

No. 619,290.

Patented Feb. 14, 1899.

J. FELBEL.
TYPE WRITING MACHINE.

(Application filed May 5, 1898.)

(No Model.)

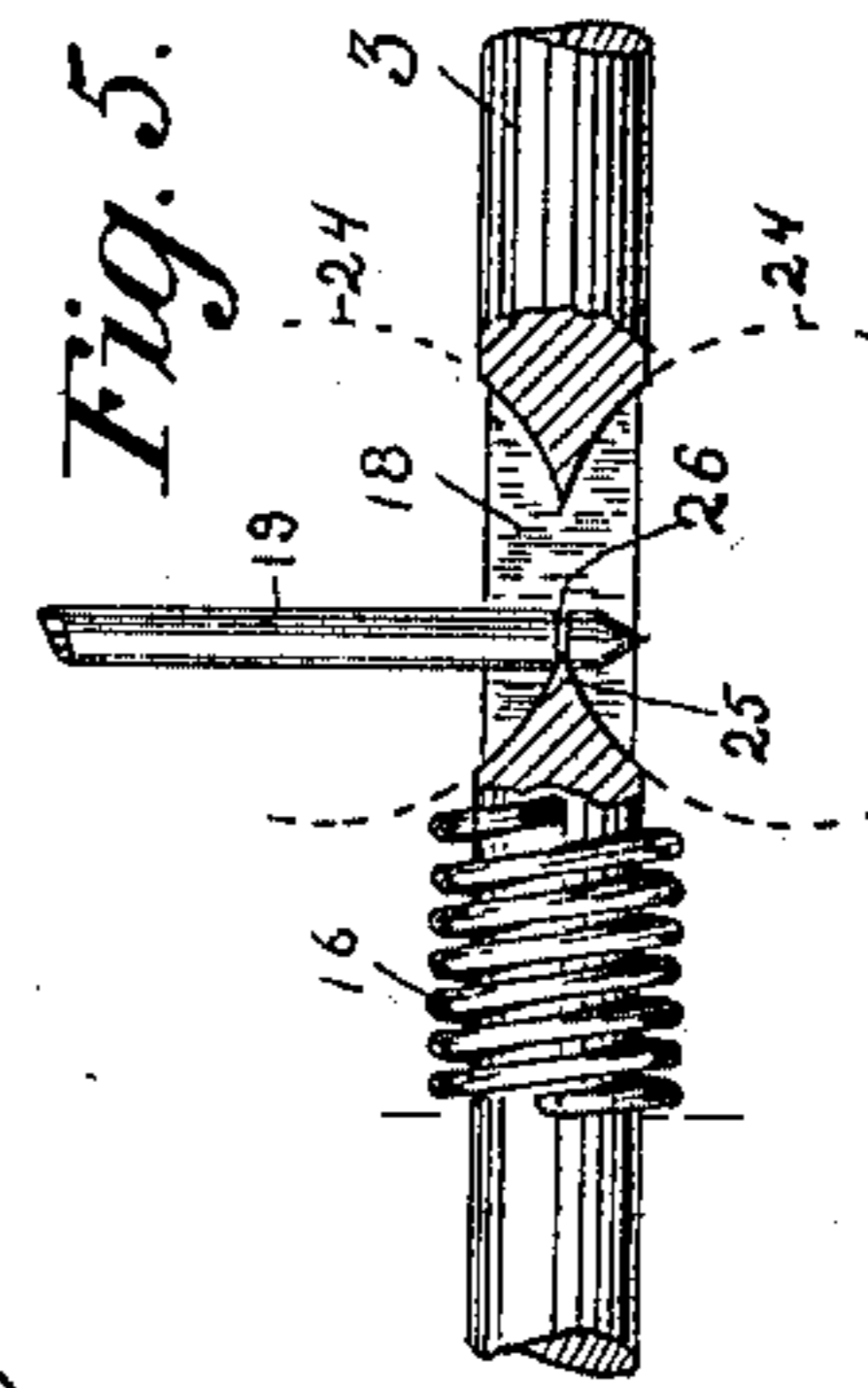
