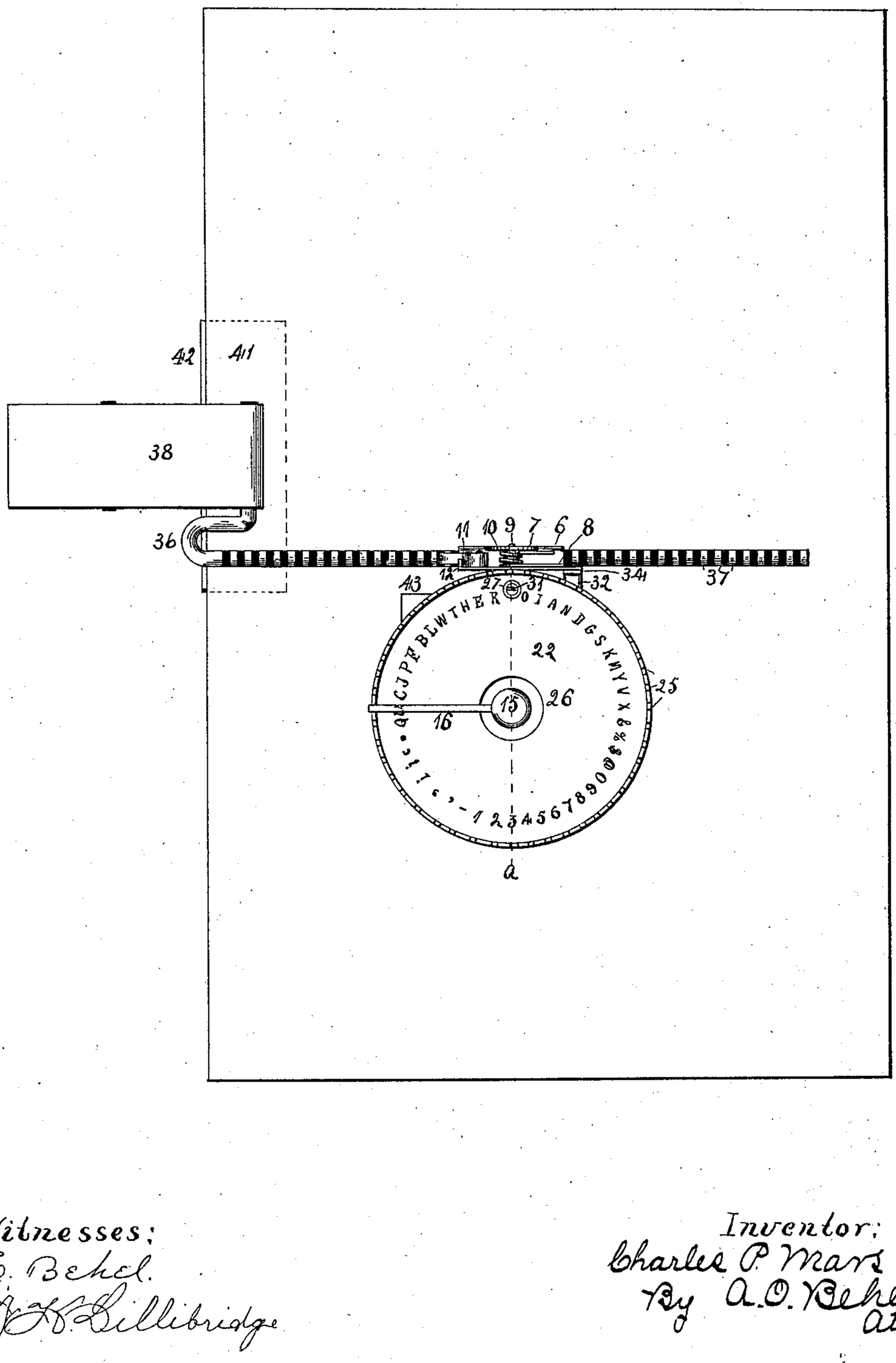
(No Model.) 2 Sheets—Sheet 1.

