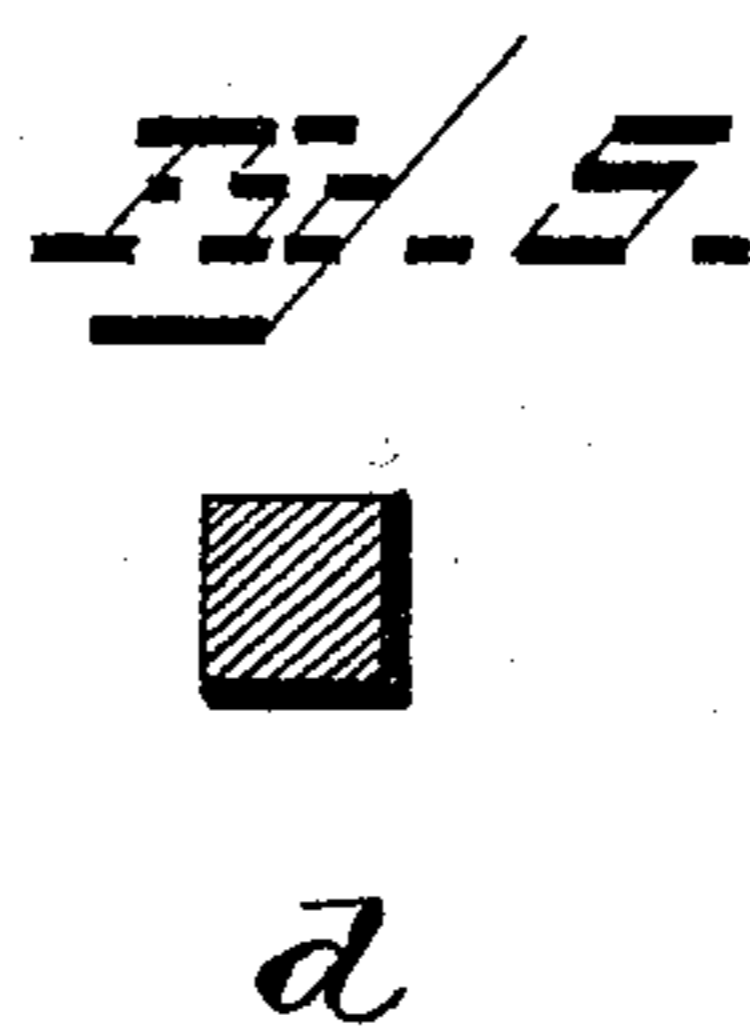
