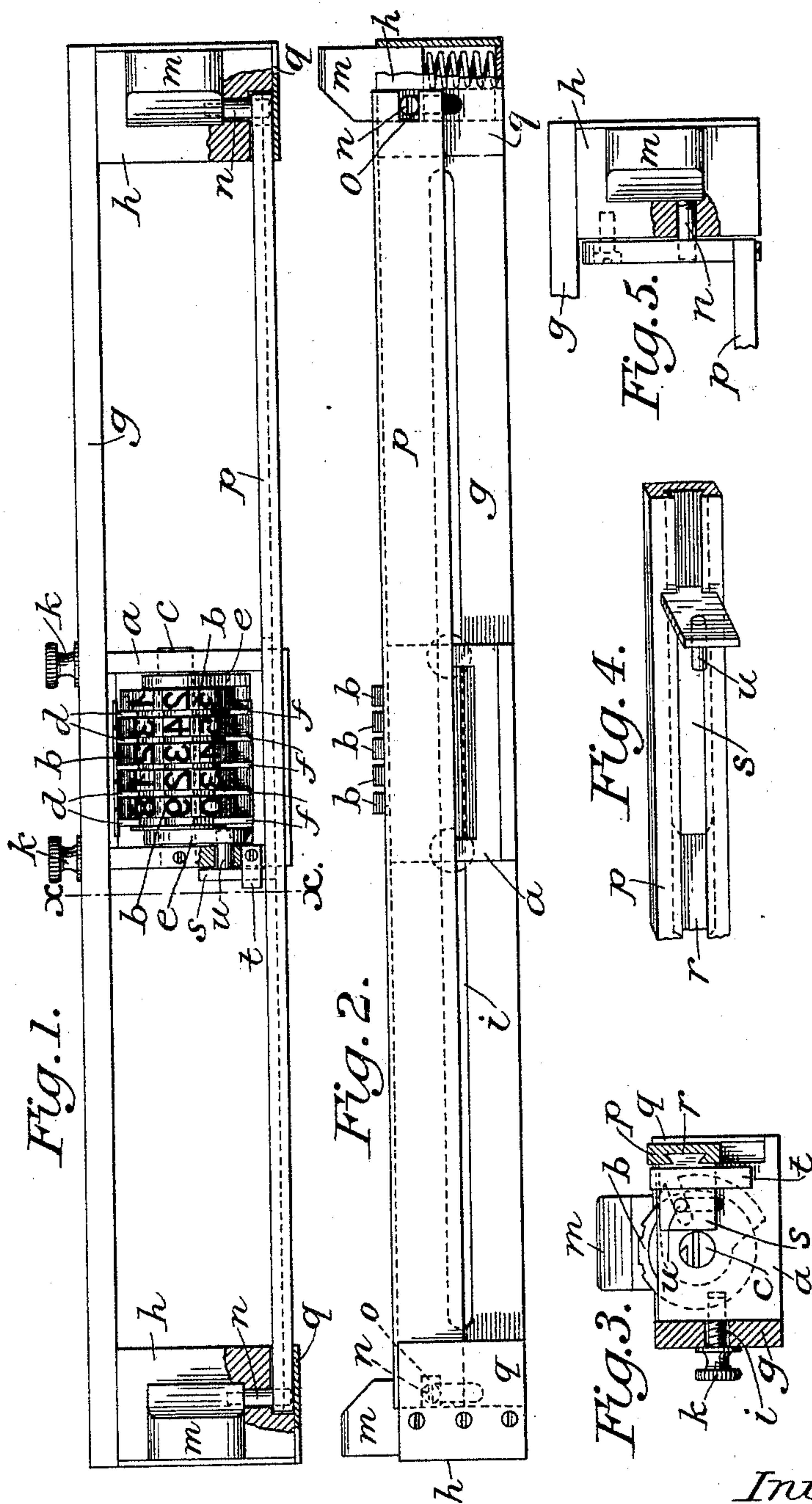


(No Model.)

