

No. 795,707.

PATENTED JULY 25, 1905.

C. A. KLEIN.
INTERCHANGEABLE PEN HOLDER.
APPLICATION FILED NOV. 10, 1904.

Fig. 1.



Fig. 2.

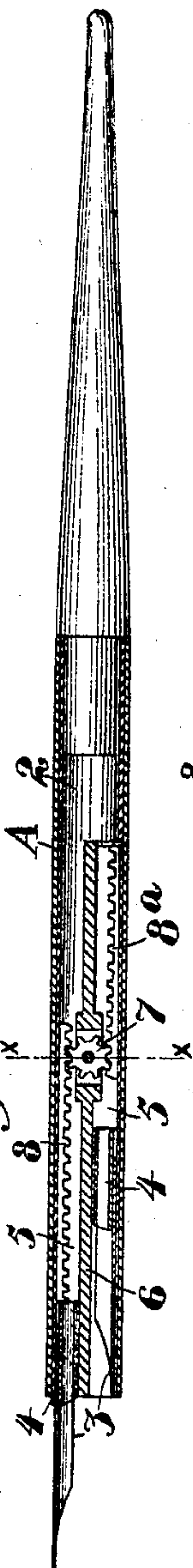


Fig. 3.

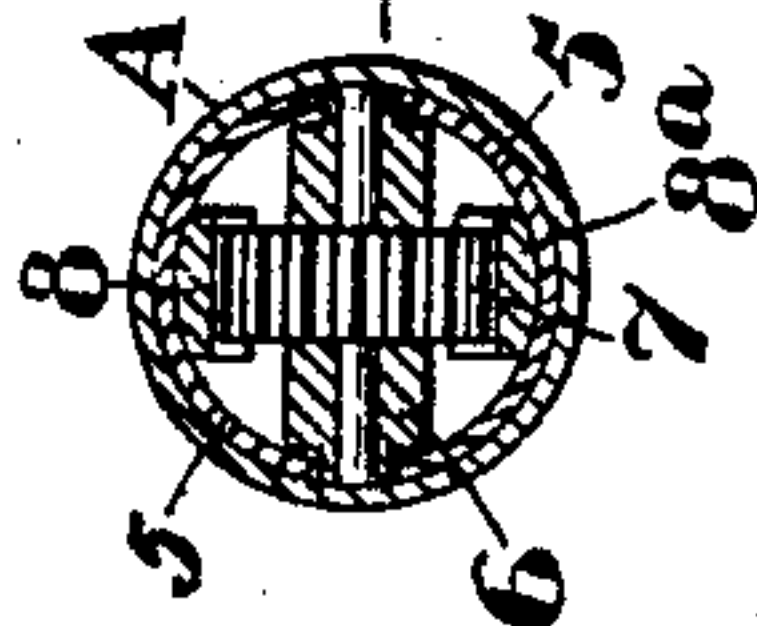
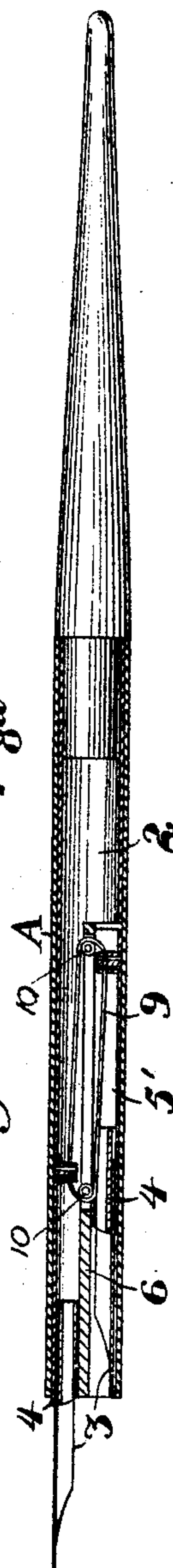


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES A. KLEIN, OF SAN FRANCISCO, CALIFORNIA.

INTERCHANGEABLE-PEN HOLDER.

No. 795,707.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed November 10, 1904. Serial No. 232,119.

To all whom it may concern:

Be it known that I, CHARLES A. KLEIN, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Interchangeable-Pen Holders, of which the following is a specification.

