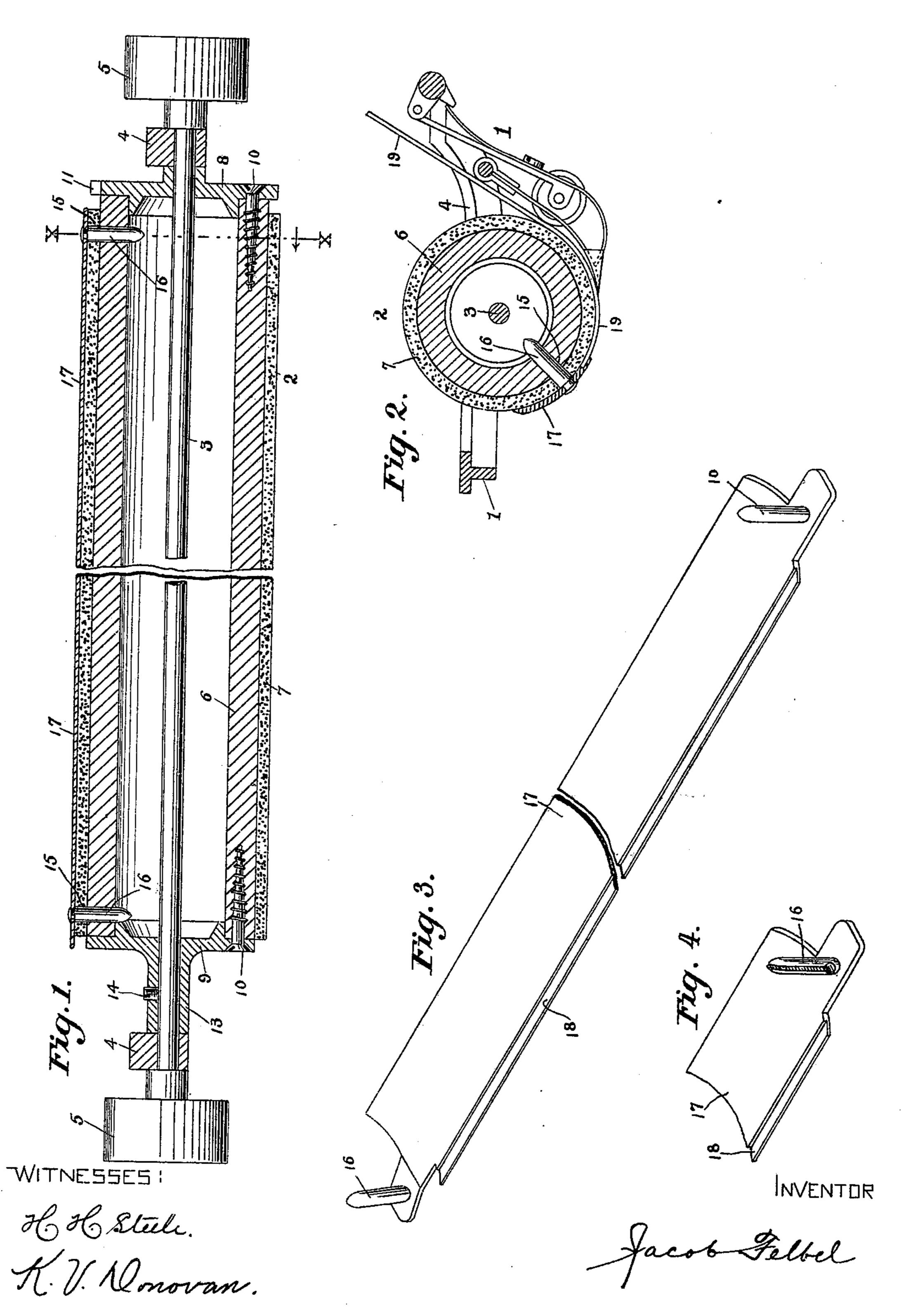
## J. FELBEL. TYPE WRITING MACHINE.

(Application filed Dec. 14, 1898.)

(No Model.)



## 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. 619,880, dated February 21, 1899.

Application filed December 14, 1898. Serial No. 699,261. (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, in the city of New York, in the county of New York 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 on 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, prima-20 rily, in combining with a perforated platen a card-holder having pins or legs adapted to pass into the perforations in the platen with a snug fit and by reason of the frictional engagement thereof properly retain the card-25 holder in working position upon the surface of the platen.

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, taken at the line x x of Fig. 1. Fig. 3 is an inverted perspective view of the cardholder detached; and Fig. 4 is a similar view of one end of the card-holder, showing a modified construction of pin or leg.

