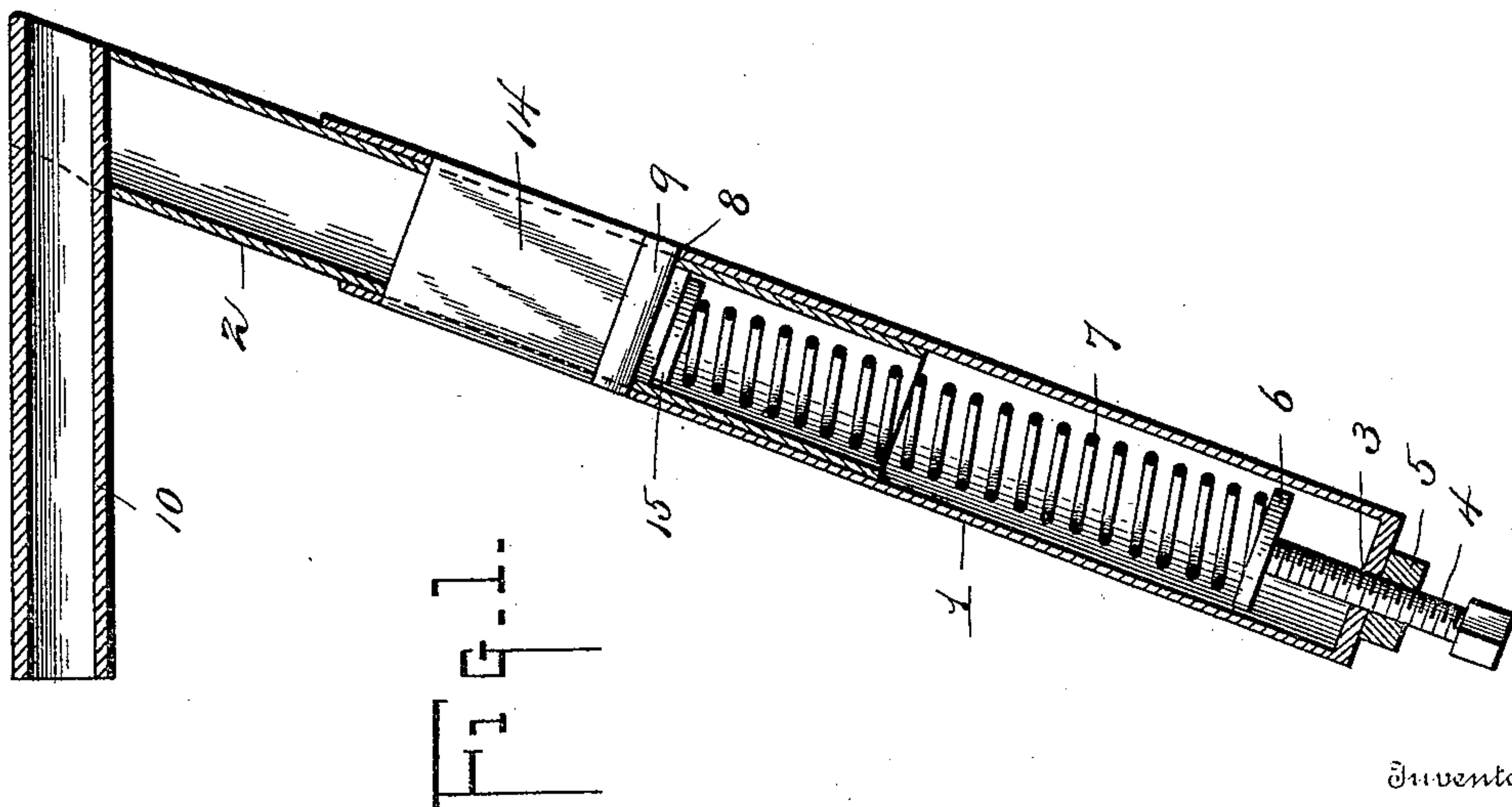