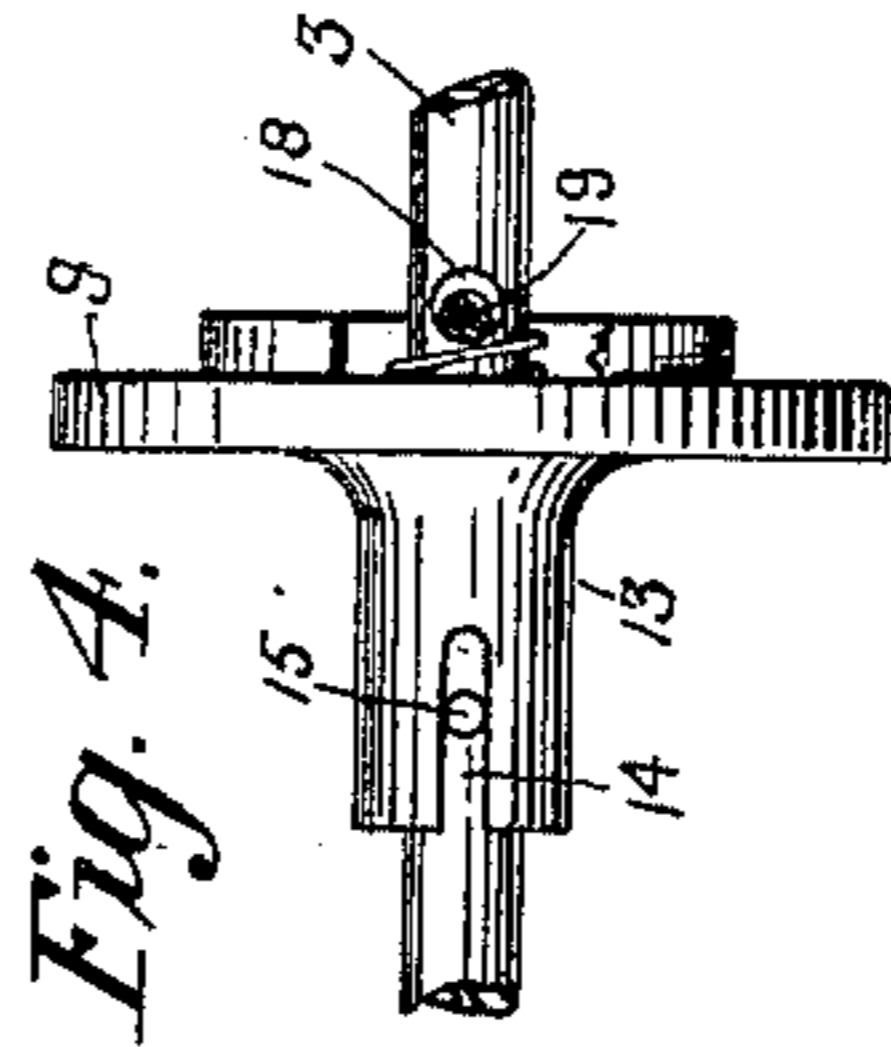
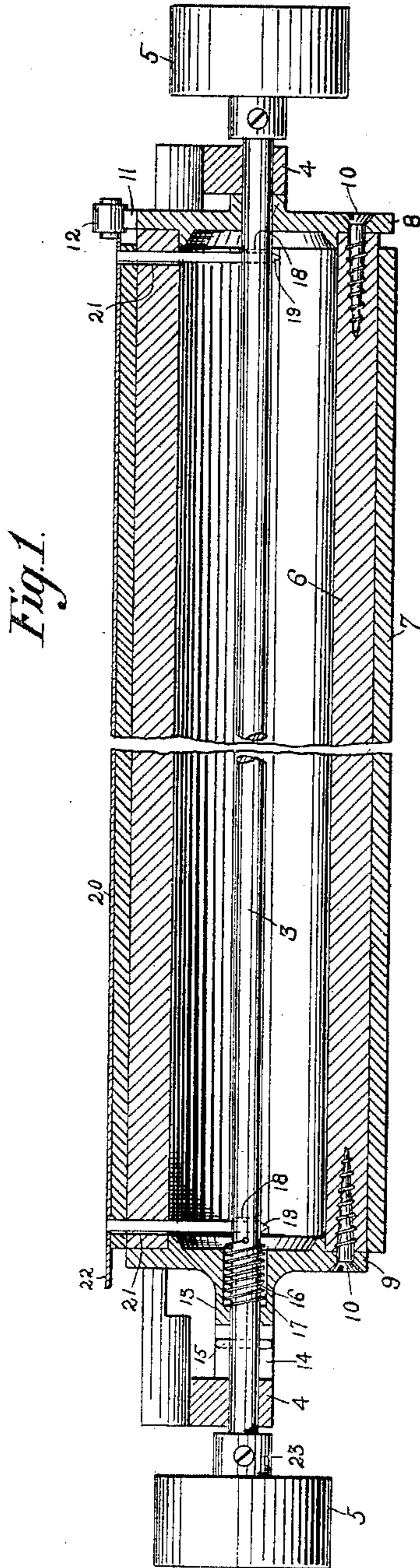
