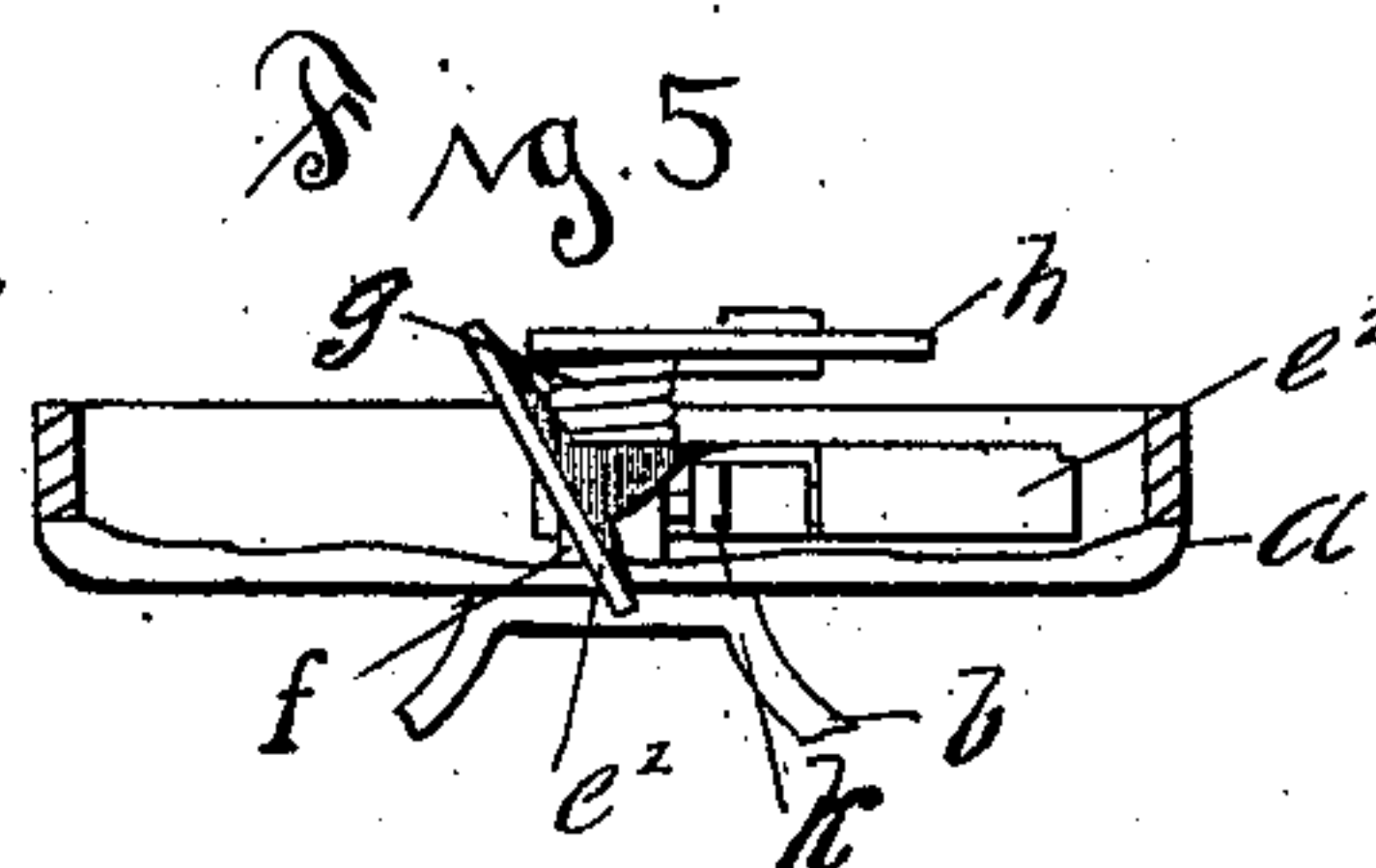