C. P. MARS.

POCKET TYPE WRITER.

No. 577,049. Patented Feb. 16, 1897.

Fig. 1.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

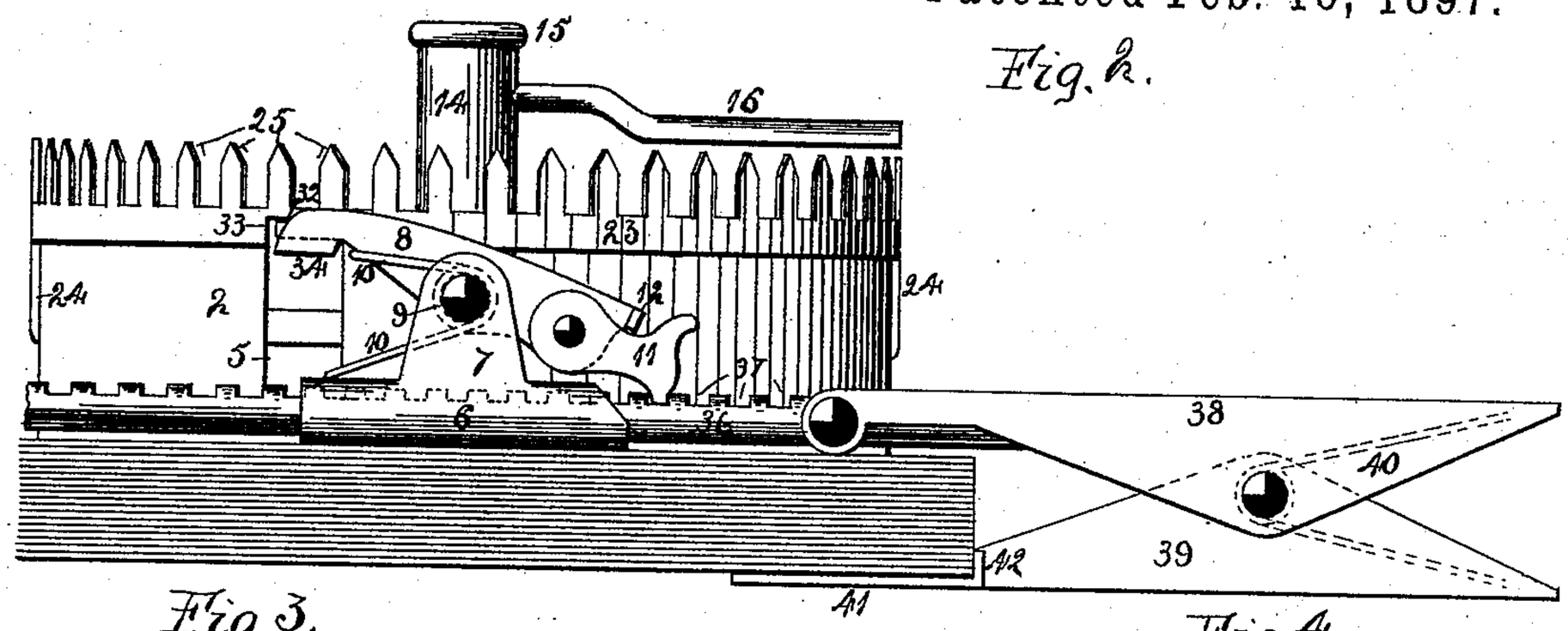


Fig. 3.

