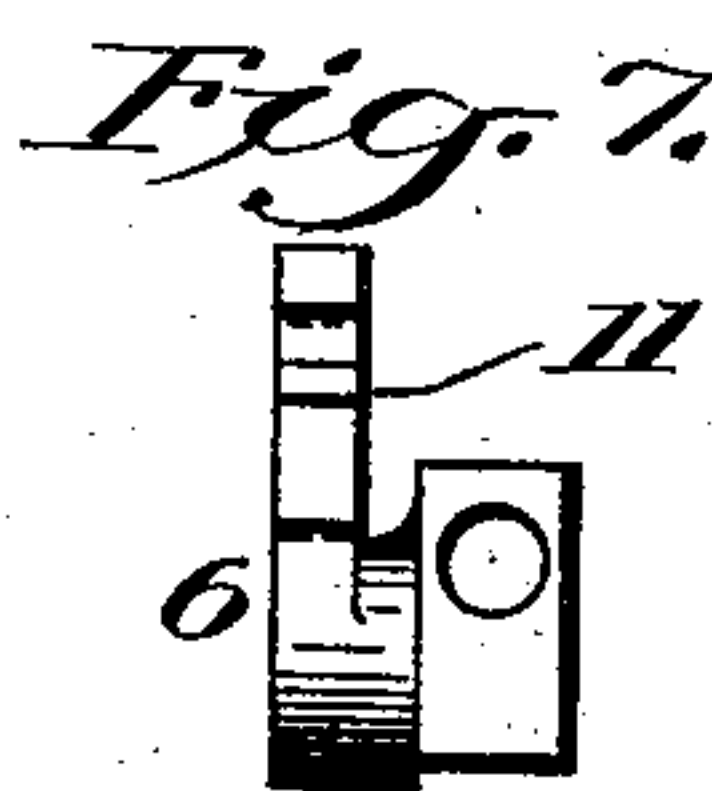
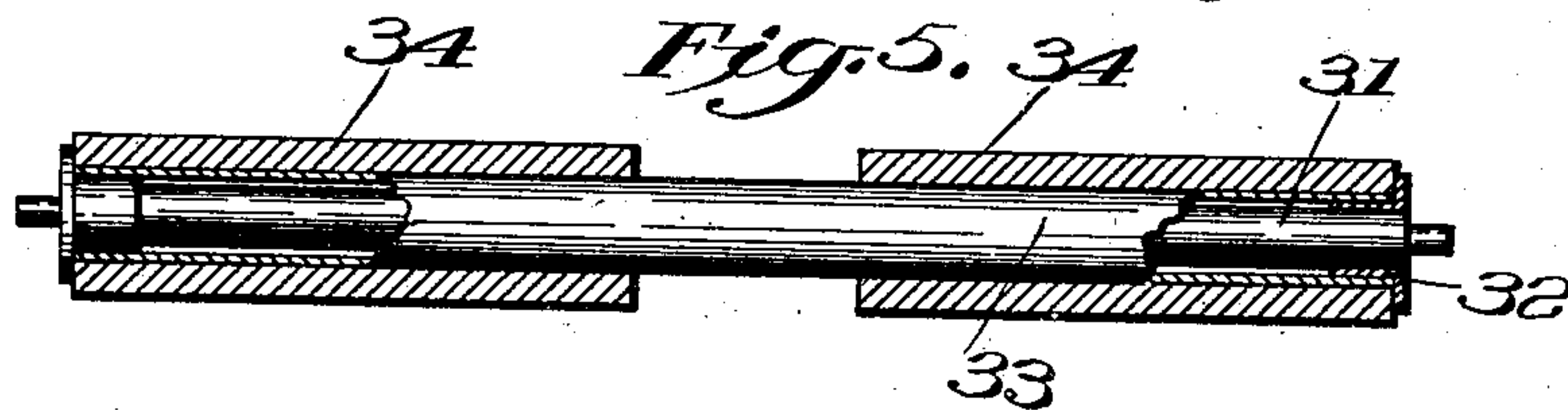
