

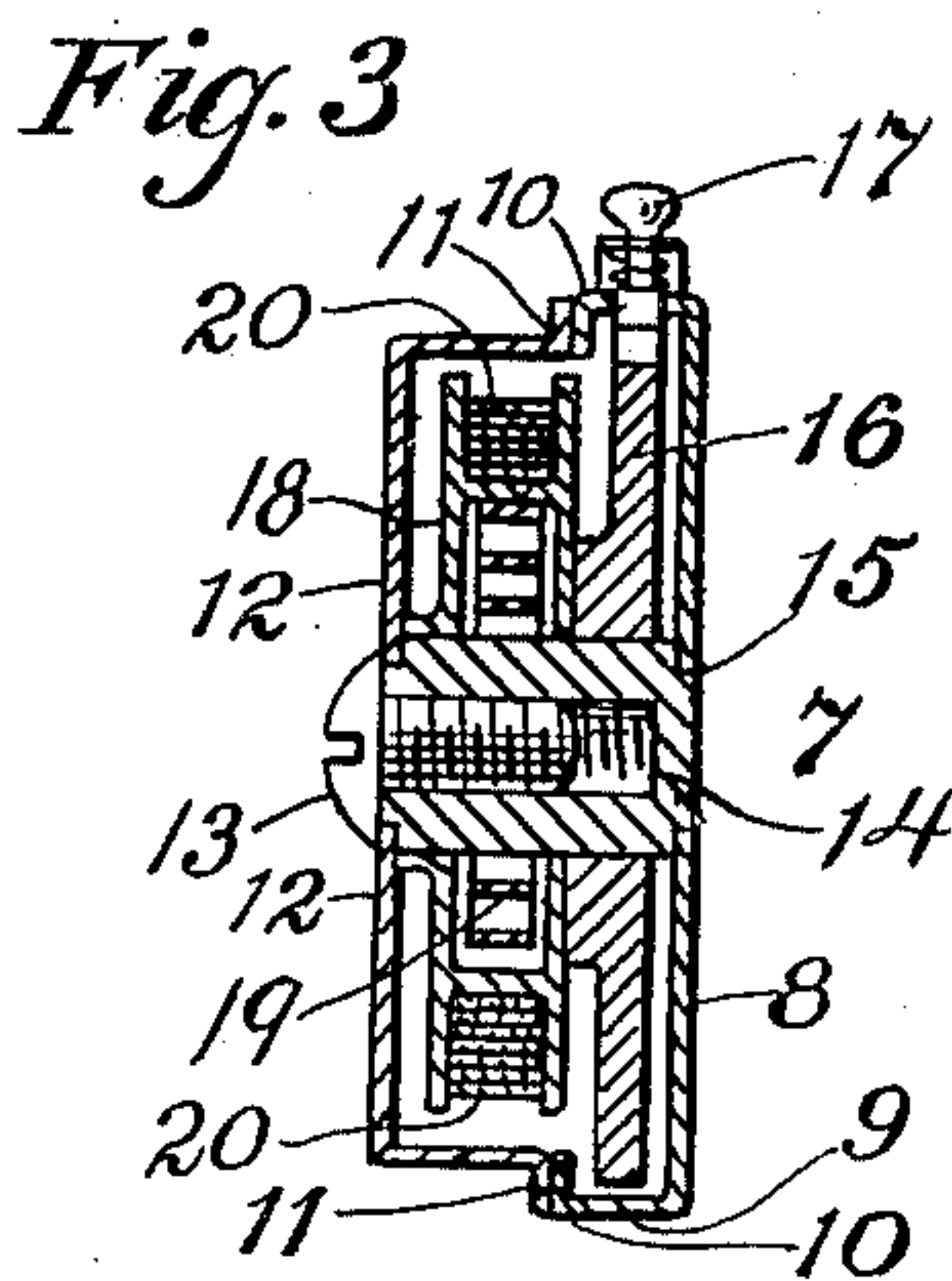
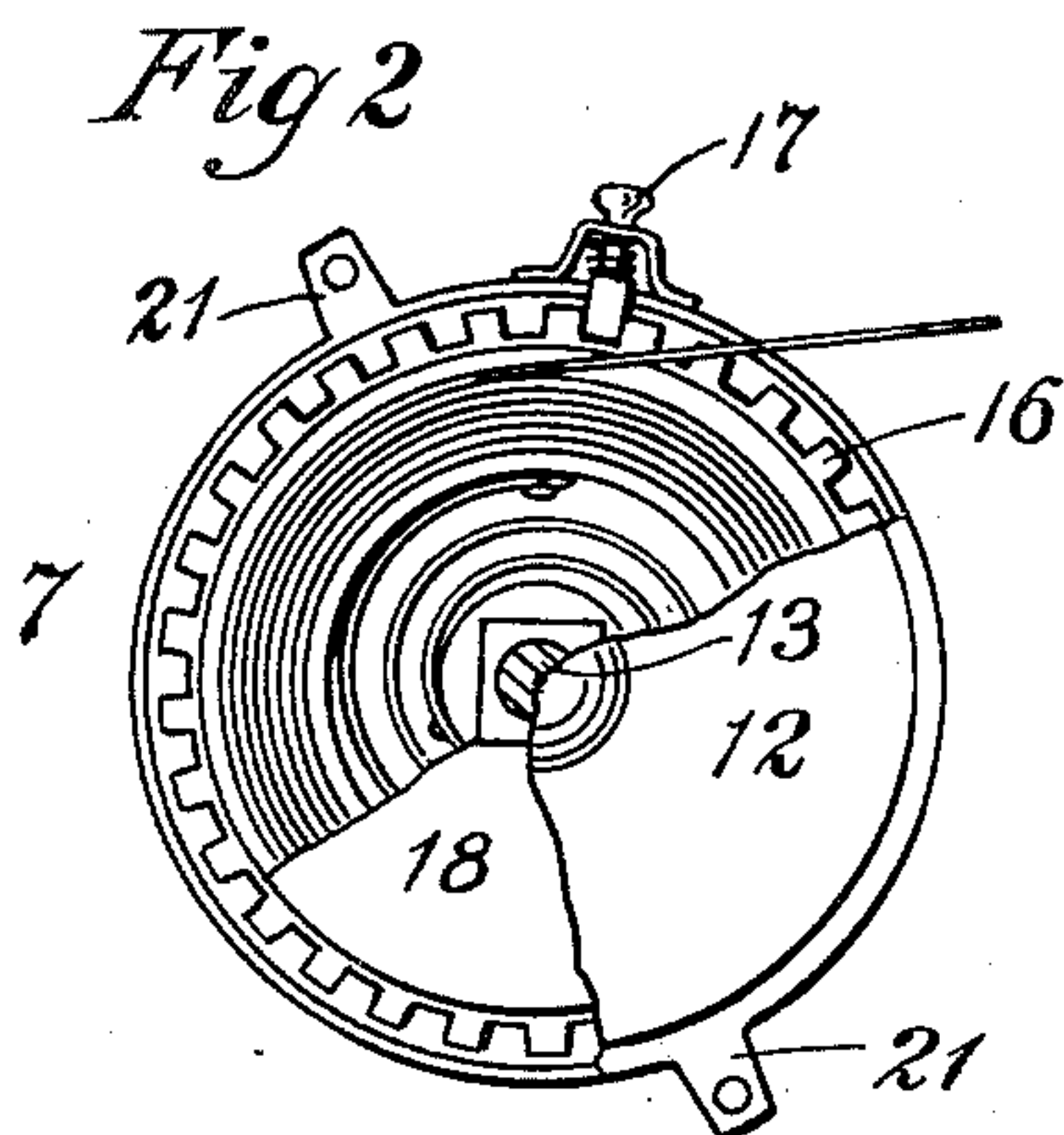