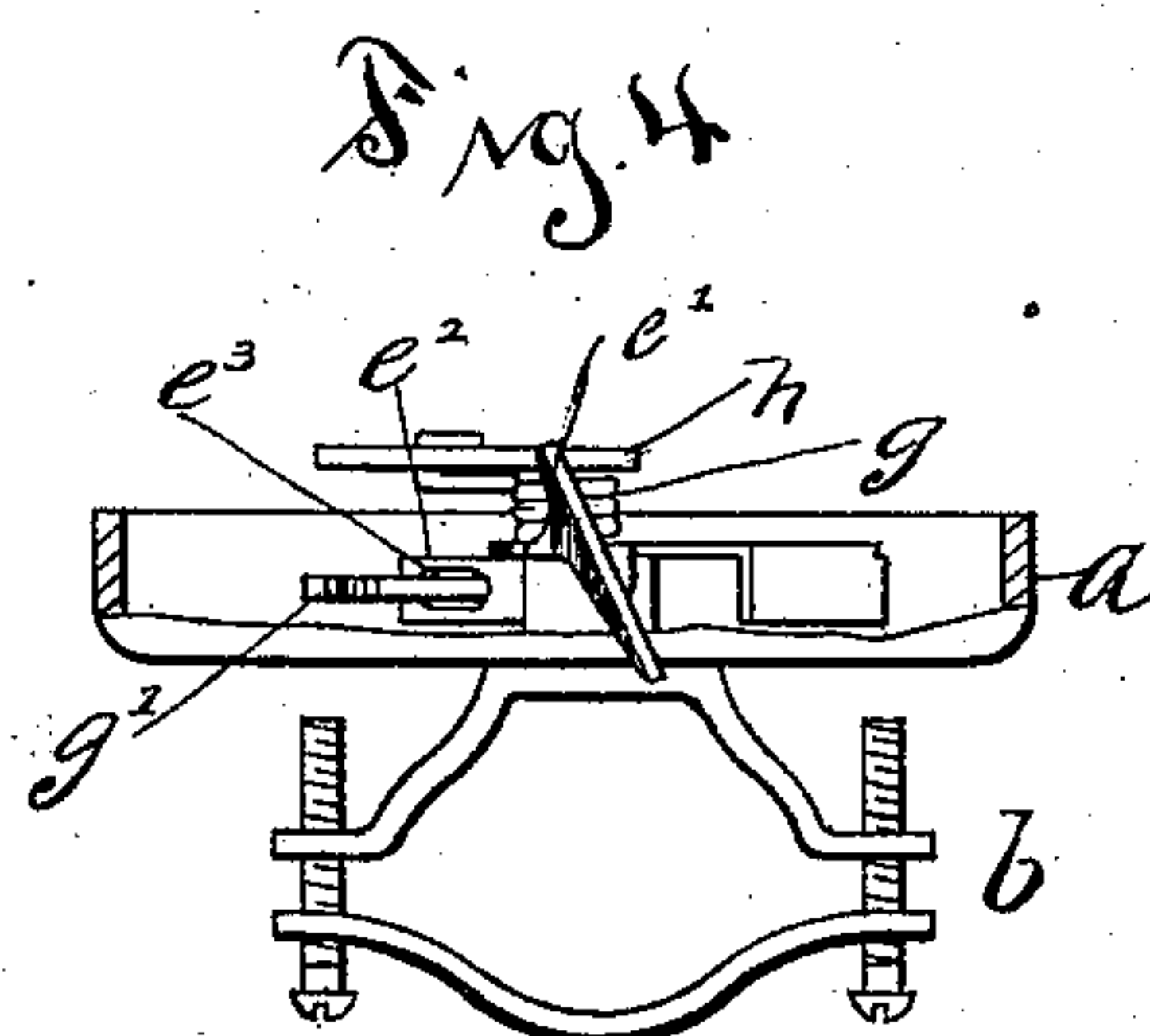
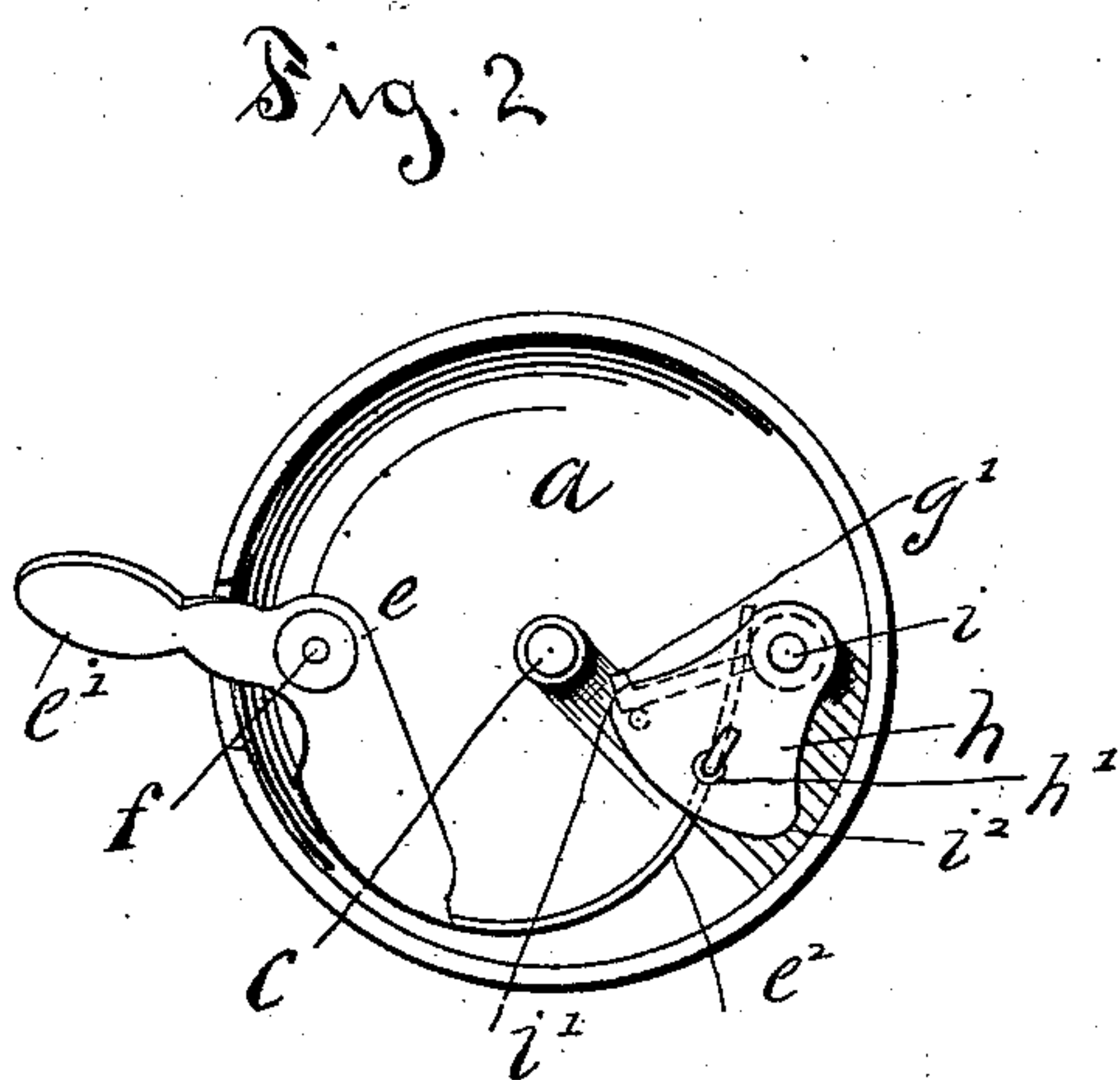