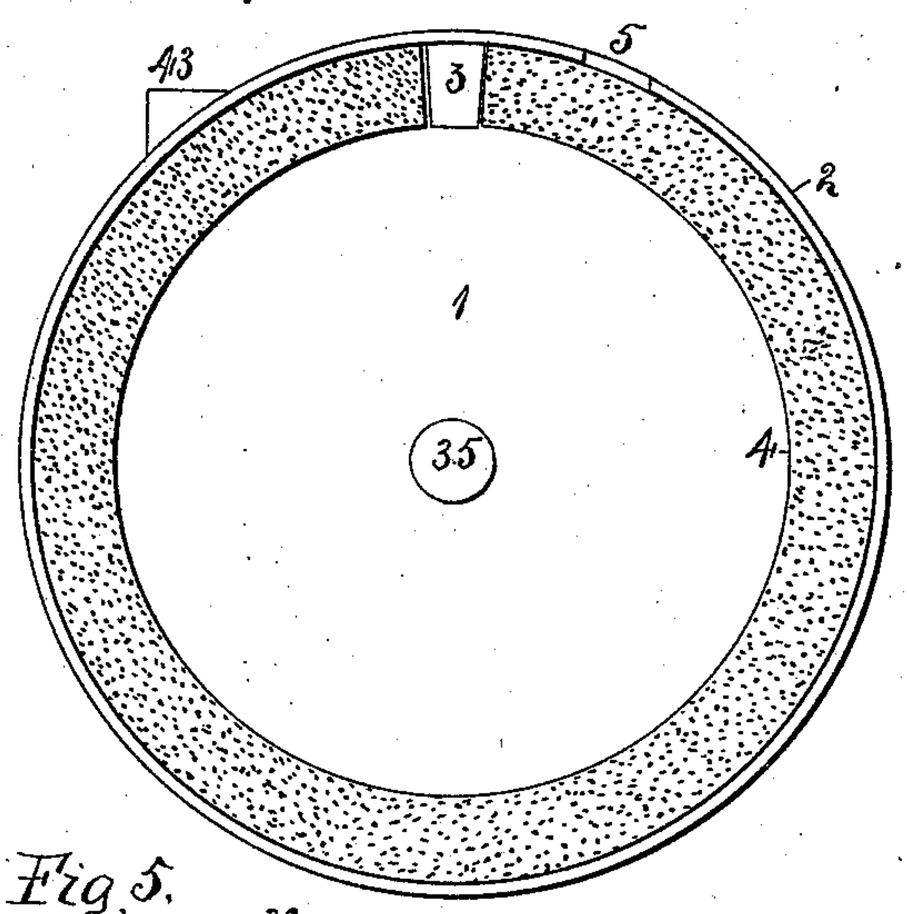


Fig. 4.