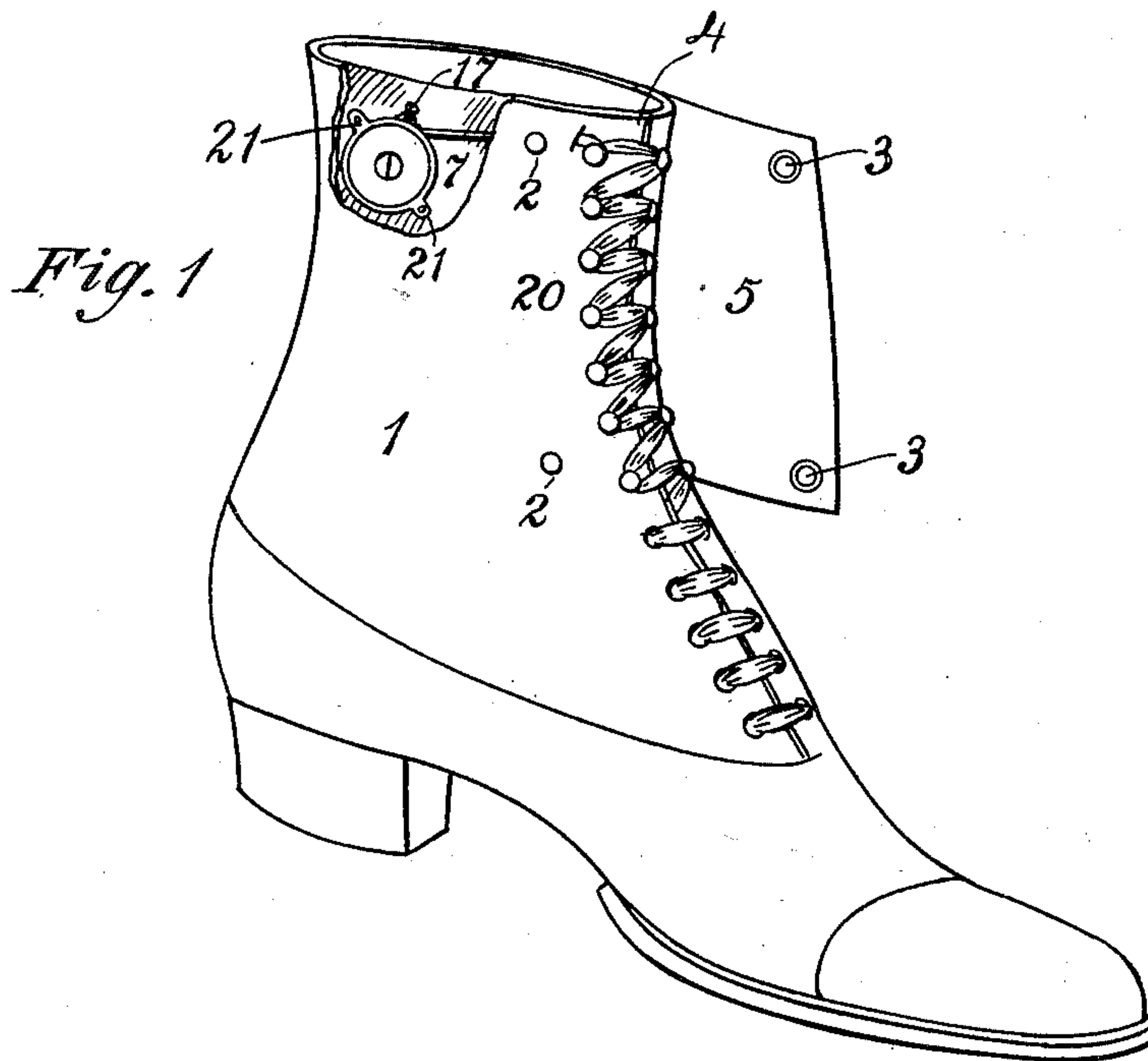
No. 737,769.

