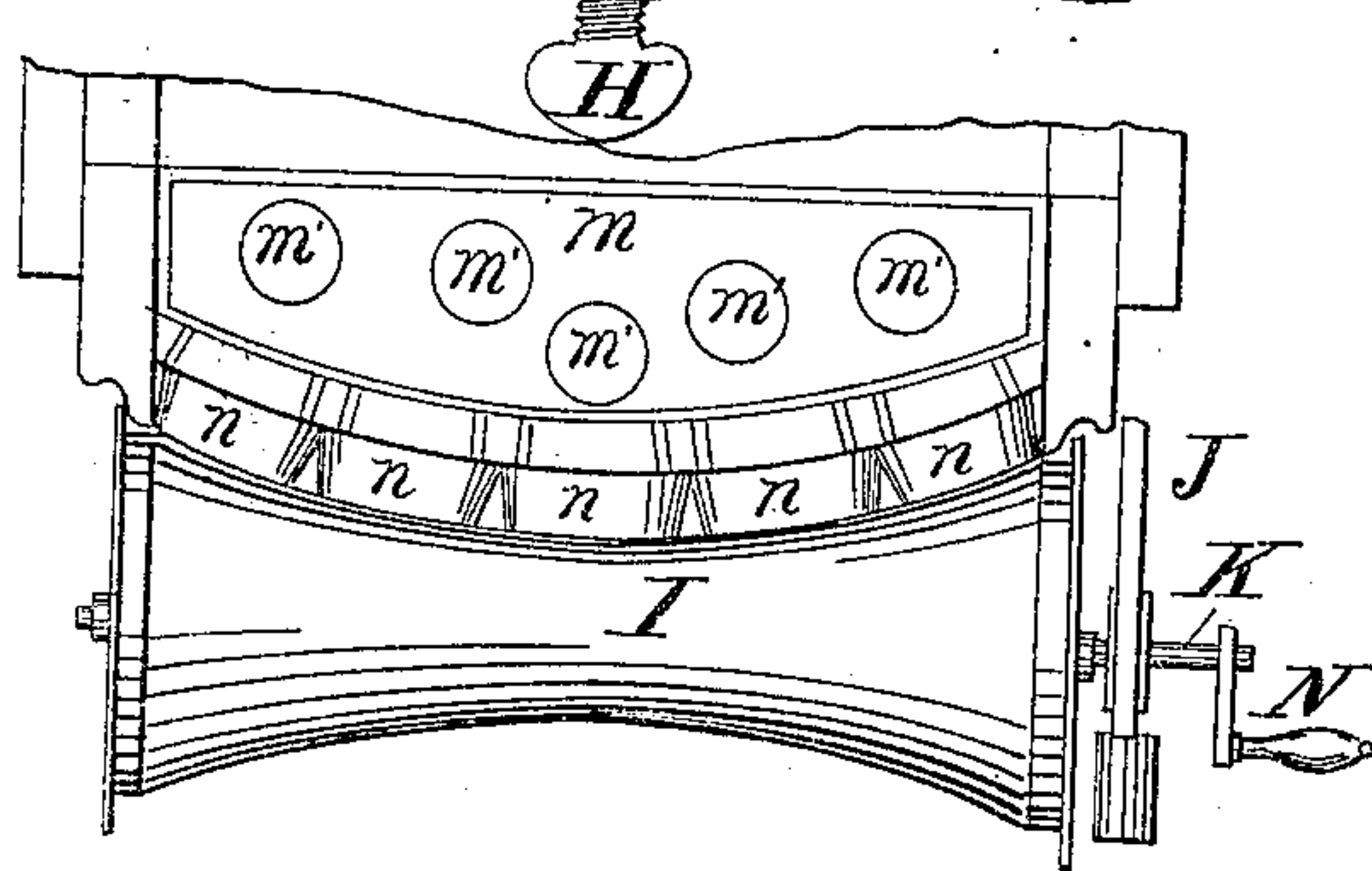
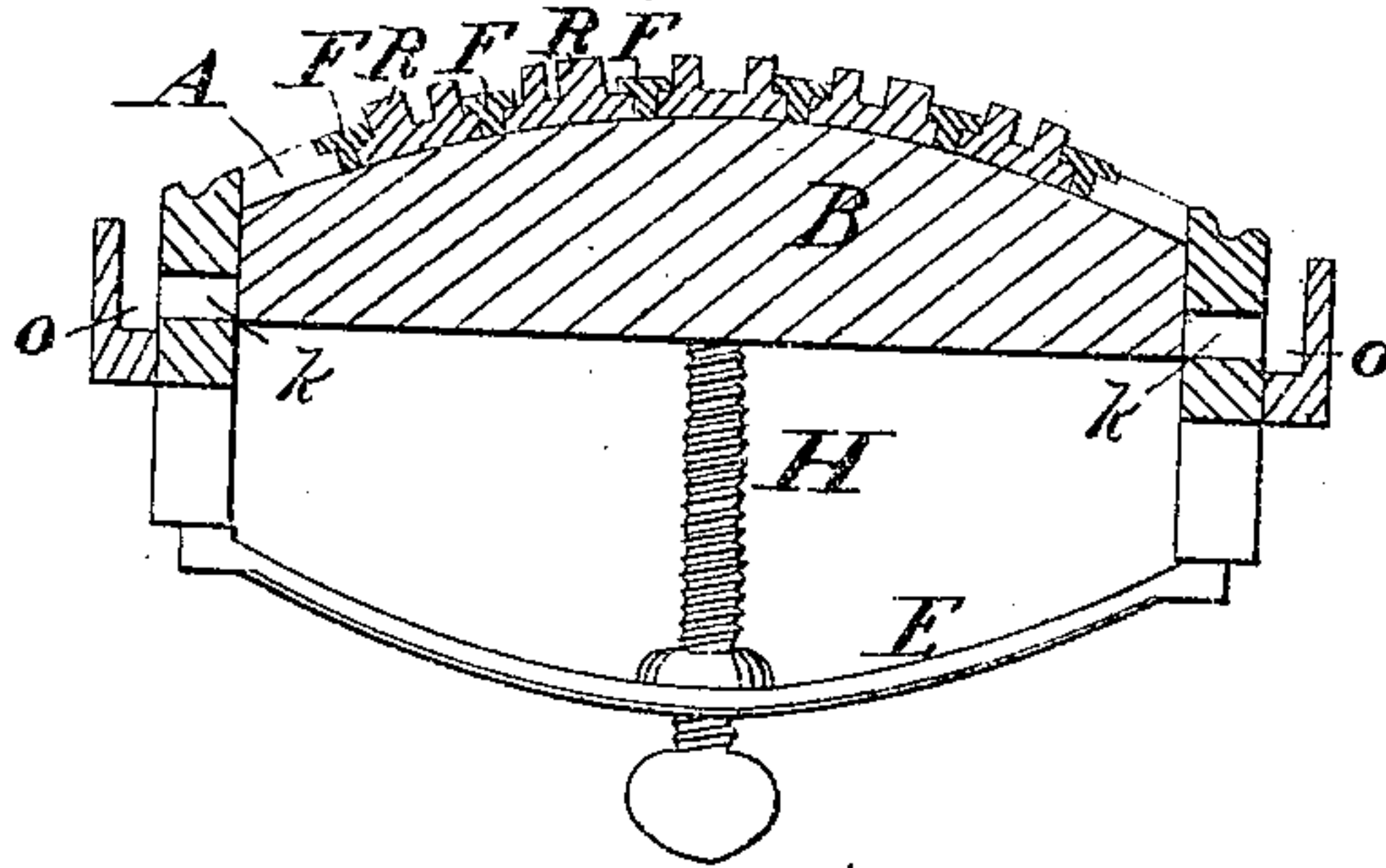


