

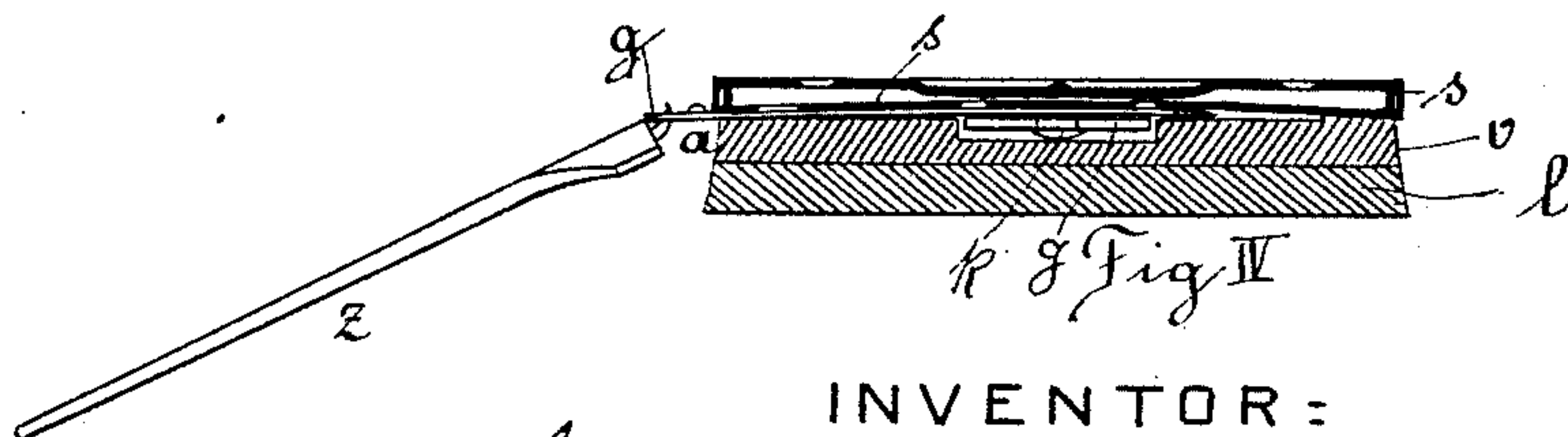