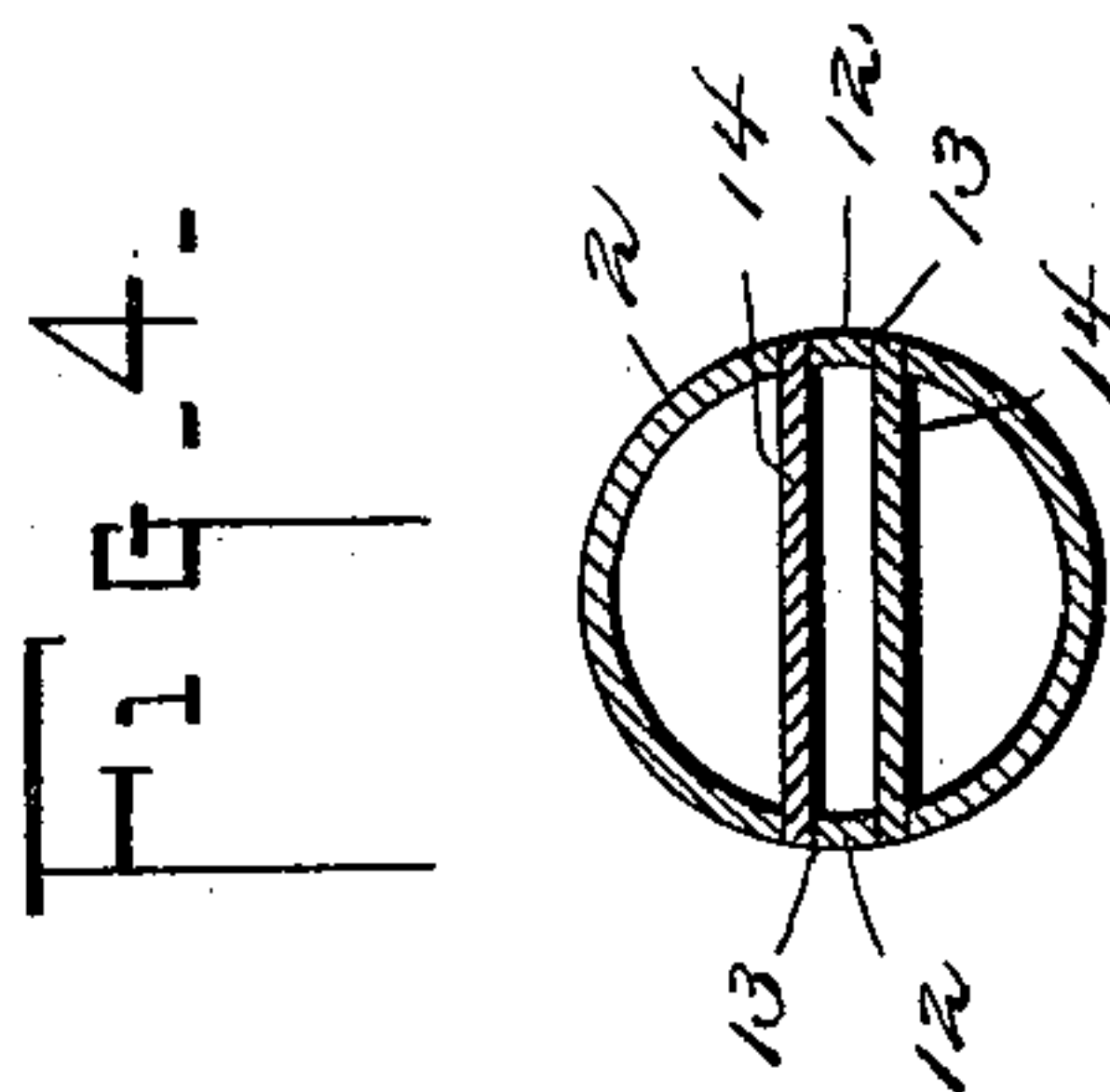
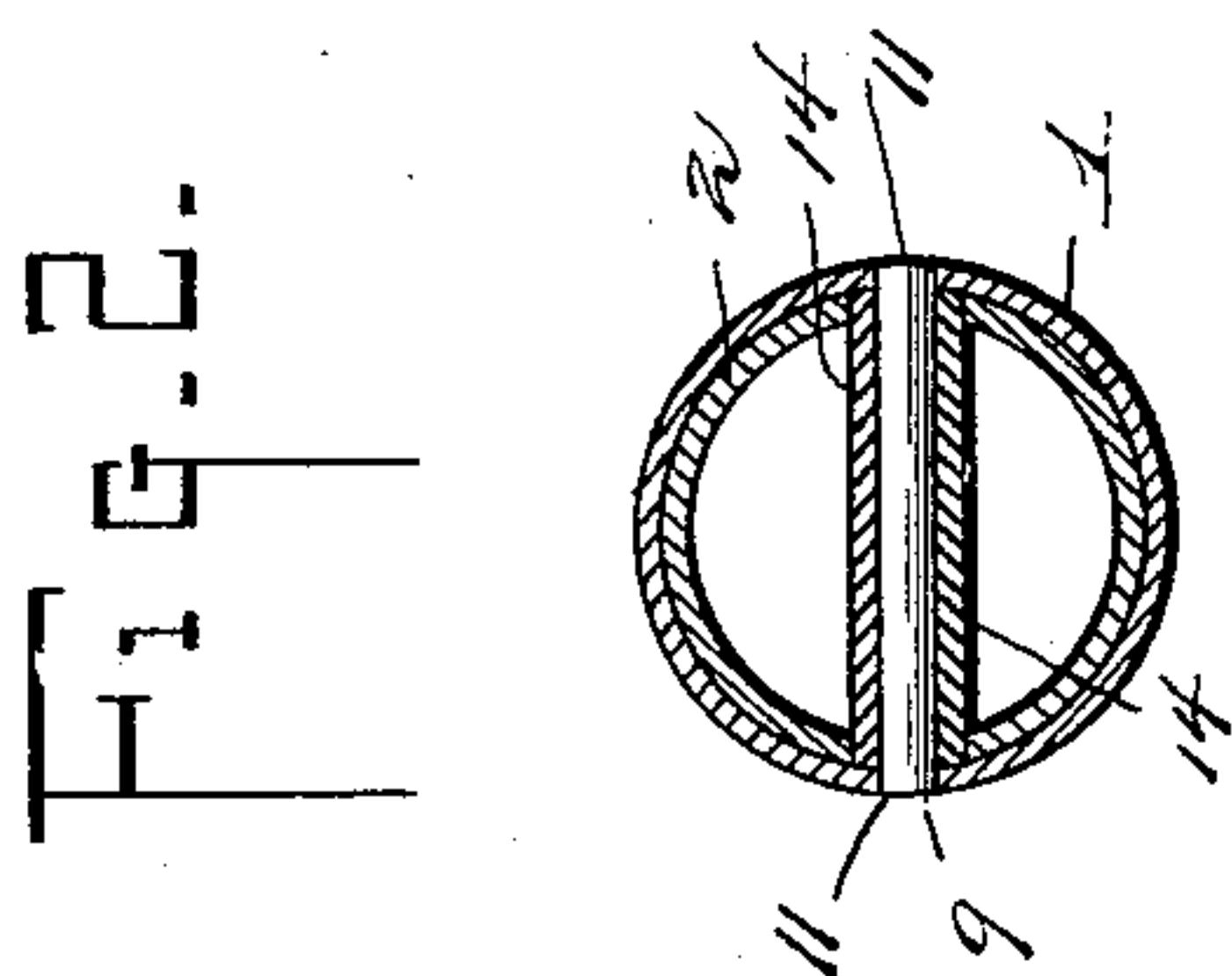