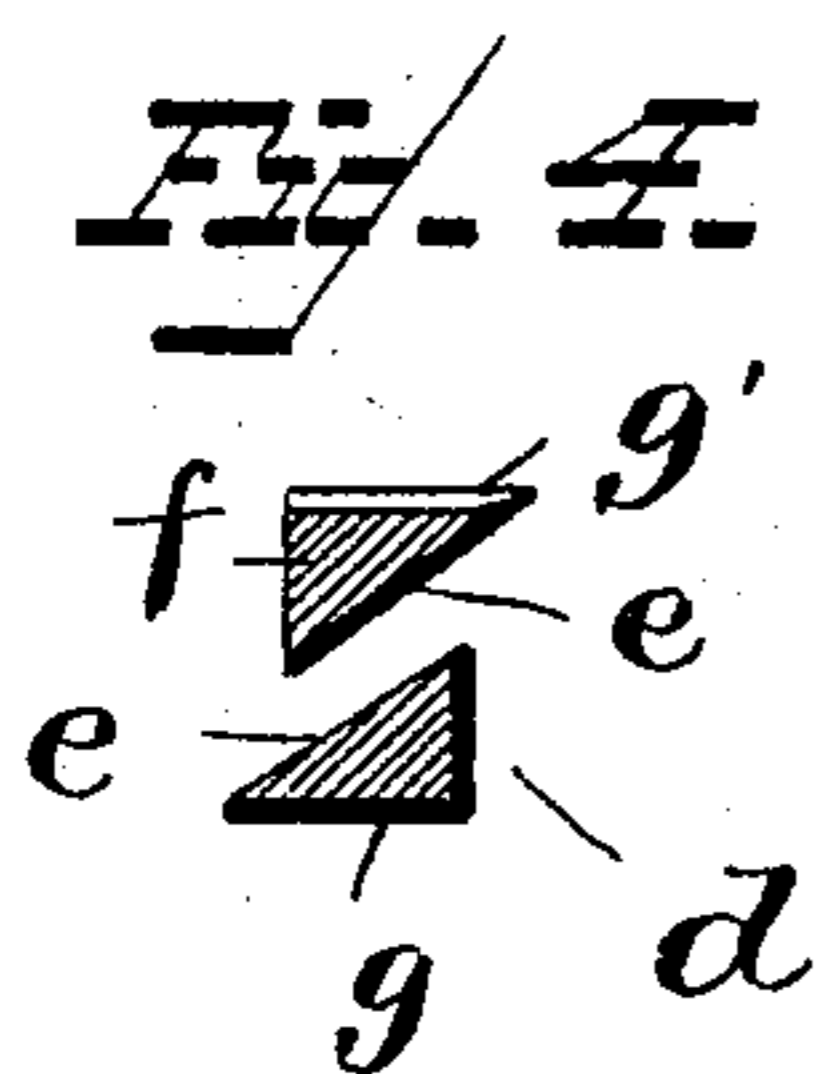
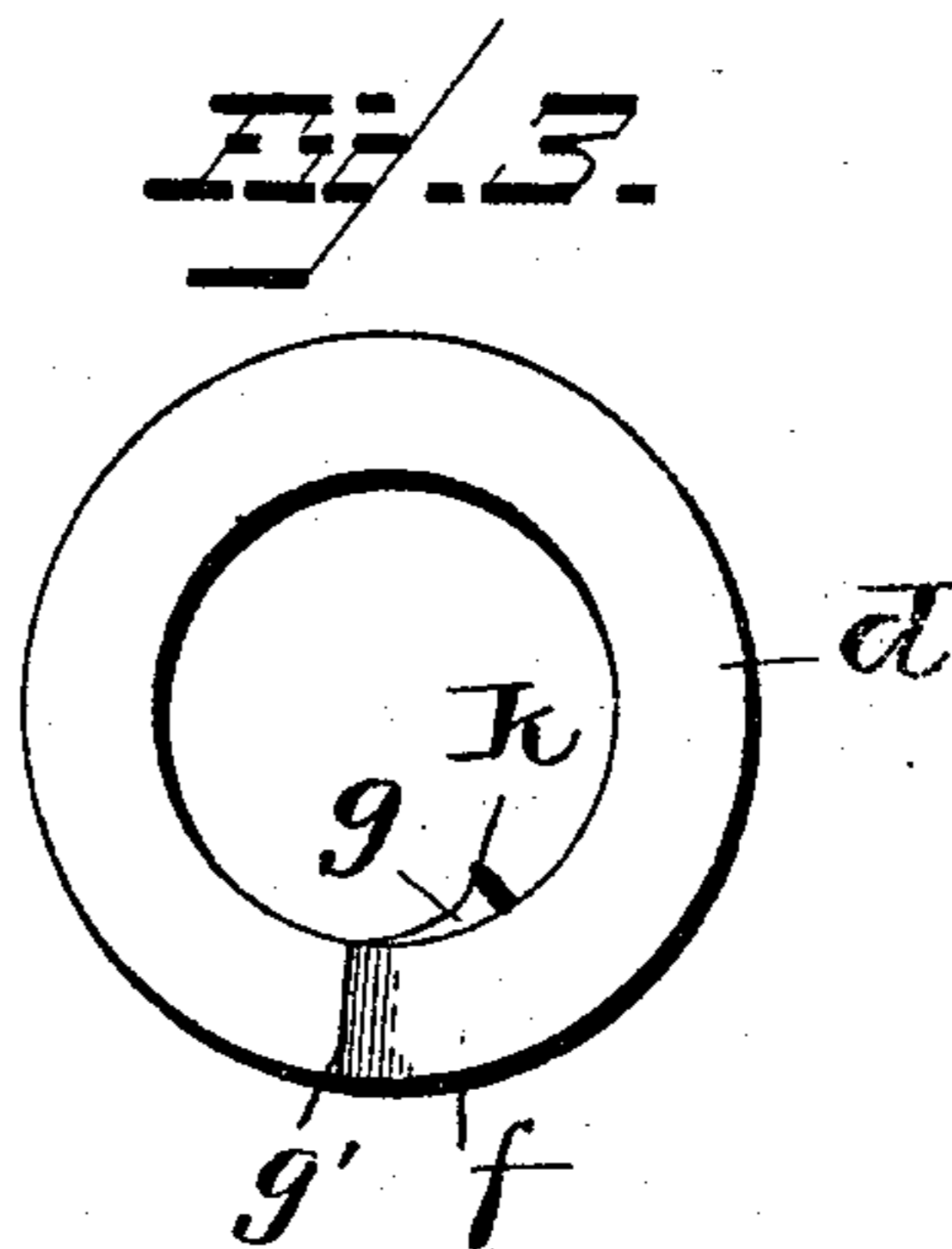