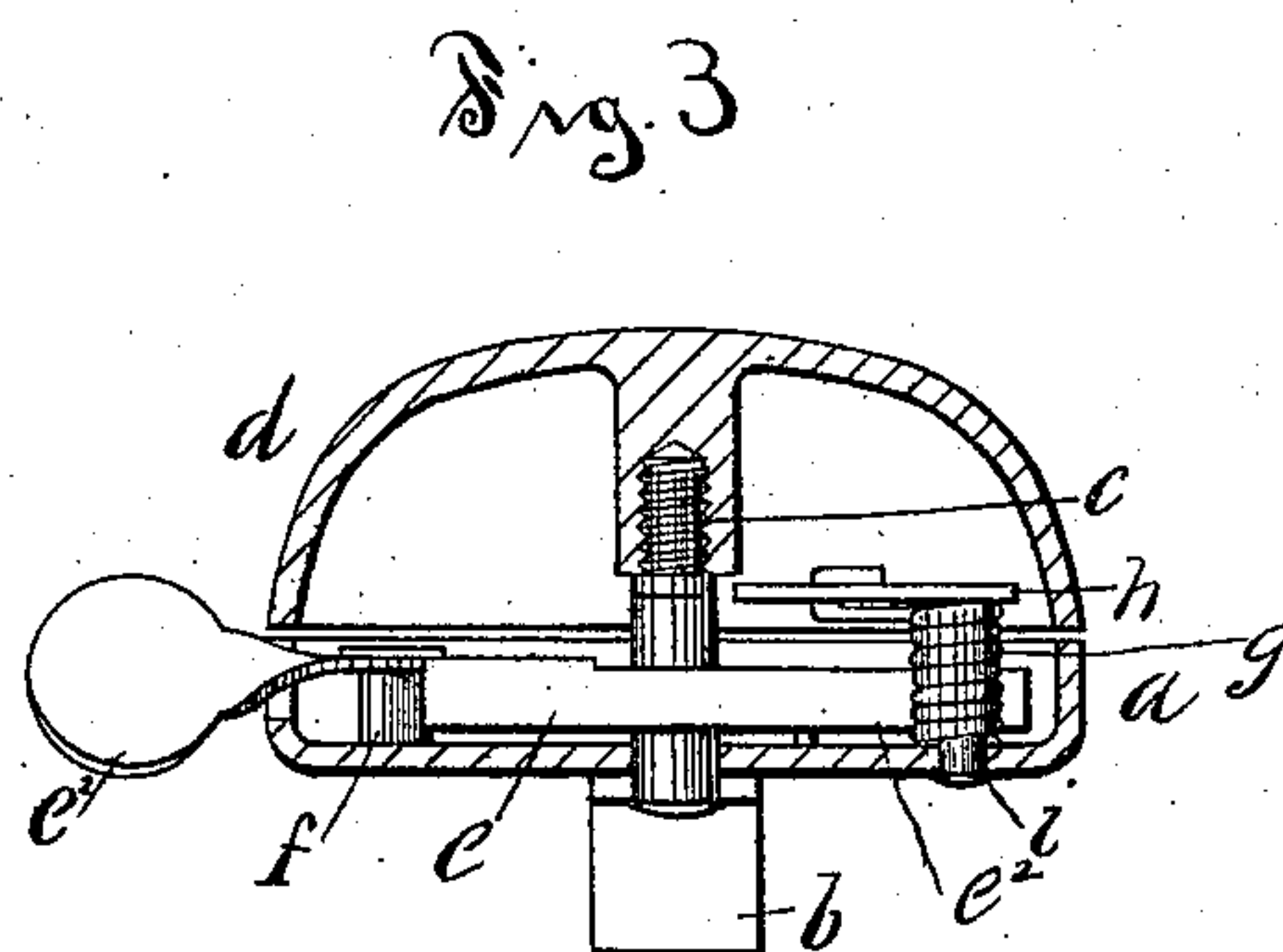