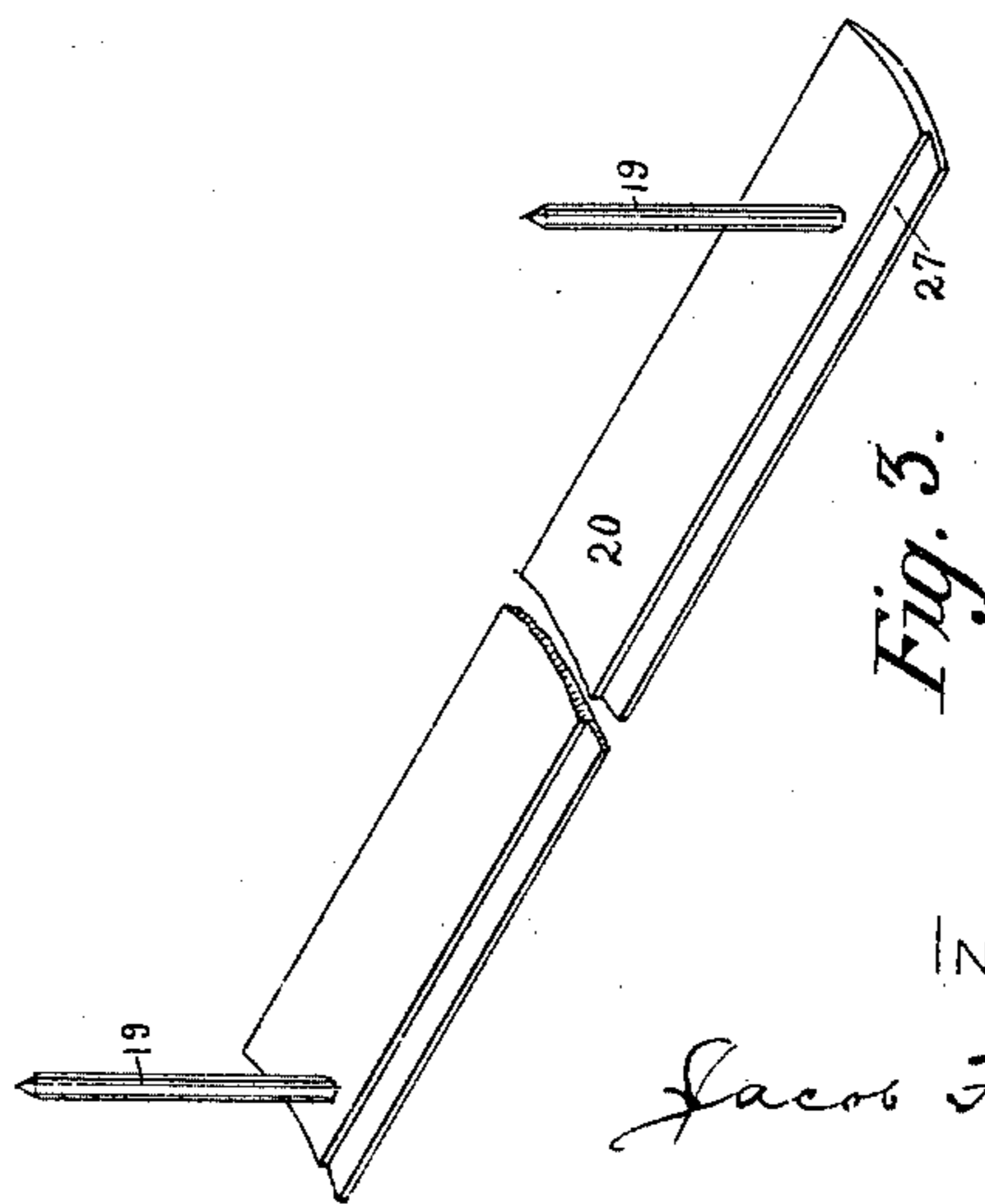
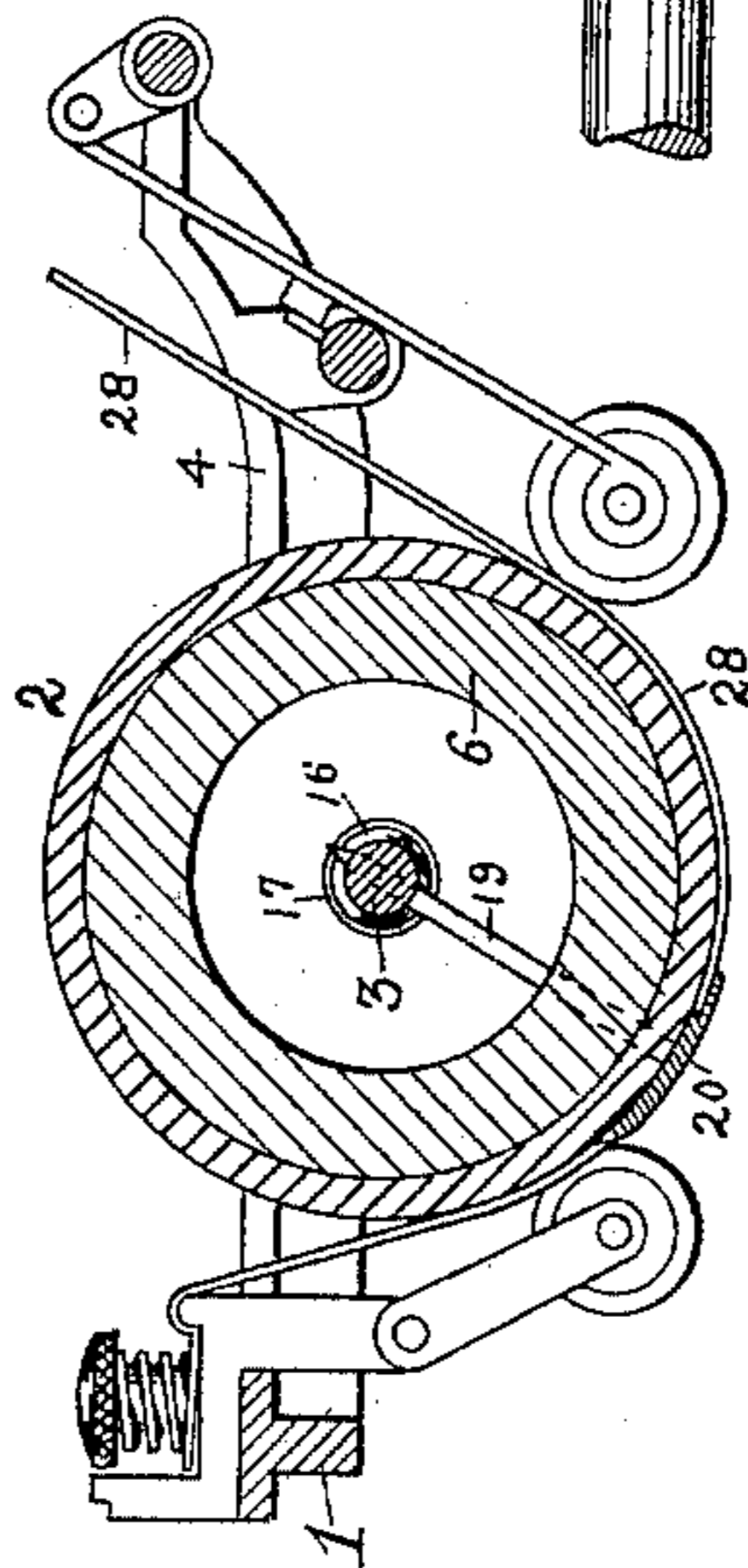