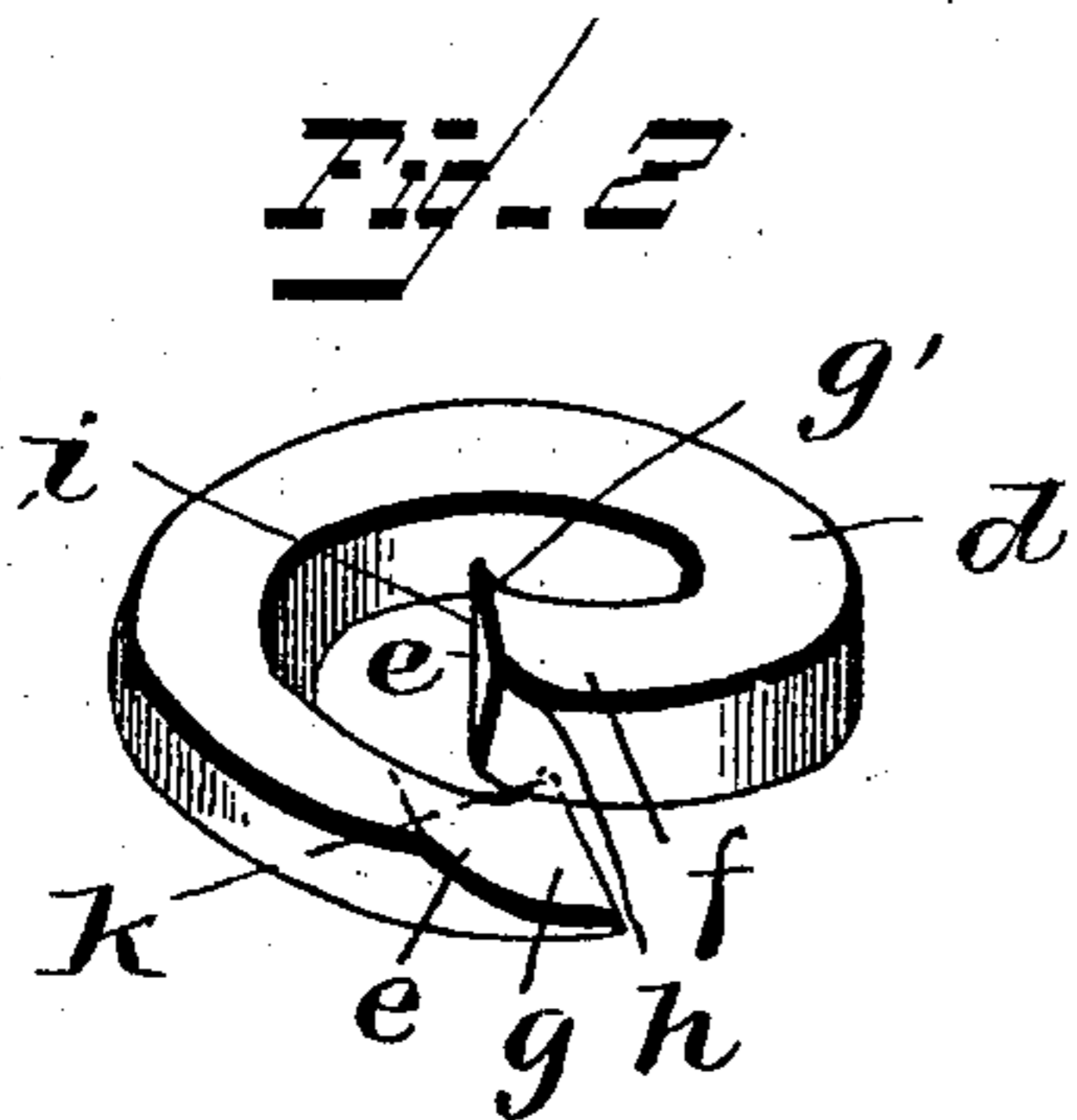