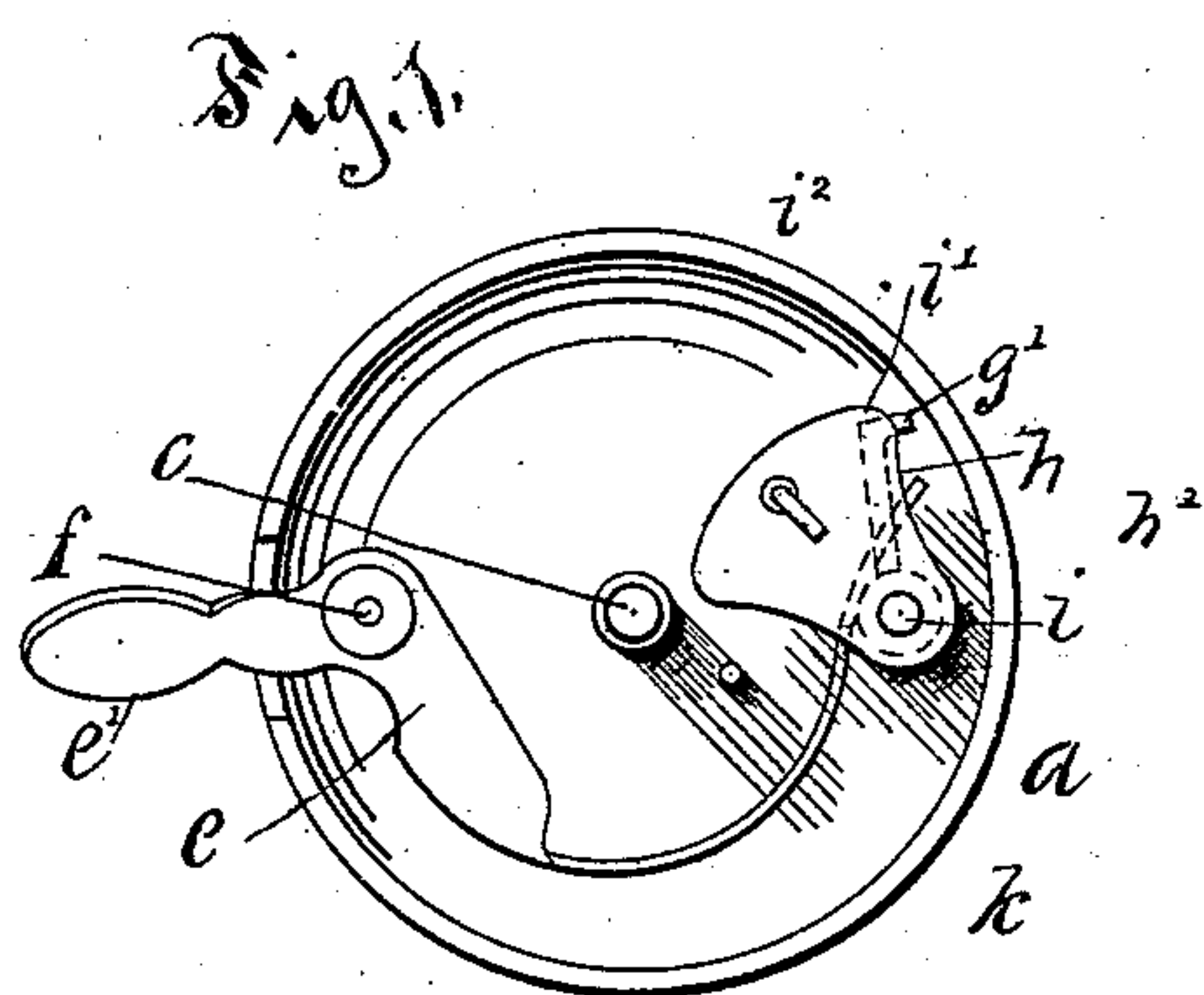