Fig. 2.



WITNESSES:

K. V. Donovan

Ethel Mills

INVENTOR

Jacob Felbel

UNITED STATES PATENT OFFICE.

JACOB FELBEL, OF NEW YORK, N. Y., ASSIGNOR TO THE WYCKOFF,
SEAMANS & BENEDICT, OF ILION, NEW YORK.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 619,290, dated February 14, 1899.

Application filed May 5, 1898. Serial No. 679,753. (No model.)

To all whom it may concern:

Be it known that I, JACOB FELBEL, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

The main object of my invention is to provide means whereby a card-holder may be readily attached to and detached from the platen of a type-writing machine and also to provide such a construction as that the platen may be used for ordinary work upon paper when the card-holder is removed, thus obviating the necessity of the employment of two different platens for the two kinds of work, which has been general heretofore.

To this end my invention consists, first, in combining with a perforated platen a card-holder having pins or legs adapted to the perforations in the platen, and, secondly, in combining with a perforated platen and card-holder having pins or legs means for holding or catching the card-holder device to provide more effectually against accidental detachment thereof; and my invention consists in certain other features of construction and combinations of devices, all of which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a longitudinal vertical section of a portion of a type-writing machine embodying my improvements. Fig. 2 is a cross-section thereof. Fig. 3 is a perspective view of the card-holder detached. Fig. 4 is a detail view of the left-hand platen-head, a portion of the platen axle or shaft, the pressure-spring, and one of the pins of the card-holder in engagement with the shaft or axle, the pin being shown in section; and Fig. 5 is a detail view, partly in section, of the pin and the spring-pressed shaft, the hole or opening in the shaft being different in form from that shown in the other views and the pin being provided with a notch or groove.

In the several views the same part will be found designated by the same numeral of reference.

1 designates the carriage or platen frame

of a type-writing machine, 2 the platen, and 3 the platen shaft or axle, which, as usual, is supported at its ends in side bars 4 of the frame or carriage and at its extremities is provided with hand wheels or knobs 5 for rotation of the shaft and of the platen connected thereto. The platen consists of a hollow core 6, having a rubber or other suitable covering or sheath 7, and heads 8 and 9, secured to the ends of the core by screws 10.

The right-hand platen-head 8 is preferably provided with ratchet-teeth 11 to cooperate with the usual line-spacing mechanism, (not shown in its entirety;) but the usual holdfast spring-pressed roller or detent employed is indicated at 12.

The left-hand platen-head 9 is formed or provided with a sleeve or hub 13, which surrounds the shaft 3 and which is slotted longitudinally, as at 14. The shaft 3 is provided with a pin 15, whose ends engage the longitudinal slots 14 on diametrically opposite sides of the shaft and cause the platen-head and platen to turn when the shaft itself is turned, while at the same time the shaft is enabled to move longitudinally a limited distance independently of the sleeve or hub 13. Surrounding the shaft is a coiled spring 16, one end of which is attached to the shaft and the opposite end bears at the bottom of a hole or housing 17, formed in the hub or sleeve 13. The tendency of said spring is to move the shaft toward the right. That portion of the shaft within the platen is formed with two transverse holes or perforations 18, one near each platen-head, to receive the inner free ends of pins, legs, or projections 19, extending rigidly from the under side of the card-holder 20. The said pins or the like 19 pass through radial perforations 21, formed at the ends of the platen and which are located a distance apart about equal to the distance apart of the pins 19 and the distance apart of the perforations 18 in the shaft, the several perforations being slightly larger in diameter than the diameter of the pins, which latter are made preferably of small cross-section, so as to require as small-sized holes in the platen as possible, and thus to reduce the defacement of the surface of the platen to the minimum. The working field or surface of the platen be-

tween the perforations 21 is left uniform or unmutilated, so that when the card-holder is detached the platen is adapted for work upon ordinary paper.

5 The card-holder is applied to the platen by passing the pins 19 through the holes 21 in the platen and into the holes 18 in the shaft or rod 3. The holes in the shaft normally do not accurately register with the holes in the
10 platen, and hence for the purpose of enabling the pins to pass into the holes in the shaft the shaft is first pushed slightly toward the left against the tension of its spring 16, so as to bring the holes 18 in alinement with the holes
15 21, and when this has been done and the pins have engaged the holes 18 the pressure upon the shaft is removed, whereupon the spring 16 causes the shaft to move slightly toward the right and the left hand sides or walls of
20 the holes therein are caused to press against the sides of the pins. The friction produced by the pressure of the spring 16 between the shaft and pins, together with the friction of the pins within the holes 21, is sufficient to
25 lock or hold the card-holder upon the surface of the platen against casual detachment. Of course when it may be desired to remove the card-holder it is simply necessary to move the shaft endwise again toward the left to remove
30 the pressure of the spring, whereupon the card-holder may be instantly detached by lifting the pins out of the holes, the card-holder being provided, preferably, with a finger-piece 22 to facilitate its removal. The endwise
35 movements of the shaft may be limited or regulated by the distances of the hubs 23 of the hand-wheels 5 from the outer sides of the end bars 4. Of course, instead of the large round holes 18 in the shaft, square holes or
40 slots may be formed therein, and, as shown at Fig. 5, the holes 18 in the shaft may be formed by milling the shaft from opposite sides, as indicated by the dotted circles 24, so as to provide a beveled or sharp edge 25 to
45 engage a groove or notch 26 in the pin 19, and thus more firmly and positively hold the card-holder.