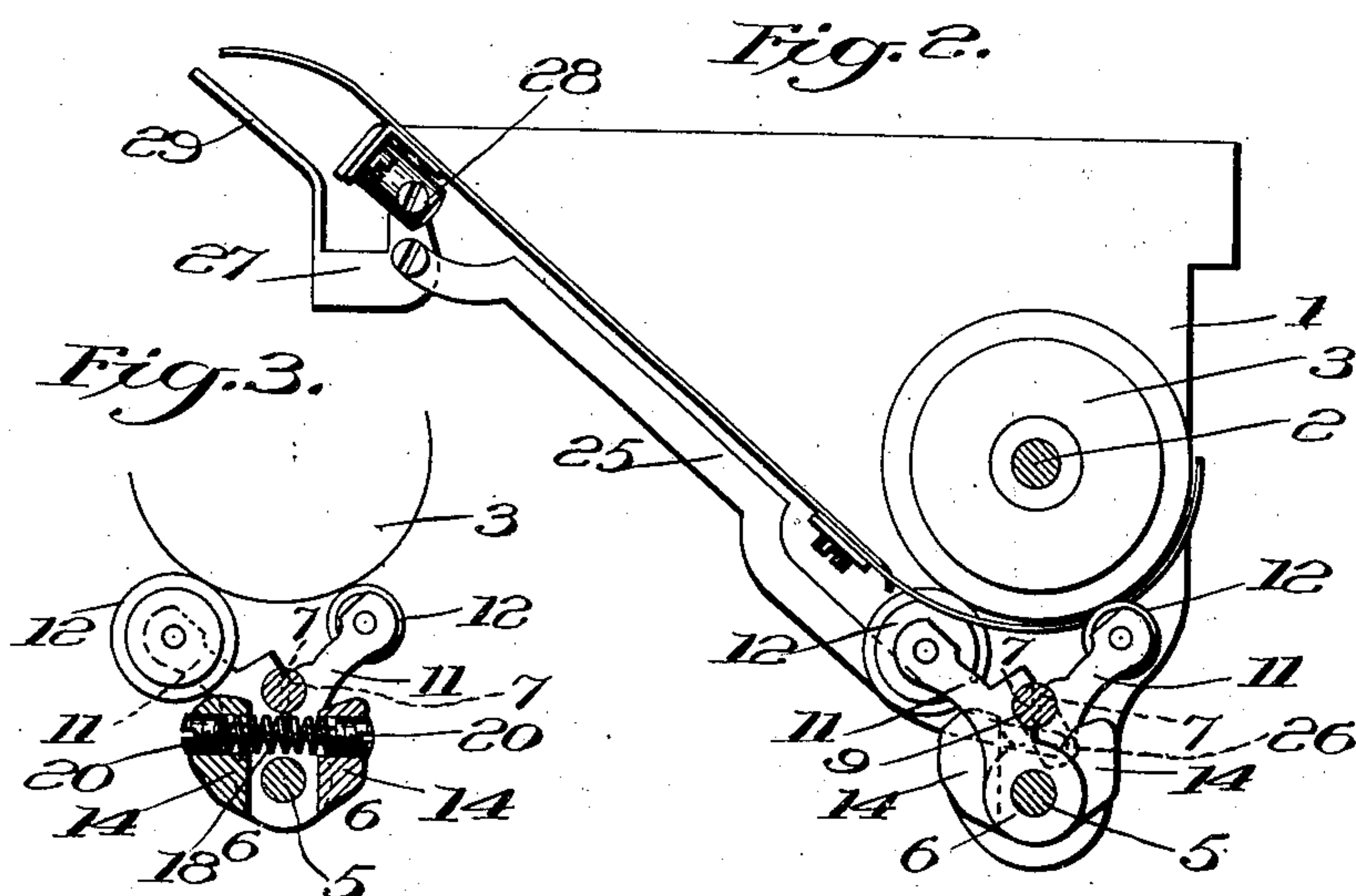
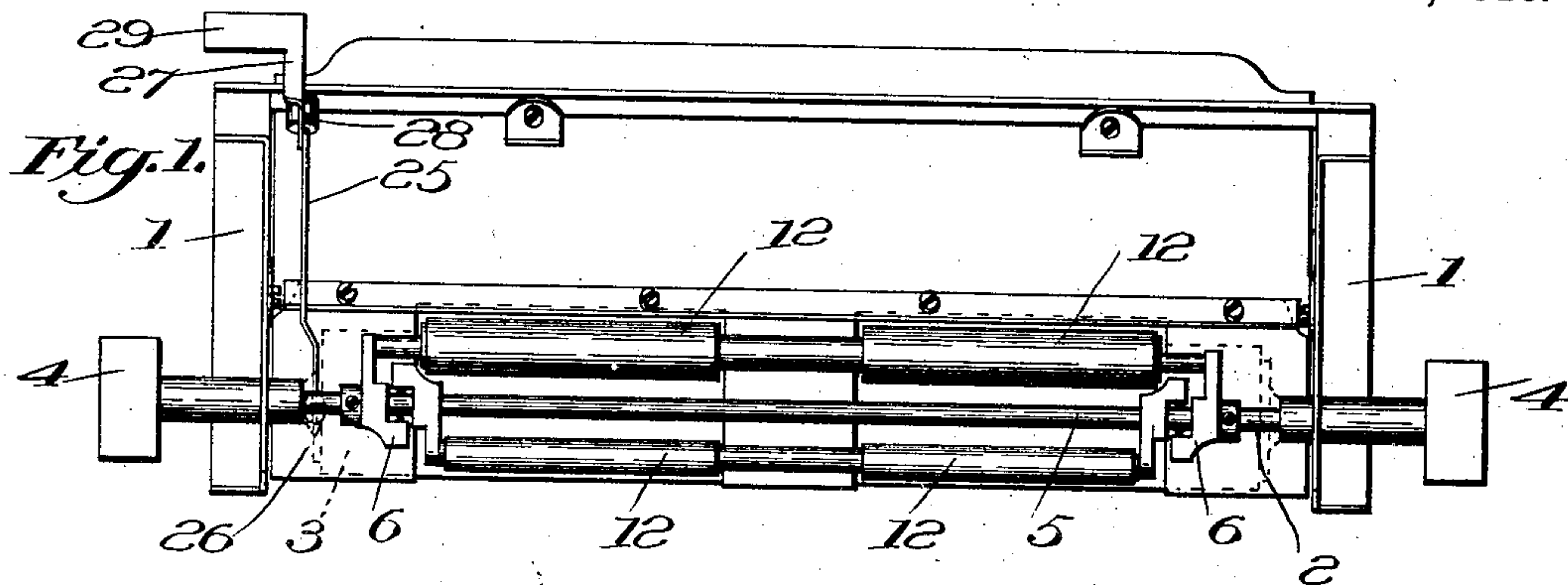