Fig. 3



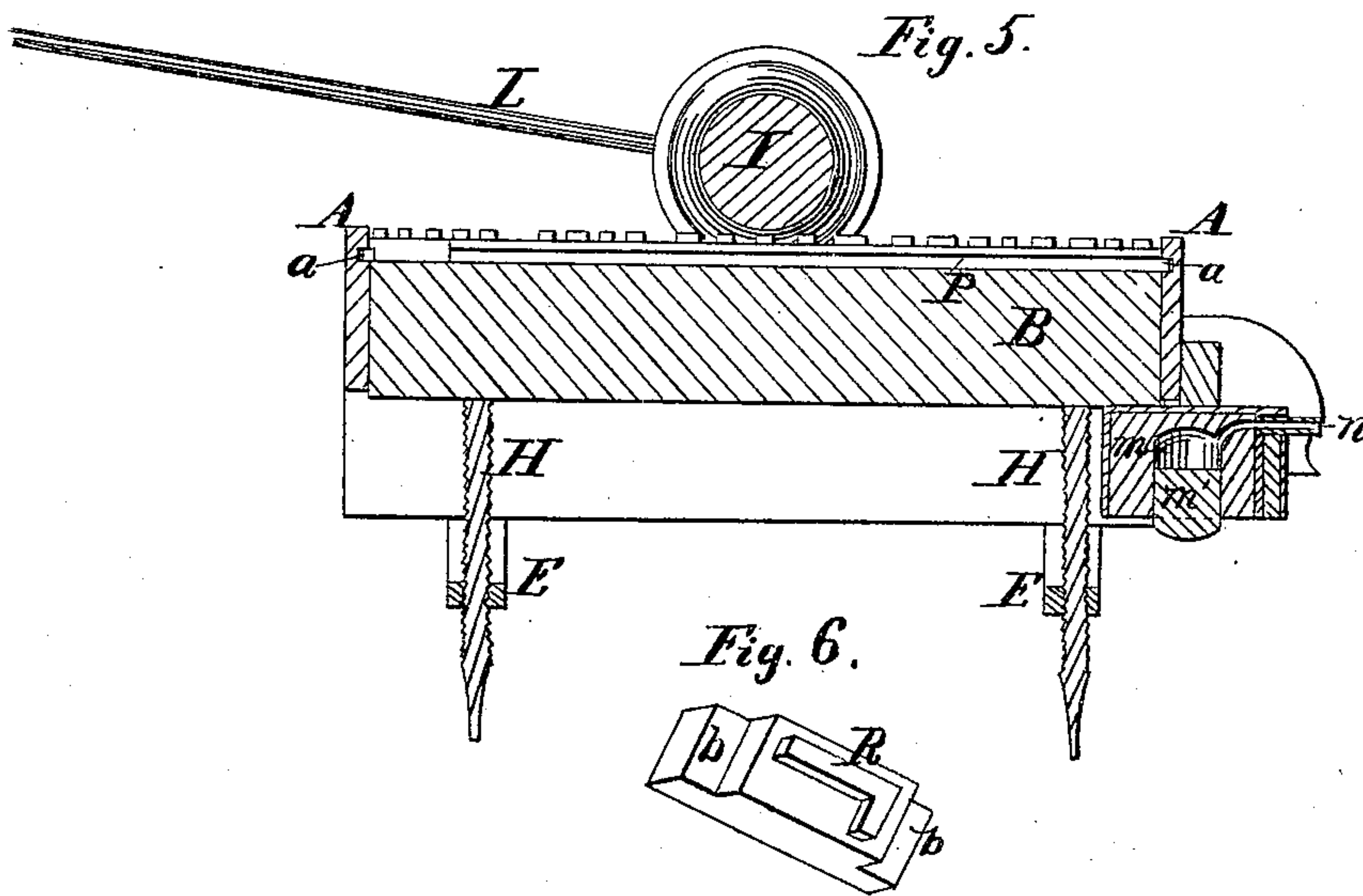
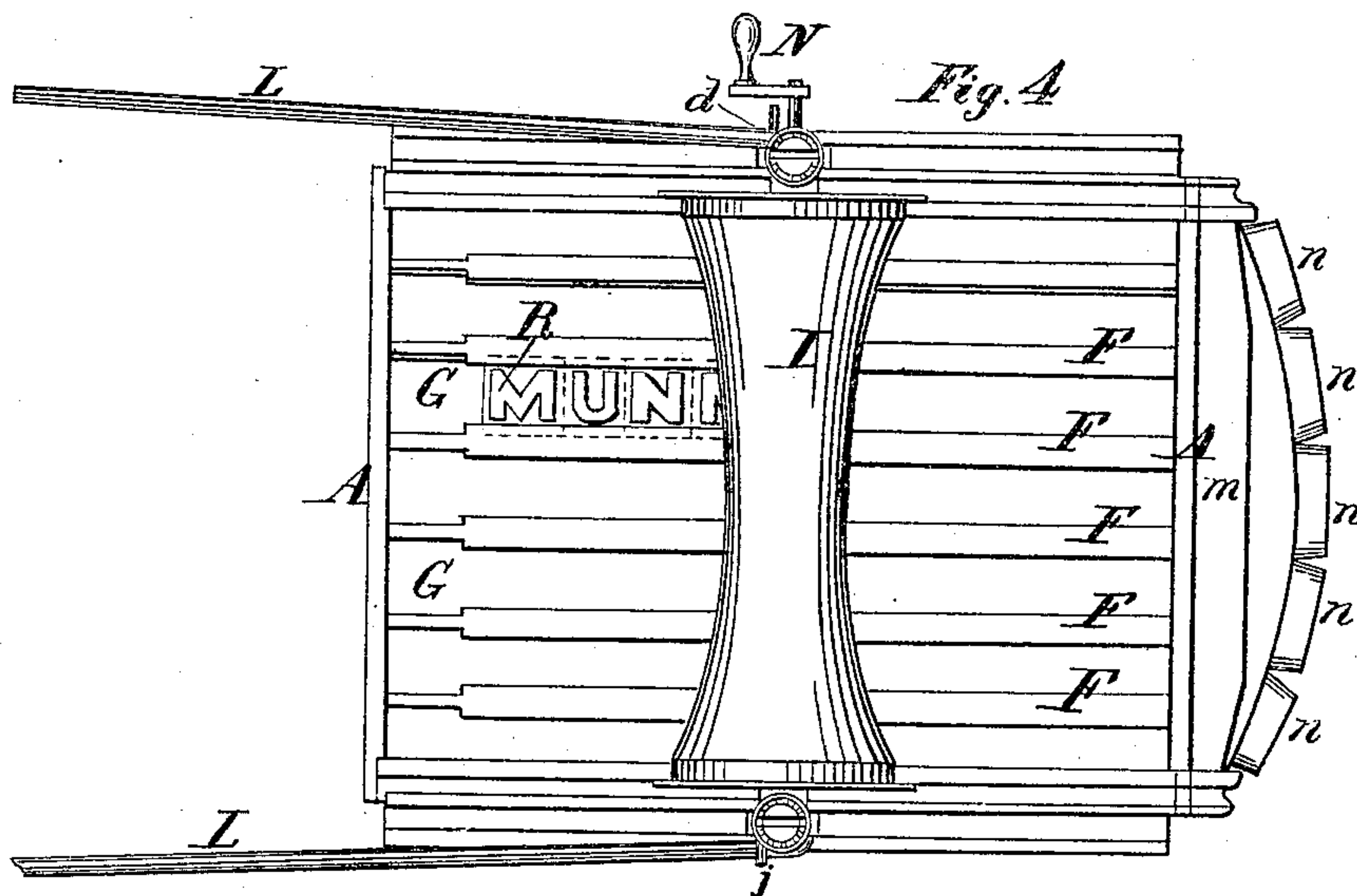
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United States Patent Office.