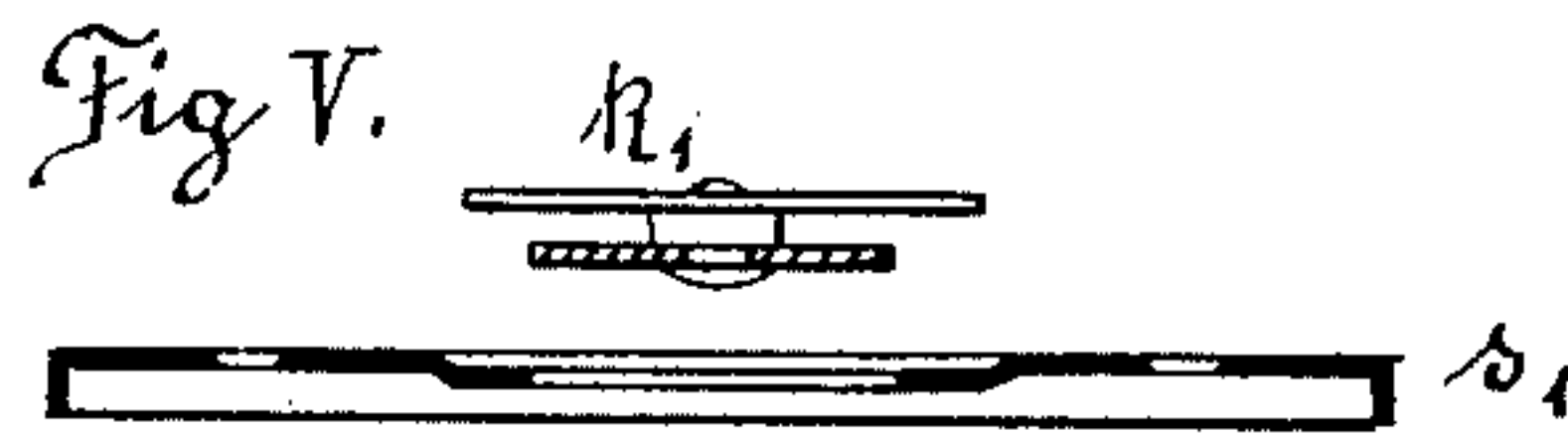
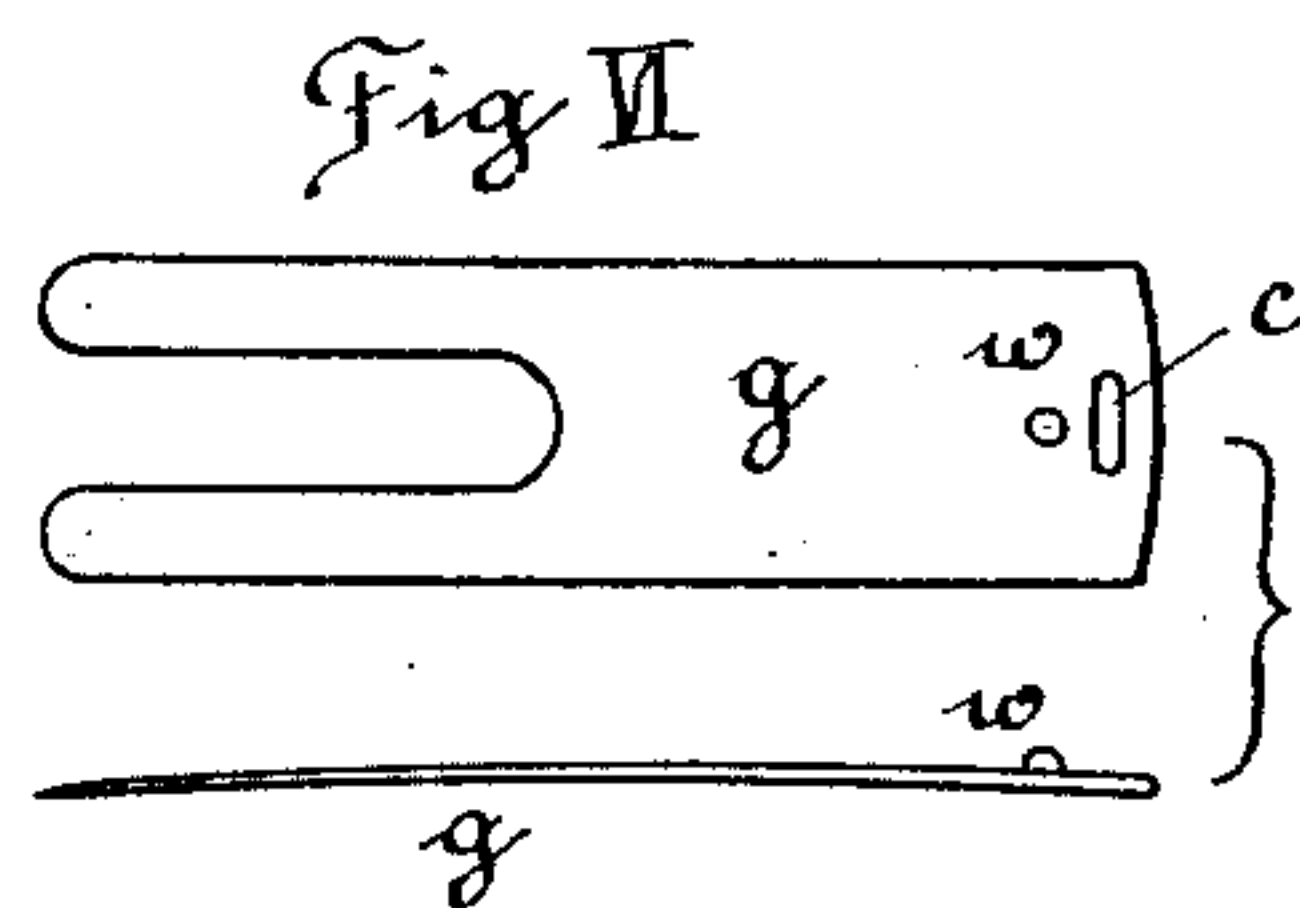