A. SCHNEELOCH.
PAPER FEED ROLLER.
APPLICATION FILED AUG. 21, 1905.

946,618.

Patented Jan. 18, 1910.



WITNESSES:
M. B. Smith
Allan H. Fosh.

INVENTOR
August Schneeloch
BY
Alfred Wilkinton
ATTORNEY

UNITED STATES PATENT OFFICE.

AUGUST SCHNEELOCH, OF SYRACUSE, NEW YORK, ASSIGNOR TO E. C. STEARNS & CO.,
OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

PAPER-FEED ROLLER.

946,618.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed August 21, 1905. Serial No. 275,083.

To all whom it may concern:

Be it known that I, AUGUST SCHNEELOCH, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Paper-Feed Rollers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to paper feed rollers for typewriting machines and consists in a strong and simple construction and arrangement of parts, which are convenient to manipulate, and effective and certain in operation.

The invention is shown in the drawing herewith, in which the numerals of the specification indicate the corresponding parts in all the figures.

Figure 1 is a bottom plan. Fig. 2 a vertical cross section of Fig. 1. Fig. 3 a cross section parallel to Fig. 2 to show the arrangement of the spring between the feed roller brackets. Fig. 4 is the releasing rod detached. Fig. 5 is a feed roller with parts broken away and parts in section. Figs. 6 and 7 are respectively side and front elevations of a feed roller bracket detached.

In the figures, 1 indicates the side plates of the carriage, 2, the platen shaft, 3, the platen and 4 the platen knobs.

5 is the paper feed bracket shaft and 6 the brackets journaled thereon in corresponding pairs toward each end, and provided with faces 7 7, engaging with the cam faces 8 8 on releasing rod 9. Said brackets have also outwardly extending arms 11 11, on which are supported the paper feed rollers 12 12. Each bracket is also provided with an abutment 14 arranged on the opposite side of the shaft 5 from the arm 11, and in pockets in the abutments, and between each pair of abutments, is arranged a spring 18; adjustably held in position by adjusting screws 20 20, by which the feed rollers are held up into engagement with the platen, with a direct and sufficient, but soft, tension, which is better than a spring coiled on the shaft. Studs may be provided on the screws to act as guides for the springs. As the

springs are arranged to force the abutments apart, and as the abutments are on the opposite sides of the shaft from their respective arms and rollers, the springs tend to hold the rollers against the platen.

The releasing rod is turned and operated by connecting lever 25, connected at one end to stud 26 on the rod, and at the other end to releasing lever 27 pivoted to bearing 28 on the carriage and provided with thumb-piece 29 conveniently arranged.

The paper feed rollers 12 are best constructed as shown in Fig. 5. To a small shaft 31 are fitted at each end bushings 32, which form bearings for the steel tube 33 carrying the rubber rollers 34. The tube is strong and stiff and therefore will not bend as the small shaft might, and often does, causing irregular feed of the paper. As the bushings are short, they give a small bearing with little friction.

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

1. In the paper feed roller mechanism of a typewriting machine, the combination with the platen suitably supported, of a shaft supported below the platen, brackets journaled on the shaft in pairs toward each end, an arm on each bracket outwardly and upwardly extending on one side of the shaft, feed rollers supported on the arms extending on the same side, abutments on each bracket extending on the other side of the shaft from their arms, tension coil springs arranged between the abutments of each pair of brackets, adjusting screws in the abutments for the springs, a releasing rod having cam portions engaging with cam faces on the brackets, and connecting and operating levers to turn said releasing rod and separate the rollers from the platen.

2. In a paper feed roller mechanism for a typewriting machine in combination with a bracket shaft arranged below the platen, oppositely arranged roller brackets carried thereon, said brackets having roller arms adjacent to the platen and abutment arms oppositely arranged and adapted to force the roller arms inwardly when separated, rollers on the roller-arms, tension springs arranged between the opposing abutments

tending to force them outwardly, adjusting
screws in the abutments for the springs,
spring guiding studs on the screws, a releas-
ing rod having cam portions engaging with
5 cam faces on the brackets, and means to
rotate the releasing rod to separate the roll-
ers from the platen.

In testimony whereof I affix my signature
in presence of two witnesses.

AUG. SCHNEELOCH.

Witnesses:

BLANCHE SMITH,
ALLAN W. FOOSE.