F. SANDERS.
NUMBERING MACHINE.

No. 497,729.

Patented May 16, 1893.



Attest:
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UNITED STATES PATENT OFFICE.

FRANK SANDERS, OF BROOKLYN, NEW YORK.

NUMBERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 497,729, dated May 16, 1893.

Application filed December 12, 1892. Serial No. 454,837. (No model.)

To all whom it may concern:

Be it known that I, FRANK SANDERS, a subject of the Emperor of Germany, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Numbering-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Heretofore printers' numbering-machines have been formed as single machines which may be locked in the form with the type and actuated by the pressure of the platen. They have also been arranged to be fixed at different points within a frame and to be actuated by a rod or bar movable in a plane parallel with the bed-plate of the press, or by some other device specially applied to the press for the purpose. The single machines are well adapted for most uses but for some other purposes they are not so well adapted both because they must be locked in a form and because the actuating mechanism therefor must be placed within the frame of the numbering-head itself. Machines of the other class referred to are free from the objections just noted but so far as known to me they cannot always be placed exactly in the most desirable position on account of the necessity for fixed guides for the horizontally movable rods or other devices referred to and furthermore in order to give the proper movement to the said rods or devices it is necessary to add some other mechanical devices to the press.

It is therefore the object of my invention to overcome the several objections noted and to provide a numbering machine in which the numbering-head itself may be shifted to any desired position, even to the fraction of an inch, and in which one or more heads may be fixed as desired, while the wheels are advanced by the direct pressure of the platen upon a vertically moving plunger which stands at the margin of the bed-plate.

In the accompanying drawings: Figure 1 is a plan view of a numbering machine embodying my improvement, portions of the frame being broken out. Fig. 2 is a side elevation of the same with a portion of the covering

plate at the right broken away. Fig. 3 is a section on the line $x-x$ of Fig. 1. Fig. 4 is a detail view of a portion of the actuating bar with the sliding finger in position. Fig. 5 is a detail view of one end of the machine, showing a slightly different arrangement.

The numbering-head itself may be of any preferred construction and as shown in Figs. 1, 2 and 3, comprises a casing a , number-wheels b, b , mounted on a fixed shaft c , spring holding pawls d, d , and a swinging frame e which carries the driving pawls f, f . The numbering-head is supported by a frame which may be of any desired length and which consists of a bar g rigidly fixed to two end blocks h, h . The bar g is formed with a longitudinal slot i . Thumb-screws k, k , pass through the slot into the casing a and serve to secure the numbering-head in any desired position. Each end block h has a vertically-movable, spring-seated plunger m which engages, as by a pin n and slot o , the corresponding end of a vertically-formed actuating bar p . Guide-ways for the ends of the bar may be formed by recessing each block and securing a covering plate q over the recess. The bar p is slotted or preferably formed with a dove-tail groove r to receive the end of a sliding plate or finger s which moves with the numbering-head as the latter is adjusted along the bar g , a guide-way for the finger being formed by a plate t fixed to the casing a . The finger s is provided with a pin u which passes through a slot in the casing a and engages the swinging frame.

The operation of my improved numbering machine will be understood readily. As the plungers m, m , are depressed by the pressure of the platen and rise as the platen moves away the actuating bar p is also depressed and rises and through the finger s imparts the necessary movement to the swinging-frame.

I have shown a single numbering-head secured to the bar g but it is evident that as many as desired might be secured to the same bar and operated in the same manner as the single head.

I claim as my invention—

The combination of a frame composed of a bar with end-blocks rigidly fixed thereto, a numbering-head and means for securing the same to the bar in any desired position, ver-

tically-movable spring-seated plungers supported by said end-blocks, an actuating-bar connected to said plungers, and a sliding-finger in engagement with said actuating-bar
5 and transmitting its movements to the mechanism of the numbering-head, substantially as shown and described.

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

FRANK SANDERS.

Witnesses:

WILLIAM WENZ,
A. N. JESBERA.