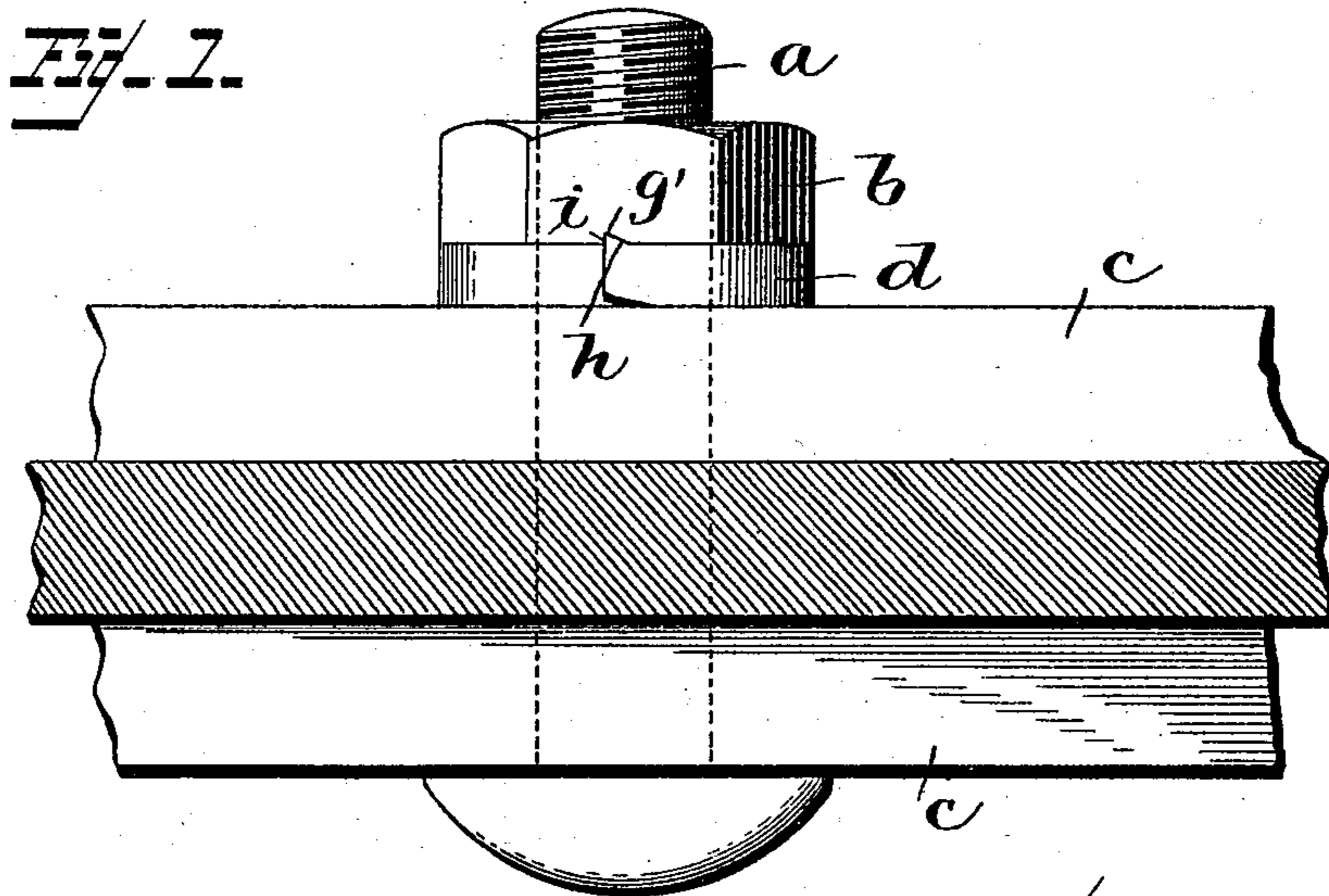