JAMES McDERMOTT, OF FREDERICK, MARYLAND.

Letters Patent No. 73,359, dated January 14, 1868.

IMPROVEMENT IN ELASTIC PRINTING-APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES McDERMOTT, of Frederick, Frederick county, State of Maryland, have invented new and useful Improvements in Printing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable one skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, which are made part of this specification, and in which the same letters indicate similar parts.

Figure 1 is an end view.

Figure 2 is a view of the under side of the ink-holder and the roller in contact therewith.

Figure 3 is a transverse section.

Figure 4 is a top view.

Figure 5 is a longitudinal section.

Figure 6 is a perspective view of a letter.

This is a hand-printing apparatus. The type is held in a curved bed or turtle, and the inking-roller has a corresponding shape. The types are made of India rubber, and are retained in their places by the flanges of the adjustable spacing-bars which rest upon the base-piece of each letter. At the end of the bed-piece is an inking-apparatus, consisting of reservoirs of ink, of divers colors, if required, with mouths from which it exudes on to the roller.

In the drawings, A is the metal frame, and B the bottom of the bed or turtle on which the type R are set up. The bottom, B, is fastened by the set-screws H which pass through the yokes E of the frame. In the end-plates of the frame A are grooves, *a*, which are occupied by the ends of the adjustable bars F which are interposed between the lines of letters. The bars F are shown in plan in fig. 4 and in section in fig. 3. The section shows them of a T-shape, the downward-projecting portion passing between the letters, and the side planges resting upon the planges *b b* of the letters R, fig. 6. The bases of the letters rest upon the bed-bottom B, and they are properly spaced to form the word or sentence in the intervals of the bars F. The letters are formed of India rubber, and being elastic, are readily inserted at the openings G, where the lateral flanges of the bars F are removed, and then slipped along to their places, after which the bottom, B, is tightened by the screws H. The inking-roller I has a concave face, the counterpart of the convex or rounded face of the platen, over which it passes to distribute the ink on to the type. The roller is journaled in a frame, J, on an axis, K, with a hand-crank, L, by which it is revolved in contact with the mouths *n* of the ink-reservoirs *m m*. The ink-reservoirs *m* may be made to contain either the same kind or a variety of inks, in the latter case making a variegated effect on the type. The plugs *m'* act as pistons to force the ink out at the mouths *n*, so as to be taken up by the roller which is revolved in contact therewith. The frame J is reciprocated over the face of the type by means of the handle N, the sides of the frame entering and reciprocating in the grooves O, while the lugs *j* on the frame are retained within the slots *k*. While the inking-roller is in contact with the faces of the type, the frame J is at right angles to the bed, as shown in figs. 1 and 4, but when it has reached the end of the bed to which the ink-reservoirs are attached, it vibrates on the lugs *j*, which form a pivot, so as to bring the frame J to an angle of ninety degrees with its former position, where it is adapted to receive the ink. It is intended to have springs placed under the boxes of the inking-roller to keep the latter depressed upon the type while permitting it to rise to the necessary extent to pass obstacles.

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

1. The arrangement of the frame A, movable bottom B, set-screws H, yokes E, and adjustable types, substantially as described.
2. The concave roller I, shaft K, reciprocating frame J, guide-grooves O *k*, lugs *j*, frame A, and inking-apparatus *m m' n*, when combined and arranged in the manner described.

JAMES McDERMOTT.

Witnesses:

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