My invention relates to improvements in pens; and its object is to provide a simple and reliable means whereby two pens may be interchanged within the same holder without loss of time.

It consists in the mounting of two pens within the same holder and a mechanism by which one of said pens is retracted when the other is advanced.

It also comprises details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 shows my improved pen. Fig. 2 is a central section of same. Fig. 3 is a section on line *xx* of Fig. 2. Fig. 4 is a modification of same.

Bookkeepers and those employed in similar work where two colors of ink are often required find it necessary to employ two separate pens, one of which must be laid down when the other is taken up, and time is thus lost.

It is the object of my invention to provide a single implement in which two pens are carried and mechanism by which one pen may be retracted and the other advanced whenever needed.

As shown in the accompanying drawings, the penholder may be made of any suitable or convenient material of sufficient lightness and strength, such as hard rubber, aluminum, or the like. It may consist of a cylindrical or other suitably-shaped shell A and a similarly-shaped portion 2, which is slidable within the outer shell or casing. The portion 2 may have any suitable continuation of sufficient length to form the handle, either as a part of itself or suitably attached thereto. The pens 3 are fitted into the usual sockets 4, and these sockets are connected with slides, as at 5, guided and movable within the outer shell. Intermediate between these slides is a diaphragm 6, which is fixed across the casing, extending longitudinally thereof. The two opposite slides or carriers are adapted to move upon opposite sides of this diaphragm and may be so connected that the movement of one of the slides and its pen in one direc-

tion will cause the other slide and pen to be moved in the opposite direction.

As shown in Fig. 2, 7 is a pinion journaled in the slot in the diaphragm so that its teeth project in opposite directions.

One of the slides or pen-carriers is connected directly with an extended end portion of the inner sliding section 2 and the other is movable independently upon the opposite side of the diaphragm. Each of these carriers has its inner face provided with a toothed rack, as at 8 8^a, which engage with opposite sides of the pinion. It will be seen, therefore, that when the handle and the portion 2, slidable within the outer casing A, Fig. 2, is pushed inwardly the teeth of the rack 8 will engage with the teeth of the pinion and revolve the pinion so that its teeth upon the opposite side of the diaphragm engaging the rack 8^a will retract that rack, and with it the slide and pen with which it is connected, so that when the pen carried by the portion 2 is advanced the other one will be fully retracted within the casing. When it is desired to use the second pen, it is only necessary to pull the slide 2 outward within the casing A, when a reverse action of the racks and pinions will take place and the first pen will be retracted and the second one advanced. Thus both black and red ink pens may be used in the same holder and easily interchanged at any time when required.

It will be seen that various equivalent devices may be employed for advancing and retracting the pens. Thus pulleys or rollers 10 may be journaled in the diaphragm 6, and a flexible cord or strap 9 may pass around these pulleys and may have its ends connected one with the sliding portion 2 and the other with the slide 5, Fig. 4, carrying the opposite pen, while the bight of the strap or cord will pass over the pulleys. The operation of this device is the same as that of the pinion and racks.

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

1. The combination of a casing and a handle portion one slidable relative to the other, pen-sockets adapted to move in unison with the slidable member, and means whereby a movement of one socket in one direction produces a corresponding movement of the other socket in a reverse direction.

2. The combination in a pen of a hollow casing, a handle having an extension slidable

within said casing and a pen-socket carried thereby, a second pen-socket movable independently of the first named and connections whereby the two are slidable in opposite directions.

3. In a pen, an exterior or tubular casing, a handle and section slidable within said casing, a second section movable independently of the first named, both of said sections having pen-sockets at their forward ends, toothed racks fixed within the sections, a pinion pivoted intermediate with teeth upon opposite sides engaging the racks so that one section may be retracted when the other is advanced.

4. In a pen, a tubular casing, a diaphragm fixed centrally and longitudinally within said casing, a handle having a segmental section

slidable within the casing upon one side of said diaphragm, a second independent segmental section slidable within the casing upon opposite sides of the diaphragm, a pinion journaled in the diaphragm and projecting upon each side toward the inner curvatures of the segmental sections, and toothed racks fixed within said sections and engaging the teeth upon the opposite sides of the pinion.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES A. KLEIN.

Witnesses:

S. H. NOURSE,
HENRY P. TRICOU.