(No Model.)

A. J. MAUERMANN.
NUT LOCK.

No. 516,501.

Patented Mar. 13, 1894.



Witnesses
Albert Spiden
J. B. Clevins

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UNITED STATES PATENT OFFICE.

ALBERT J. MAUERMANN, OF DEL RIO, TEXAS.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 516,501, dated March 13, 1894.

Application filed July 31, 1893. Serial No. 482,011. (No model.)

To all whom it may concern:

Be it known that I, ALBERT J. MAUERMANN, a citizen of the United States, residing at Del Rio, in the county of Val Verde and State of Texas, have invented certain new and useful Improvements in Nut-Locks; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in that class of nut locks in which a locking washer is employed, and arranged at the base of the nut, and adapted to bear upon the under side of the same, whereby it is prevented from unscrewing and my object is to provide a lock of this general class wherein the washer will bear upon both the washer and the bolt, thereby making a more effective and desirable device than any heretofore known.

To this end my invention consists in certain improved features of construction which will now be fully described and finally embodied in the claims.

Referring to the accompanying drawings which illustrate my invention, Figure 1 represents a sectional view, taken longitudinally through the rail, of my device in use; Fig. 2 a perspective view of the lock detached; Fig. 3 a plan and Figs. 4 and 5 various sectional views of details.

The reference letter *a*, indicates the bolt to which my device is here shown as applied, *b*, the nut and *c* the fish plate of the rail joint all of which may be of any preferred form.

d, indicates the nut lock which is formed of a bar of steel, square in cross section and bent so as to form substantially a ring, the ends *f* and *g* of which lie, normally, one above the other and a short distance from each other, as shown in Fig. 4. Each end of the bar is formed with an oblique face *e*, disposed parallel with each other so that when the ends are pressed together, against their normal tendency, their oblique faces will lie flush with each other. This construction gives to each end of the bar a tri-angular shape in cross section, (see Fig.

4.) Formed in the upper side of the end *f*, is an upwardly extending gripping point *g'* which is adapted to engage and hold the nut and is so formed that when the nut is turned to the right it will not positively engage with it, but when the direction of the nut is reversed the point will firmly grip the nut and prevent it from being retracted. This is accomplished by means of an incline portion *h*, to the right of the point, which causes the point *f*, to be pushed down, as the nut is turned over it; and the abrupt face *i*, to the left of the point, which gives the latter a hold on the nut. The end *e*, of the ring has its upper inner face bent inwardly toward the center of the ring whereby the gripping point *k* is formed, (see Fig. 3.)

In using my improved nut lock the ring is first placed over the bolt and the nut is screwed down over it. This will operate to overcome the normal tendency of the ends of the ring and compress them together, whereupon the point *g* will firmly grip the under side of the nut and the incline face on the point *f* will operate with the incline faced point *e*, to push the gripping point or edge *k* toward the center of the ring and firmly into the bolt. This operation is shown in Fig. 1. Thus it will be seen that a nut lock is provided in which two gripping points or edges are employed and one made to operate with the bolt while the other operates with the nut. By this means a much more effective and durable nut lock is produced.

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

1. A nut lock adapted to encircle the bolt and to be arranged between the base of the nut and the part bolted, and formed of a bar of spring metal bent in the form of a circle the ends of which bar are arranged one above another and having substantially parallel oblique engaging faces whereby when the upper end is pressed down upon the lower end the said lower end will be forced to move laterally and inwardly, and two gripping points or edges one on the top of the upper end and adapted to engage and hold the nut and the other on the inner side of the lower end and

adapted to engage the bolt and hold the nut lock and hence the nut in place, substantially as described.

2. A nut lock consisting of a coiled bar of
5 metal having overlapping ends provided with oblique faces adapted to engage each other when the nut is forced down, an upwardly extending gripping edge located on one of the overlapping ends and adapted to engage the
10 nut, and an inwardly extending gripping edge

located upon the remaining overlapping end and adapted to engage the bolt, substantially as described.

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

ALBERT J. MAUERMANN.

Witnesses:

G. B. ABERCROMBIE,

G. ST. C. HUSSEY, Jr.