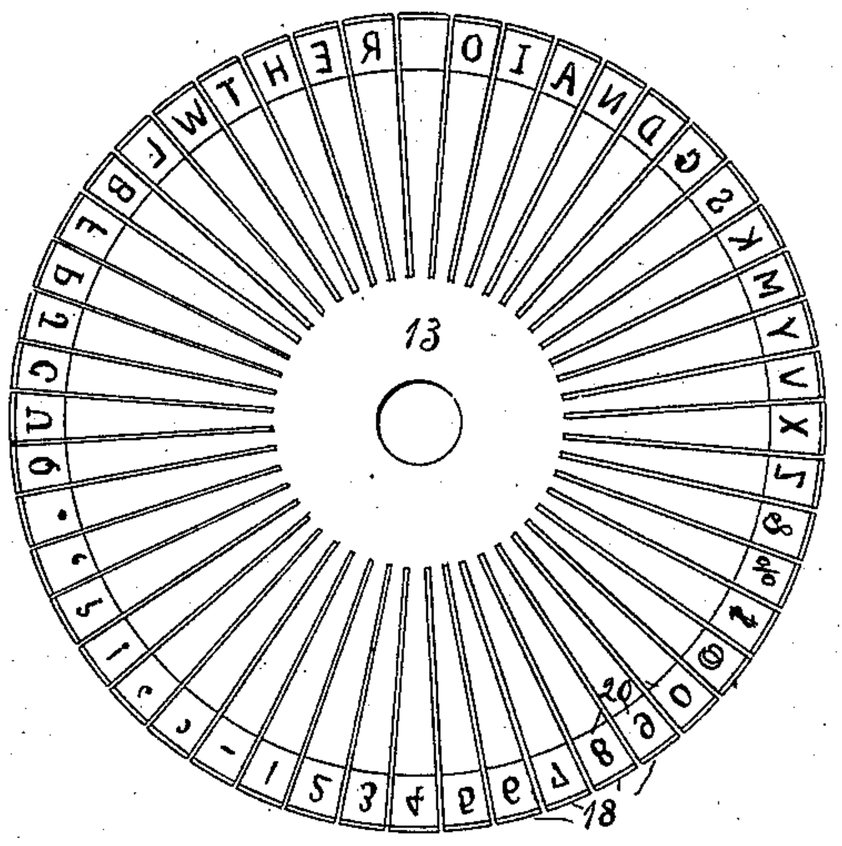


Fig. 5.

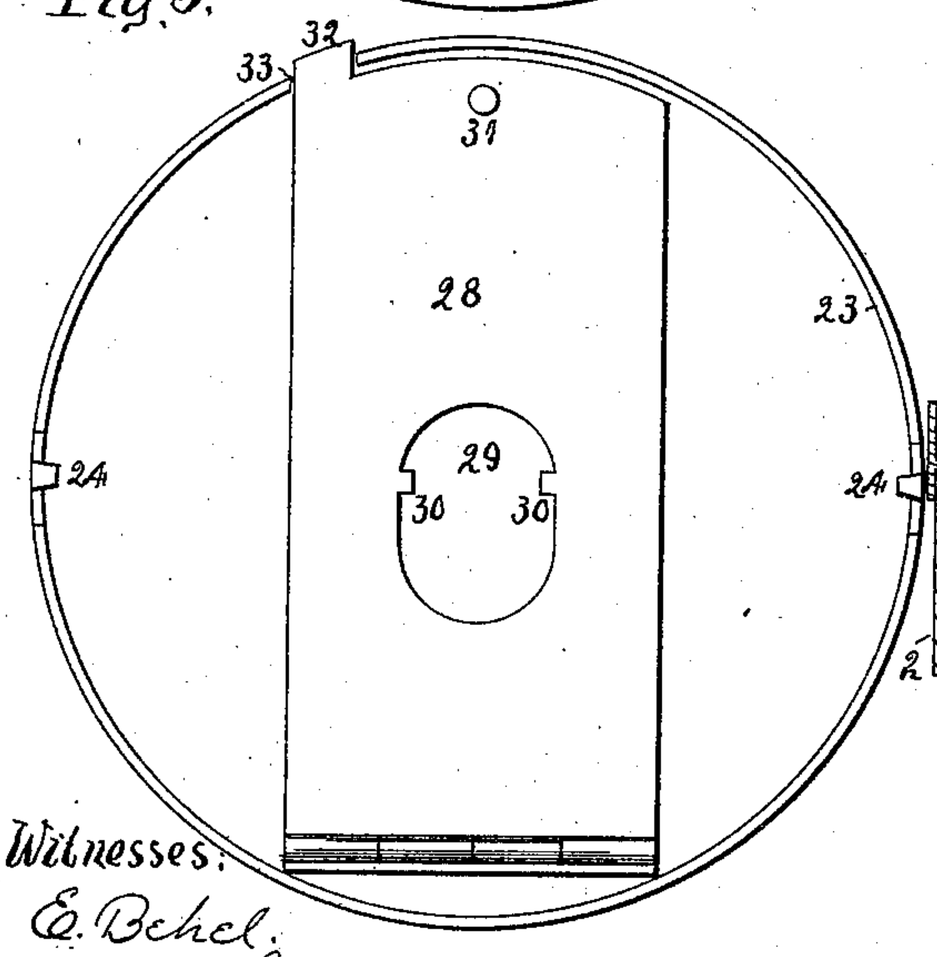
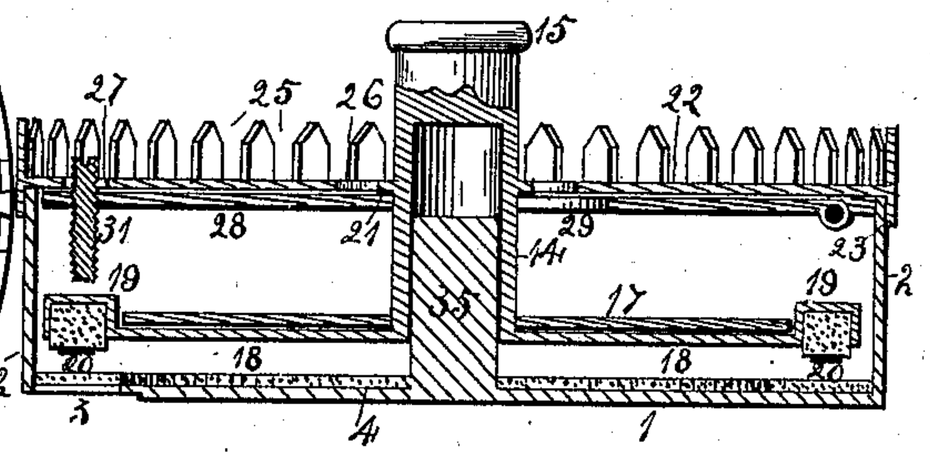


Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES P. MARS, OF ROCKFORD, ILLINOIS.

POCKET TYPE-WRITER.

SPECIFICATION forming part of Letters Patent No. 577,049, dated February 16, 1897.

Application filed May 7, 1896. Serial No. 590,632. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. MARS, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improevments in Pocket Type-Writers, of which the following is a specification.

The object of this invention is to construct a type-writer which may be carried in the vest-pocket and be attached to a tablet of paper and operated in connection therewith.

In the accompanying drawings, Figure 1 is a plan view of my improved type-writer and its connection with a tablet of paper. Fig. 2 is an elevation of the same. Fig. 3 is a plan view of the receptacle, showing the ink-pad. Fig. 4 is an under face view of the type-carrying arms. Fig. 5 is an under face view of the dial. Fig. 6 is a vertical section on dotted line *a*, Fig. 1.

The type-writer proper or writing-machine consists of a cup-shaped receptacle having a bottom 1 and rim 2, connected together or stamped from a single piece. The bottom has an opening 3 near its edge, and an ink-pad 4 is secured to the bottom, having a section cut away at the opening 3. The rim has a vertical slot 5. To the outer face of the rim near the bottom is secured a tubular guideway 6, having an upwardly-extending lug 7. A lever 8 is pivotally supported between this lug and rim upon a pivot 9. A spring 10 is coiled around the pivot, one end engaging the lever and its other end lying in contact with the upper face of the tubular guideway, holding the lever in the position shown at Fig. 2. To one end of this lever is pivoted a dog 11, in this instance operated by gravity, and a lug 12, extending from the lever, overlies the dog, insuring its descent. Within the receptacle is located a type-supporting disk (shown at Fig. 4) consisting of a disk 13, to which is connected a central stud 14, having a knob 15 at its end. A pointer 16 extends radially from the stud. On the upper face of this disk 13 is located a disk 17, which is connected to the central stud. The type-carrying arms 18 are formed from the disk by slitting it radially into the required number. The end of each arm is bent to form a cup 19, within which the type 20 are located. An enlargement 21 is formed on the stud 14.