PATENTED SEPT. 1, 1903.

L. C. PRESTON.  
FASTENING DEVICE.

APPLICATION FILED OCT. 28, 1901.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

LEWIS C. PRESTON, OF WESTON, OREGON.

## FASTENING DEVICE.

**SPECIFICATION** forming part of Letters Patent No. 737,769, dated September 1, 1903.

Application filed October 28, 1901. Serial No. 80,331. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS C. PRESTON, a citizen of the United States, residing at Weston, in the county of Umatilla and State of Oregon, have invented a new and useful Fastening Device, of which the following is a specification.

This invention relates to fastening devices, and particularly to means for securing and protecting parts of articles of personal wear; and some of the objects of this invention are to provide means for fastening and retaining the laces or strings of shoes, gloves, and other articles in such a manner that the same will be automatically retained or secured in the laced or fastened position, and will be capable of extension when it is desired to unfasten or unlace the article and be retained in such position.

Another object of the invention is to provide an improved device to receive the lace or string by which the article is fastened and to provide for the movement thereof when the article is in use to afford ease and comfort to the wearer or user of the article.

Another object of the invention is to prevent a shoe, glove, or other article from becoming untied accidentally.

It is also an object of this invention to provide means for covering a portion or all of the fastening devices of the article to which the same are applied in order to prevent such devices from accidentally engaging and injuring the other garments of the user.

With these and other objects in view the invention consists, essentially, in the construction, combination, and arrangement of parts substantially as more fully described in the following specification, and illustrated in the accompanying drawings, forming part of this application, in which—

Figure 1 is a perspective view of a shoe provided with my improvements. Fig. 2 is an enlarged detail view of the winding device, showing a portion of the top or cover broken away. Fig. 3 is a transverse central section of the same; and Figs. 4, 5, and 6 are detail views of the improved lacing-stud employed.

Similar characters of reference designate corresponding parts throughout the several views.