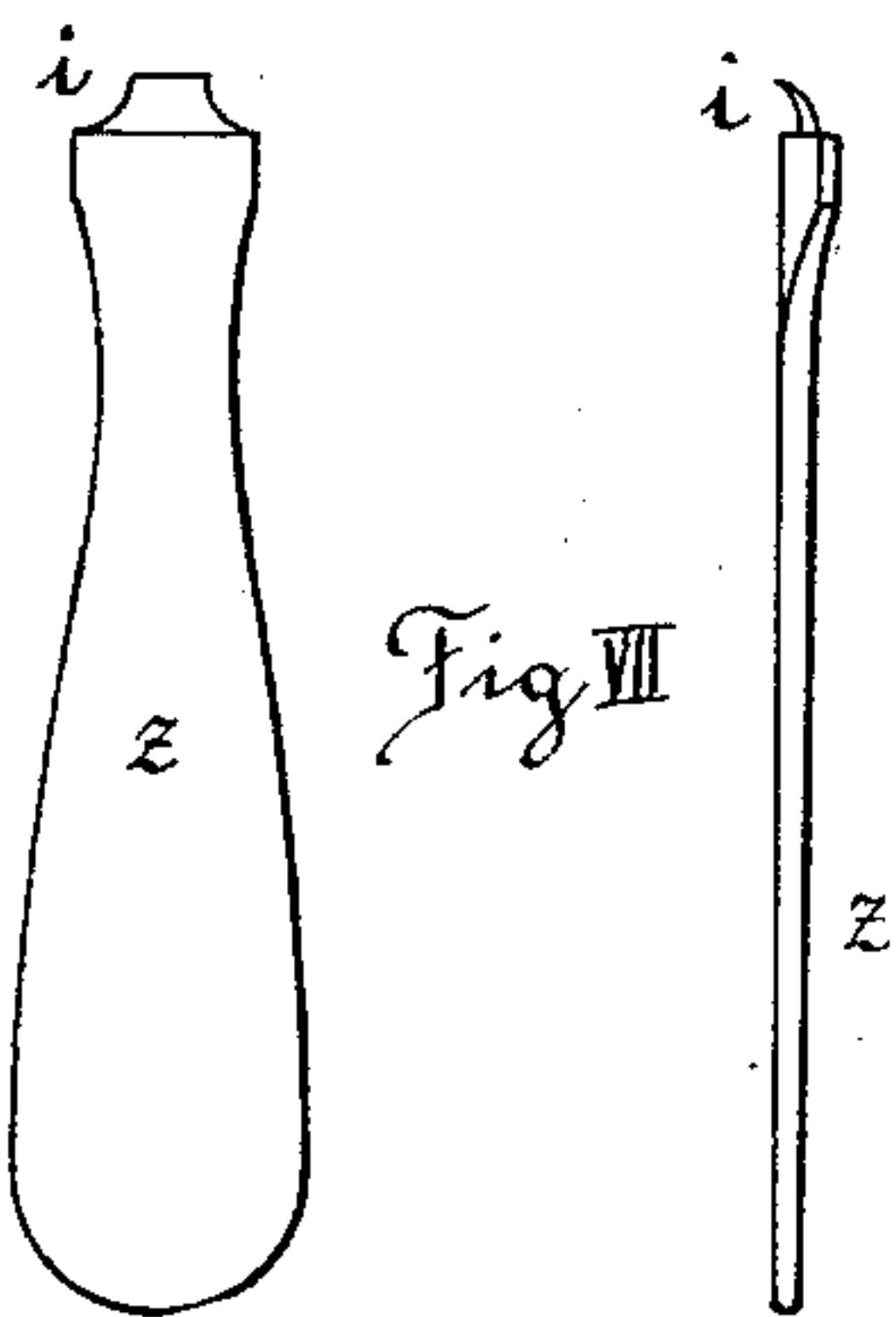