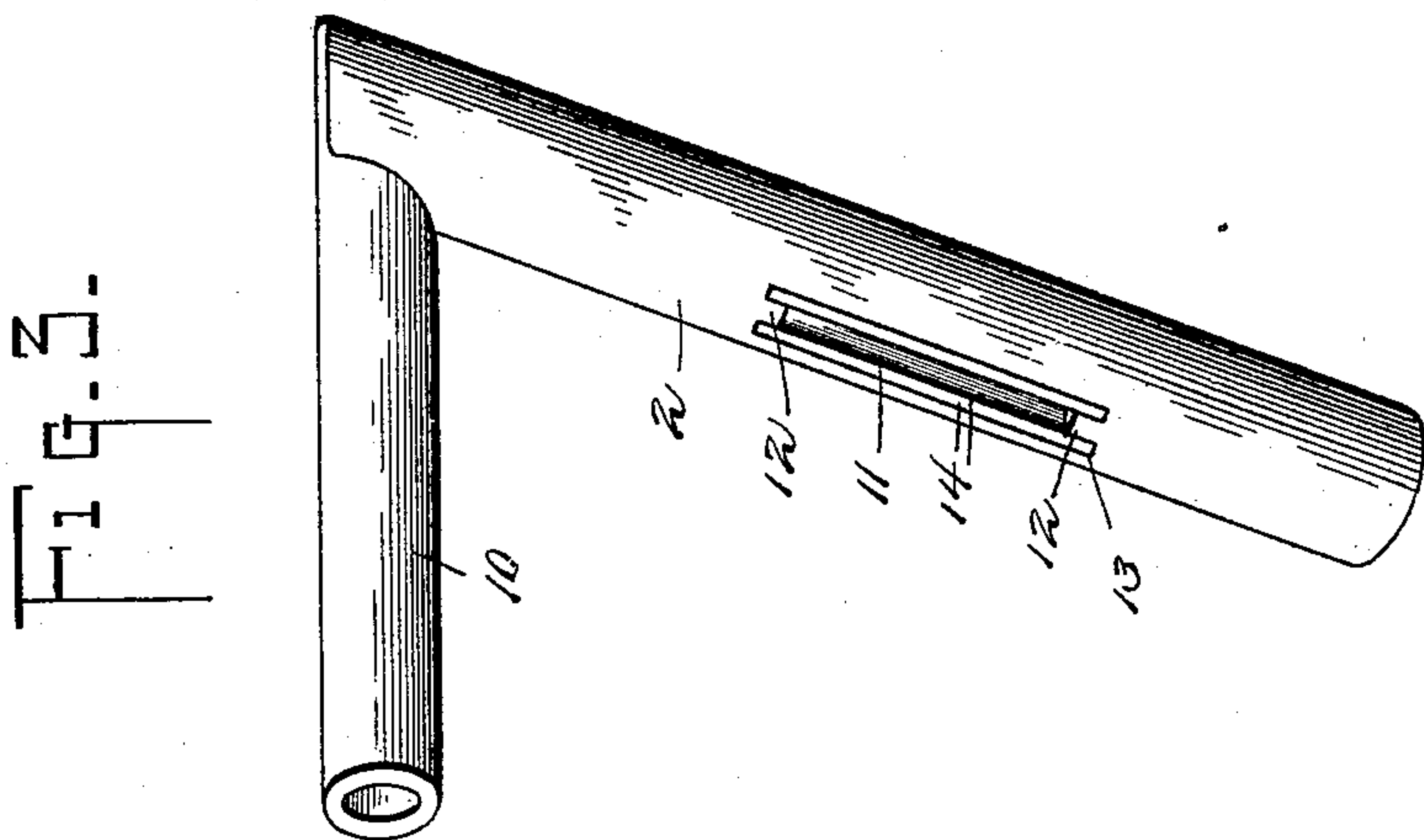