(No Model.)

F. A. SCRANTON.  
BICYCLE BELL.

No. 576,985.

Patented Feb. 9, 1897.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 576,985, dated February 9, 1897.

Application filed October 27, 1896. Serial No. 610,201. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK A. SCRANTON, a citizen of the United States, and a resident of East Hampton, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Bell-Striking Mechanism, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of my invention is more particularly to provide a bell-striking mechanism of simple construction that is positive in operation and is easily embodied in the small sizes of bells especially adapted for use on bicycles, although the same mechanism is applicable for bells of larger size.

The bell is of the class known as "double stroke;" and the invention consists in the details of the several parts making up the striking mechanism as a whole and in the combination of the parts, as hereinafter described, and more particularly recited in the claims.

Referring to the drawings, Figure 1 is a plan view of the base-plate, showing the striking mechanism in one position. Fig. 2 is a plan view of the base-plate, showing the striking mechanism and with the hammer at the opposite limit of its play from that shown in Fig. 1. Fig. 3 is an edge view of the bell with parts broken away to show the striking mechanism in side elevation. Fig. 4 is a detail view in section of the base-plate and showing an edge view of the striking mechanism in a plane at right angles to the plane of view of Fig. 3. Fig. 5 is a like view, but showing the hammer at the opposite limit of its play.