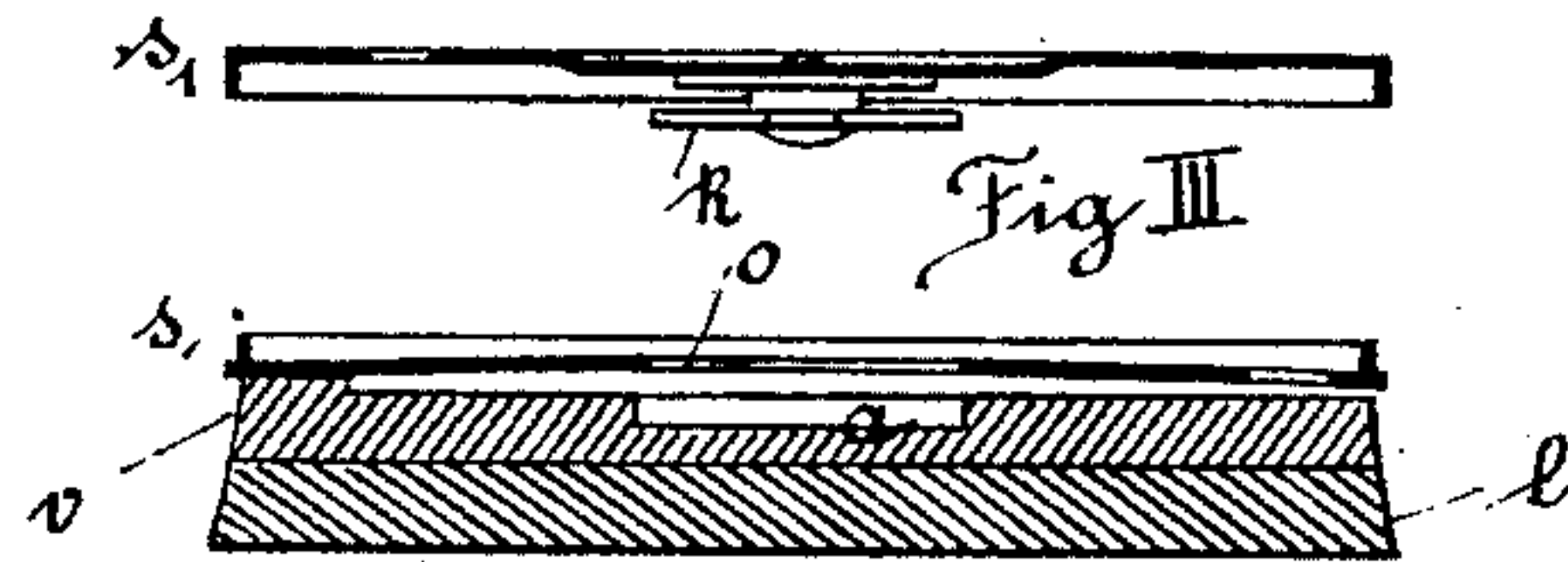
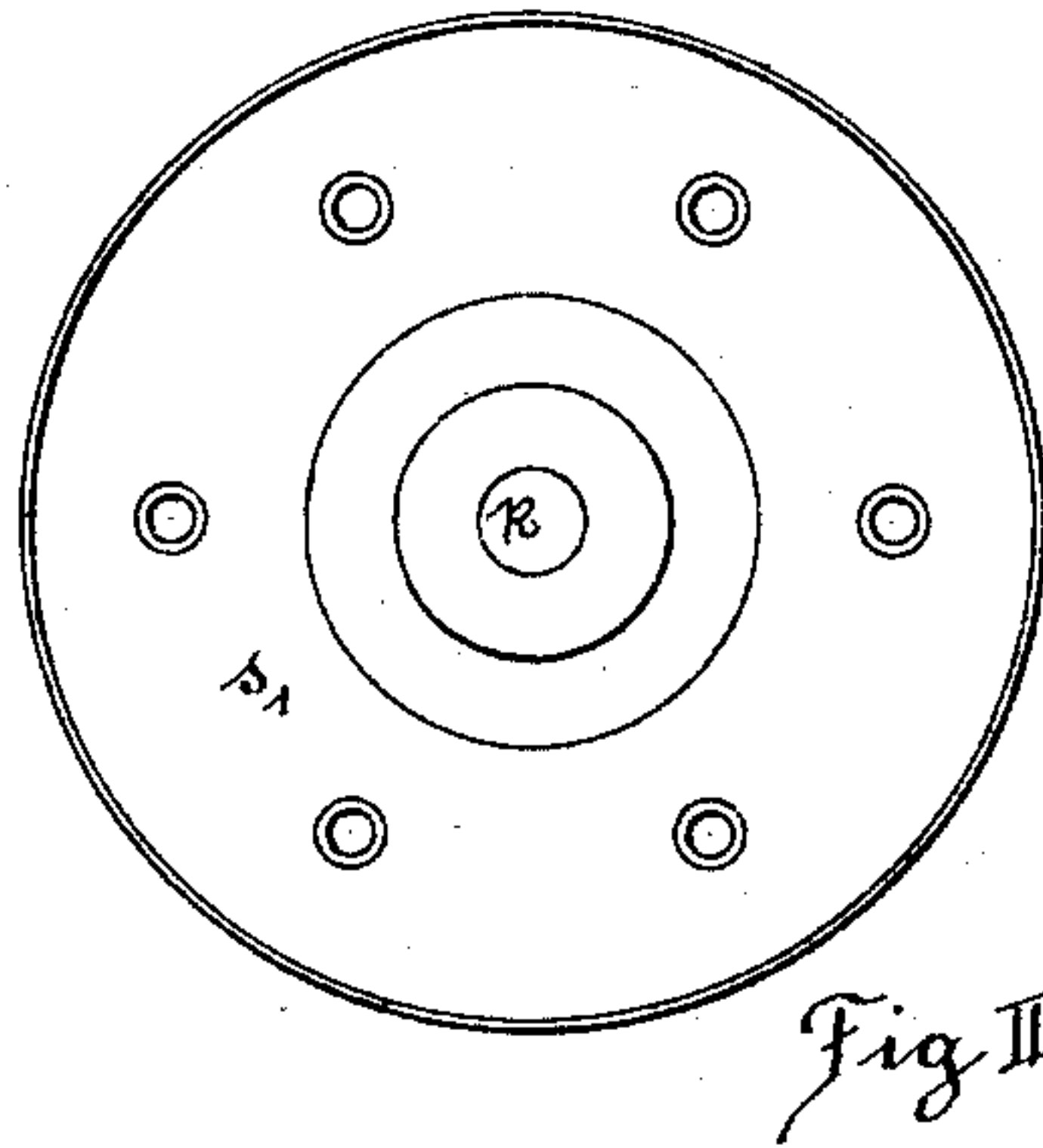