A dial 22 has the letters, figures, and characters used in type-writing arranged in a circle at its outer edge. This dial has a depending flange 23, fitted to receive the open end of the rim 2, and the spring-clasps 24 have hooked ends which enter openings in the rim 2, thereby forming a connection between the dial and receptacle. The upper face of the dial has a flange provided with vertical notches 25, one for each type-arm. A central opening 26 is formed in the dial, also an opening 27 directly over the opening 3 in the bottom. To the under face of the dial is provided a plate 28, having a central opening 29, provided with inward projections 30. This plate supports a screw 31, which passes through the opening 27 in the dial, and from the free end of the plate extends a projection 32, extending through an opening 33 in the depending flange 23 of the dial. The stud 14 of the type-supporting arm is passed through the central opening of the plate 28 and dial 22, and the projections 30 of the plate will support the type-supporting disk by engaging the enlargement 21 of the stud 14. The dial is secured in connection with the receptacle, and the projections 32 of the plate 28 will rest upon an inward projection 34, extending from the arm 8, and the action of the coil-spring 10 will be to hold the type-carrying disk above the ink-pad.

By turning the knob 15 any one of the type can be brought over the opening 3 in the bottom, and by depressing the knob the type-bars and plate 28 will be depressed, causing the type to come in contact with the ink-pad, and the screw 31, carried by the plate 28, will be forced against the type-bar supporting the type located over the opening 3 in the bottom, causing it to come in contact with the paper placed beneath it, upon which it will leave its imprint, and by adjusting the screw 31 the force of the impression may be regulated. The pointers 16 will enter the notches 25, forming a guide to the vertical movement of the type-supporting disk, and at each impression of the type the remainder of the type will be inked. A stud 35, extend-

ing from the center of the bottom, forms the pivot upon which the type-carrying disk revolves, also a guide for its vertical movement.

In order that the writing-machine may be moved across the paper during the printing process, I have designed an escapement consisting of a rod 36, provided with square notches 37 along its upper edge. A clamp composed of jaws 38 and 39 are pivoted together and closed by a spring 40, located between them. The lower jaw has a lateral extension 41, provided with an upturned edge 42. The upper jaw supports the rod 36 in a pivotal manner. This clamp receives a tablet of paper, the upturned edge 42 serving to hold the rod transversely of the tablet. The socket 6 of the writing-machine receives the rod 36 and the dog 11 engages the notches thereof. Upon depressing the plate 28 during the printing process its projection 32 will move the lever 8 upon its pivot, which will raise the dog 11 free of the notch it occupied, and upon the pressure upon the knob 15 being relieved the spring 10 will lower the dog into another notch of the rod, and as the rod is stationary the spring 10 will move the writing-machine the distance between the notches 37, thereby presenting a new surface for receiving the impression of the next type.

By tipping the writing-machine until it stands in a vertical plane the dog 11 will be disengaged from the teeth of the rod and may be adjusted upon the rod, and owing to the shape of the notches 37 and dog 11 the writing-machine is locked against movement in either direction until operated upon by the knob 15.

One of the arms of the disk 13 does not support a type, and when the pointer 16 is brought over the screw 31 this arm will be over the opening 3 in the bottom, and upon depressing the knob 15 an impression will not be made upon the paper, but the escapement will be operated, moving the machine one space.

From the lower edge of the receptacle extends a projection 43, which indicates the lower edge of the printing-line, which enables the machine to be replaced in proper position had it been displaced.

I claim as my invention—

1. In a pocket type-writer, the combination of a case containing the printing mechanism, a toothed rack, and an escapement connection between the case and rack, spring-actuated jaws having a pivotal connection, one of the jaws pivotally connected to the toothed rack and the other jaw provided with a gage.

2. In a pocket type-writer, the combination of a toothed rack, a case containing the printing mechanism, having a sliding engagement with the rack and an escapement connection therewith, the case having an outwardly-extending projection indicating the lower edge of the printing.

3. In a pocket type-writer, the combination of a case, a stationary dial-plate marked with the printing-characters, the upper edge of the plate provided with vertical notches, a disk located beneath the dial-plate provided with radial spring type-supporting arms, a stud connected with the disk extending through an opening in the dial-plate by which the disk is operated, having a pointer extending radial therefrom, a plate having a pivotal connection with the under face of the dial-plate and a connection with the stud, the plate supporting a screw adapted to engage one of the type-arms forcing the type of the arm in contact with the paper.

CHARLES P. MARS.

Witnesses:
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