In the accompanying drawings my invention is shown as embodied in a bicycle-bell provided with means for attachment to the handle-bar or like part of a bicycle, and the letter *a* denotes a base-plate having on the under side a clamp *b* of ordinary and convenient form, the base-plate being preferably dished and with upturned edges to support and partly inclose the mechanism. A central post *c* supports a gong *d*, secured in place by interengaging screw-threaded parts. A lever *e* is pivoted on a post *f*, fixed in the base-plate, the outer end of the lever having a thumb-

piece *e'* and the inner end curved so as to extend across the base-piece and engage at its inner end with the spring-arm *g'* of the hammer *h*. Near the edge of the base-plate and substantially diametrically opposite the post *f*, on which the lever is pivoted, is a fixed post *i*, on the upper end of which the hammer *h* is pivoted. This hammer is of a length which enables it to swing freely clear of the central post *c* and through an arc of about ninety degrees. It has two striking-faces *i'* *i''* and is loosely connected with one end of the spring *g*. A spiral spring *g* is coiled about the post *i*, and one end extending forward is turned upward through the hole *h'* in the hammer, while the lower end of the spring extends forward and forms the spring-arm *g'*, one end of this arm being turned outward to form a stop which limits the swinging movement of the hammer and holds the striking-face *i'* of the hammer in its normal position out of contact with the inner surface of the gong.

The inner portion *e''* of the lever *e* is formed of spring metal and is loosely connected to the spring-arm *g'*, as by means of an oblong opening *e''*, through which the spring-arm extends, and this spring-arm of the lever thrusts outward against the spring *g* and also in a direction tending to hold the hammer normally in the position shown in Fig. 1 of the drawings. By pushing on the thumb-piece *e'* the lever is moved so as to swing the hammer on its pivot until just past the central point, where the spring-arm, which has been put under increased tension, recoils and throws the hammer sharply toward and against the gong. The spring-arm *g'*, with which the end of the lever is loosely connected, encounters the stop-pin *k*, fixed on the base-plate and located so as to hold the striking-face *i''* of the hammer out of contact with the gong, except as the inertia of the swinging movement of the hammer coils the spring *g* and causes the hammer to strike a rebounding blow upon the gong. As soon as the pressure on the thumb-piece of the lever is removed the recoil of the spring-arm throws the hammer sharply in the opposite direction until the end of the spring-arm strikes against the stop formed, in this instance, by the up-



turned edge of the base-plate and causes the hammer to strike with a rebounding blow against the gong.

The function of the spring *g* is to hold the 5 striking-faces of the hammer normally out of contact with the gong and provide means for causing the hammer to strike the gong with a yielding or rebounding blow, the impetus of the hammer as it is swung in either 10 direction of its play being thrown upon the spring in such manner as to yield in the desired direction a degree sufficient to sound a blow.

It is obvious that the construction herein 15 described and shown may be variously modified and yet embody the invention, the main features of the invention residing in a spring-lever connected with a hammer to rotate it in opposite directions and a spring connected 20 with the hammer to control its swinging movement.

I claim as my invention—

1. In combination in a bell, a base-plate, a gong, a lever pivoted to the base-plate and 25 having an inward-extending curved spring-arm, a spring rotarily mounted on a post and having a lower spring-arm loosely connected with the spring-arm of the lever, a pivoted

swinging hammer connected with the upper spring-arm of the spring, and stops to limit 30 the swinging movement of the hammer.

2. In combination in a bell, a base-plate, a gong, a lever pivoted to the base-plate and having an inward-extending curved spring-arm, a spring rotarily mounted on a post and 35 having a lower spring-arm loosely connected with the spring-arm of the lever and an upper spring-arm connected with a hammer, the hammer pivoted on a post on which the spring is rotarily mounted, and stops to limit 40 the swinging movement of the hammer.

3. In combination in a bell, a gong, a base-plate, a lever pivoted to the base-plate and having an inward-extending curved spring-arm loosely connected to the spring-arm of a 45 swinging hammer, a swinging hammer pivoted on a post and connected to the upper spring-arm from the spring, the spring rotarily mounted on a post, and stops located in the path of movement of the lower arm of 50 the spring to hold the hammer normally out of engagement with the gong.

FREDERICK A. SCRANTON.

Witnesses:

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