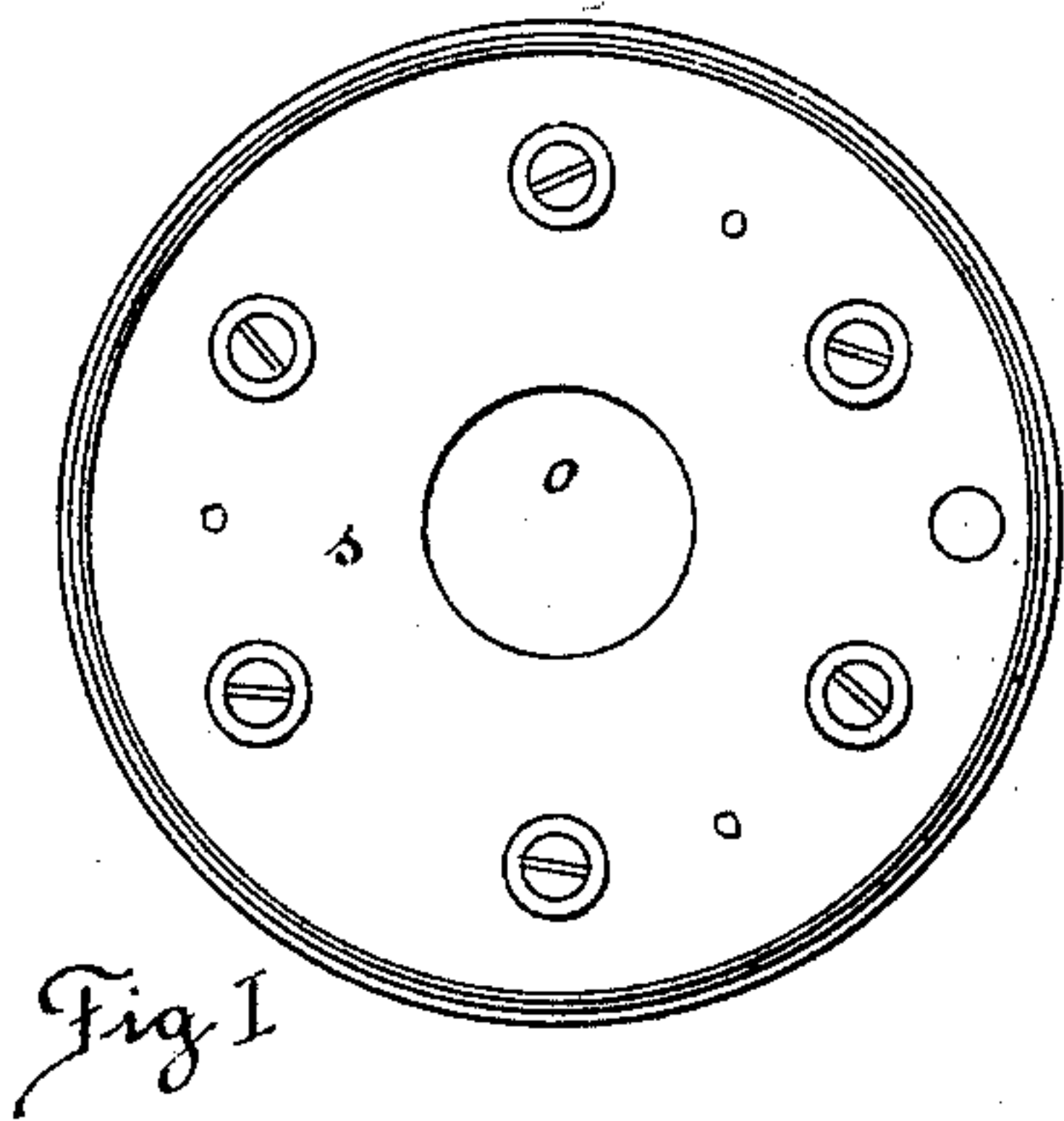
(No Model.)