No. 626,811.

Patented June 13, 1899.

**A. JOHNSON.**  
**BICYCLE SEAT POST.**  
(Application filed Aug. 4, 1898.)

(No Model.)



Witnesses  
*Harry L. Amer.*  
*A. V. Britt.*

Inventor  
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his Attorney



# UNITED STATES PATENT OFFICE.

ALFRED JOHNSON, OF PHILADELPHIA, PENNSYLVANIA.

## BICYCLE SEAT-POST.

SPECIFICATION forming part of Letters Patent No. 626,811, dated June 13, 1899.

Application filed August 4, 1898. Serial No. 687,747. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED JOHNSON, a subject of the King of Sweden and Norway, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Bicycle Seat-Posts; 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.

This invention relates to saddle-posts for bicycles and similar vehicles; and the object in view is to provide a saddle-post of novel construction in which provision is made for absorbing the vibration of the machine-frame, so as to prevent it from being communicated to the rider.

The principal object of the invention is to provide, in connection with a sectional or two-part saddle-post embodying a spring upon which the weight of the rider is carried, means whereby the two parts of the post are prevented from having any relative rotating movement, the said means being of such nature as to prevent undue wear upon the sections of the post, which would be a fatal objection in that one portion of the post would be allowed to turn to an angle of several degrees, thereby making the saddle unsteady and unfit for careful riding.

The detailed objects and advantages of the invention will appear in the course of the ensuing description.

The invention consists in a saddle-post embodying certain novel features of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal section through a complete saddle-post constructed in accordance with this invention. Fig. 2 is a horizontal section through the same, taken on a line with the key. Fig. 3 is a detail perspective view of the upper section of the post. Fig. 4 is a detail cross-section through the upper section of the post, taken adjacent to one end of the slot and showing the manner of securing the wear-plates in place.

Similar numerals of reference designate corresponding parts in all the views.