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

1 designates the carriage or platen-frame
40 of a type-writing machine, 2 the cylindrical
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
45 for rotation of the shaft and of the platen
connected thereto. The platen consists, preferably, of a hollow core 6, having a rubber or
other suitable sheath or covering 7 and heads
8 and 9, secured to the ends of the core by
50 screws 10.

The right-hand platen-head 8 is preferably provided with ratchet-teeth 11 to coöperate with the usual line-spacing pawl. (Not shown.)

The left-hand platen-head 9 is formed or 55 provided with a sleeve or hub 13, which surrounds the shaft 3 and to which it is secured by a set-screw 14.

At or near each end the platen is formed with a radial perforation 15 to receive pins 60 or legs 16, extending rigidly from the under side of a card-holder 17, one at or near each end of the latter. The said pins or the like 16 are located a distance apart about equal to the distance apart of the holes 15 in the 65 platen. The pins or legs 16 may be secured to the card-holder 17 in any desired manner. I have shown said pins or legs as provided with reduced or shouldered ends, which pass through perforations in the card-holder and 70 are then riveted or upset upon the body of the latter. The free ends of the pins are preferably made tapering or conical, as shown, so as to facilitate their introduction into the holes in the platen, and preferably the points 75 are distant from each other a trifle more than the distance between the centers of the holes in the platen, so that the pins have to be flexed a little in pushing them into the holes, whereby greater friction is secured.

The card-holder comprises a bar or plate extending for the full length of the platen and provided at one edge with an undercut, so as to form an overhanging ledge 18 for the introduction of the card 19 in a manner com- 85 mon heretofore.

The card-holder is applied to the platen simply by passing or forcing the pins 16 into the holes in the platen. The said holes preferably extend through the sheath and the core, 90 so as to afford the pins a longer bearing in the holes; but I do not wish to be limited to holes in the platen that extend entirely through the core or rubber support. The pins being made of a diameter substantially equal to that of 95 the holes in the platen, they in consequence have a snug or comparatively tight fit in said holes, and hence merely by the friction of the pins in the holes the card-holder is maintained firmly in working position upon the platen at 100

all times during the use of the same. When it may be desired to remove the card-holder, so as to employ the platen for writing upon paper, the device is simply lifted or picked off, to facilitate which operation the end of the card-holder may project slightly beyond the end of the rubber cover of the platen, or in lieu thereof the rubber may be beveled or chamfered off, so as to enable the finger to take a hold on the under side of the card-holder.

For the purpose of securing additional friction or greater gripping action of the pins within the holes the pins may be slotted or bifurcated, as shown at Fig. 4, so that the forks or members may have a spring-like action. In this construction the free ends of the bifurcated pins are caused slightly to approach each other as they enter the holes in the platen, and in consequence the resiliency of the forks or members causes them to tend to spring outwardly and bind with greater force in the holes.

In a companion case filed by me May 5, 1898, Serial No. 679,753, the improvement made the subject-matter of this application is referred to, but not specifically claimed.

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

by Letters Patent, is—

1. In a type-writing machine, the combination with a perforated platen, of a detachable card-holder having a pin or leg adapted to enter a perforation in the platen and hold the card-holder upon the surface of the platen by the frictional engagement of said pin with

the walls of said perforation; substantially as described.

2. In a type-writing machine, the combination with a perforated platen, of a detachable card-holder having pins or legs adapted to 40 enter perforations in the platen and hold the card-holder upon the surface of the platen by the frictional engagement of said pins with the walls of said perforations; substantially as described.

For the purpose of securing additional friction or greater gripping action of the pins ithin the holes the pins may be slotted or furcated, as shown at Fig. 4, so that the rks or members may have a spring-like action. In this construction the free ends of the purpose of securing additional friction with a perforated platen, of a detachable card-holder having bifurcated pins or legs adapted to enter perforations in the platen and hold the card-holder upon the surface of 50 the platen by the frictional engagement of said pins with the walls of said perforations;

substantially as described.

4. In a type-writing machine, the combination with a perforated platen, of a detachable 55 card-holder having pins or legs the free ends of which are tapering and are separated at their points slightly in excess of the distance apart of the perforations in the platen measured from center to center; substantially as 60 described.

Signed at the borough of Manhattan, in the city of New York, in the county of New York and State of New York, this 13th day of De-

cember, A. D. 1898.

JACOB FELBEL.

Witnesses:

K. V. Donovan, E. M. Wells.