Referring to the drawings, and particularly to Fig. 1 thereof, there is illustrated a shoe, to which my invention is shown as applied; but it will be understood that the same is capable of employment with other articles, and that shown illustrates one application of the invention. The shoe 1 is here shown as provided with studs or securing devices 2, preferably of the usual form, constructed with a spherical head or free end to receive a socket or eyelet 3, which is adapted to be forced thereover and to be retained by the expansibility or frictional engagement of said head, as will be readily understood. Formed on or connected with one side of the shoe, adjacent to the opening 4 thereof, is a flap or extension 5 of any suitable form or material, but preferably constructed in such a manner as to conform to the shape or configuration of the shoe, and the flap 5 is preferably provided with any desired number of sockets 3, constructed to removably engage the studs 2 to retain said flap in position upon the shoe. When the flap 5 is secured upon the shoe, substantially as herein before described, the trousers, skirts, or other articles of personal wear of the individual wearing the shoe will not become engaged with or entangled by the fastening devices employed to retain the shoe in position upon the foot of the wearer, and thus said garments will not be injured or worn by contact with the fastening devices of the shoe, and the wearer will not be subjected to annoyance and inconvenience usually occasioned in this manner. It will be understood that the flap 5 may be employed with any kind of shoe or with a glove or other article to prevent the fastening devices of the glove from engaging with the sleeve of the wearer or with trimming or delicate laces thereon, thus preventing injury thereto and avoiding annoyance and inconvenience to the wearer.

Adverting particularly to Figs. 1, 2, and 3 of the drawings, there is illustrated a winding device 7, preferably embodying an attaching member or body portion 8, desirably constructed with a laterally-extending rim or flange 9, which is bent upon itself circumferentially, as shown at 10 in Fig. 3 of the drawings, to receive an attaching-rim 11 upon a cover portion 12, which is preferably secured in position by a screw or bolt 13, re-



movably secured in one end of a shaft or spindle 14, the other end whereof may be secured in an angular opening 15 in said body portion 8, substantially as shown in Fig. 3 of the drawings. Loosely or freely mounted upon the shaft 14 is a toothed wheel 16, preferably revolubly mounted within said body portion, and upon the latter is preferably mounted or secured a spring-actuated plunger 17, constructed to be depressed into engagement with the teeth on said wheel to prevent the rotation of the latter and to be elevated against the action of the spring thereon to become disengaged from said wheel and permit the revolution thereof.

Revolubly mounted on the shaft 14 and, preferably, side of the body portion 8 is a drum or reel 18, desirably constructed with a hollow center, constructed to receive a coiled spring 19, one end whereof is preferably secured to the shaft 14 and the other end to the drum in order to impart a rotary motion thereto when the spring is wound, and upon the drum 18 is secured the lace or string 20, employed to close the opening in the shoe or other article, so that when the plunger 17 is disengaged from the toothed wheel 16 the spring 19 will rotate the drum 18 to wind the shoe lace or string 20 thereon, whereupon the plunger 17 can be released into engagement with the wheel, which will then prevent the unwinding of the lace or string, as will be readily understood.

When it is desired to put on the shoe or other article, the plunger 17 is disengaged from the toothed wheel, and the lace or string is pulled from or unwound from the drum 18 against the action of the spring 19 until a sufficient amount or length of string or lace shall have been reeled off or unwound, whereupon the plunger 17 is released to prevent the winding up of the shoe string or lace, and the foot can thereupon be introduced into the shoe, and the lace or string can be tightened up in the usual manner, and the plunger 17 can then be raised or disengaged from the wheel 16, thereby permitting the surplus lace or string to be wound upon the drum 18 by the action of the spring 19 until the lace or string is drawn taut, at which time the plunger is released to lock the wheel 16 and secure the string or lace.

In order to secure the winding device 7 in

position, the same may be provided with attaching ears or hinges 21, constructed to be riveted or otherwise secured to the shoe or other article to which the winding device is applied, and the latter may be secured in any desired position upon the article, but is preferably attached to the shoe near the upper edge thereof and between the lining and the material of the upper, substantially as shown in Fig. 1 of the drawings, and the shoe string or lace 20 may pass through a slit in the lining or between the lining and the material of the upper and through a slot in the casing of the winding device, essentially as shown in Figs. 1 and 2 of the drawings.

It is not desired to confine this invention to the specific construction, combination, and arrangement of parts herein shown and described, and the right is reserved to make all such changes in and modifications of the same as come within the spirit and scope of the invention.

I claim—

An article of personal wear provided with a lace, an attaching member secured to said article having an annular perpendicular flange the edge whereof is bent parallel to the body portion of said member, a cover having an annular perpendicular flange and an outwardly-turned rim constructed to rest upon said edge, a spindle having an angular extremity secured in said attaching member and having a threaded bore and a reduced end, a toothed wheel mounted upon the cylindrical portion of said spindle within said perpendicular flange of the attaching member, a screw engaging said bore and retaining said cover upon the reduced end of said spindle, a spring-actuated drum within said perpendicular flange of the cover and mounted upon said spindle constructed to receive and wind up said lace and a spring-actuated plunger mounted in said flange of said attaching portion and engaging the said toothed wheel.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEWIS C. PRESTON.

Witnesses:

AMELIA GUEST,  
L. B. ALDERETE.