Referring to the drawings, 1 designates the lower section of the improved saddle-post. The lower section 1 is tubular and is of sufficient diameter inside to receive the upper section 2, which telescopes therein. The lower section 1 is in the nature of a socket-piece to receive slidingly the upper section 2 and has its lower end closed, with the exception of a central screw-threaded opening 3, in which fits an adjusting-screw 4, designed to adjust vertically the spring-seat for varying the tension of the spring, said screw being held at any point of adjustment by means of the locking-nut 5, which is threaded upon it and bears against the lower end of the section 1.

Arranged within the socket-section 1 is a disk-shaped spring-seat 6, against the under side of which the adjusting-screw bears. Resting upon the spring-seat 6 is a tapering spiral spring 7 with the larger end downward and the smaller end upward. The section 1 is also provided with oppositely-arranged openings 8 to receive the pin or key 9, which extends transversely through the section 1, the said key being rectangular in cross-section and provided with flat opposite sides.

The upper section 2 has the usual L-shaped extension 10 to receive a saddle of any usual or preferred form. The section 2 is also provided on diametrically opposite sides with longitudinal slots 11, and at the opposite ends of each slot are tongues or projections 12, which extend toward each other, this construction providing notches 13, in which are received the extremities of parallel wear-plates 14. The notches 13 are so arranged that the wear-plates will be located a distance apart equal to or slightly greater than the thickness of the key in the section 1. The plates 14 have a width equal to the external diameter of the section 1, thus extending entirely through the section, so as to form a wide bearing-surface for the key. The tongues at the ends of the slots serve to space the plates the proper distance apart and also materially assist in welding or brazing the plates in position, said plates being permanently se-



cured in any desired manner. Immediately underlying the lower extremities of the wear-plates is the disk-shaped spring-seat 15, which rests upon the upper end of the taper-  
 5 ing spring contained within the lower section. The upper end of the spring enters the lower end of the section 2 and bears upon said upper spring-seat, thus supporting the upper section of the post yieldingly to admit  
 10 of an easy relative longitudinal movement between the two sections.

It will be understood that the lower section or socket-piece 1 is clamped in the seat-post tube of the bicycle, as in the case of an ordi-  
 15 nary seat-post, and the spring allows the upper section of the post to yield up and down, thus preventing any jar imparted to the frame being communicated to the rider. By means of the adjusting-screw the spring may be com-  
 20 pressed, thus adapting it to riders of different weights.

The principal advantage of the construction hereinbefore described resides in the parallel wear-plates in the upper section, as by giving  
 25 this increased bearing-surface the durability and life of the saddle-post as a whole are greatly increased, thus obviating the looseness between the two sections of the post, which would allow the pommel of the saddle  
 30 to oscillate sufficiently to render the machine difficult to ride and interfere materially with the steering. By the improved construction the wear will be almost imperceptible, and should wear take place it will come entirely  
 35 upon the plates, which can be removed and substituted by others, although this will seldom need to be done.

It will of course be understood that the parallel wear-plates may be fitted in the seat-  
 40 post in a variety of ways and are made of any desired length, according to the movement or play which is desired between the two sections of the post. I therefore do not wish to limit myself to the exact details of construction

hereinabove described, but reserve to myself 45 the right to change, modify, or vary the construction within the scope of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A saddle-post comprising tubular sections, one sliding within the other, the inner section being provided at diametrically opposite points with longitudinal slots and hav-  
 55 ing tongues extending inward from the ends of said slots, in combination with parallel wear-plates extending transversely through the saddle-post, the extremities of said plates being received in notches on opposite sides of said tongues, and a key passing between  
 60 said plates and having its ends fitted in the outer section, substantially as described.

2. In a spring seat-post, tubes fitted to each other telescopically, the inner tube having  
 65 slots therein in opposite places, vertically-extending plates in said inner tube extending from slot to slot, and a key having its ends connected with the outer tube and passing freely between said plates, the inner tube  
 70 having recesses which extend upward and downward beyond the terminals of said slots, and having the ends of said plates secured therein.

3. A tubular saddle-post provided at diametrically opposite points with longitudinal  
 75 slots and having tongues extending inward from the ends of said slots, in combination with parallel wear-plates extending transversely through the saddle-post, the extremities of said plates being received in notches  
 80 on opposite sides of said tongue, substantially as described.

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

ALFRED JOHNSON.

Witnesses:

S. T. ESHBOOT,  
 J. SADLEIR.