While I prefer to move the shaft endwise by hand, as above explained, to bring the
50 holes or openings in the shaft in register with the descending pins, it will be understood, of course, that the holes may be so situated relatively to the beveled or tapering points of the pins as that the pins will strike within the
55 holes eccentrically thereof and then wedge or force the shaft longitudinally as the beveled ends of the pins are farther inserted, thus compressing the spring, and when it may be desired to remove the card-holder it may be
60 pulled off directly against the pressure of the spring without specially manipulating the shaft.

The card-holder preferably consists of a bar extending for the full length of the platen and
65 provided at one edge with an undercut, so as to form an overhanging ledge 27 for the in-

troduction of the card 28 in a manner common heretofore.

Although I prefer to make the holes for the pins slightly larger than the cross-section of
70 the pins and to use some means for holding the card-holder against accidental detachment, it will be understood, however, that the holes in the platen may be made smaller, so as to afford the pins a close fit and produce
75 enough friction to hold the card-holder in place without even engaging the pins with the shaft; but this specific construction forms the subject-matter of another application filed by me December 14, 1898, Serial No. 699,261.
80

What I claim as new, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination with a cylindrical platen having a uniform or unmutilated surface throughout its
85 working field (whereby the platen may be used for ordinary work upon paper) and having perforations at its ends, of a card-holder for temporary use only and adapted to bear upon the plain, unmutilated surface of the
90 platen and having pins or legs that extend directly from the under side of said card-holder and are adapted to the perforations in the platen; whereby the said card-holder is adapted for quick attachment to the platen
95 when it is desired to print upon cards and for quick detachment therefrom when it is desired to use the platen for printing upon ordinary paper.

2. In a type-writing machine, the combination with a perforated platen, of a detachable
100 card-holder having fixed pins or legs and supplemental means for holding the card-holder adapted automatically to engage said pins or legs when the latter are inserted and to re-
105 lease the same when the card-holder is simply lifted from the surface of the platen.

3. In a type-writing machine, the combination with a perforated platen, of a detachable
110 card-holder having fixed pins or legs and means on said platen for engaging or catching said pins or legs interiorly of the platen.

4. In a type-writing machine, the combination with a perforated platen, of a detachable
115 card-holder having fixed pins or legs, and a perforated spring-pressed endwise-movable platen shaft or axle.

5. In a type-writing machine, the combination of a platen having a perforation at or near each end, a detachable card-holder hav-
120 ing a fixed pin or leg at or near each end, a platen shaft or axle having perforations within the platen to receive said pins or legs, and a spring for causing said shaft or axle to press against said pins or legs.
125

6. In a type-writing machine, the combination of a platen having a head provided with a slotted sleeve or hub, a platen shaft or axle adapted to move endwise and provided with a pin to engage said slotted sleeve or hub and
130 also provided with a spring to move said shaft in one direction, perforations in the platen

and perforations in the shaft or axle, and a card-holder provided with pins or legs passing through the perforations in the platen and entering the perforations in the shaft or axle.

5 7. In a type-writing machine, the combination of a platen formed with perforations, an endwise-movable spring-pressed platen shaft or axle formed with perforations, and a card-
10 holder provided with pins or legs having at their lower or inner ends grooves or notches for engagement by the edges of the perforations in the shaft or axle.

8. A card-holder comprising a bar adapted

to lie upon the surface of a cylindrical platen 15 and having at its forward edge an undercut and a projecting ledge, and also provided at or near its ends with fixed pins or legs which project from the under side of said bar and are adapted to pass into holes formed in the 20 said platen.

Signed at the borough of Manhattan, in the city, county, and State of New York, this 4th day of May, A. D. 1898.

JACOB FELBEL.

Witnesses:

K. V. DONOVAN,
ETHEL WELLS.