G. N. THURZÓ.

ROTARY CAP FOR BOOT HEELS.

No. 348,800.

Patented Sept. 7, 1886.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORG NICOLAUS THURZÓ, OF VIENNA, AUSTRIA-HUNGARY.

## ROTARY CAP FOR BOOT-HEELS.

SPECIFICATION forming part of Letters Patent No. 348,800, dated September 7, 1886.

Application filed June 9, 1886. Serial No. 204,582. (No model.)

*To all whom it may concern:*

Be it known that I, GEORG NICOLAUS THURZÓ, of the city of Vienna, in the Austro-Hungarian Empire, have invented certain new and useful Improvements in the Manufacture of Rotary Caps for the Heels of Boots, Shoes, Crutches, and other Objects; and of which I declare the following to be a specification.

My invention relates to rotary heels for boots or shoes, the object of which is to insure an equal wear of the heels and to prevent their being worn off at one part more than at another.

It is a well-known fact that many persons wear off the soles and heels of their boots or shoes in a very unequal manner, and that such unequal wear is soonest apparent at the heels. To walk with such an unequally worn-off boot or shoe is not only uncomfortable and unsafe, but is also very detrimental to the other parts of the said boot or shoe, not to mention even the injurious effects which such a partly and unequally worn-off boot or shoe is sure to produce upon the organism of the wearer.

According to my invention the one-sided or partial wearing-off of the heel is totally impossible, as the same is attached or connected with the boot or shoe in such manner that it is allowed to revolve in walking in accordance with the movements of the wearer, so that a constant treading upon one and the same part of the heel is quite impossible, as the latter moves or turns a little in walking or even at every step of the wearer. To be sure, however, that the heel does not remain in one and the same position, the same may be turned somewhat when the boot is being cleaned or put on by the wearer.

In the accompanying drawings my new rotary heel is represented as follows: Figure I is a top view with the cover-plate removed. Fig. II is a view of the cover-plate seen from below. Fig. III are sections through the heel and cover plate. Fig. IV shows the complete heel in section, and Fig. V is a modification of the cover-plate. Figs. VI and VII represent the requisite parts for securing and taking off the heel, said parts consisting of the forked locking-plate and the draw-pin.

The chief component parts of these rotary heels consist of two steel disks, *s* and *s'*, which

gear with each other, the latter of which is secured to the boot or shoe, and is made to receive the former, which catches or gears into it, a piece, *v*, of india-rubber and a stout leather plate or disk *l* forming the exterior surface of the heel.

The aforementioned steel disks *s* and *s'* are connected to each other by a knob, *k*, and the forked locking-plate *g*.

The india-rubber plate *v* and the leather plate *l* are screwed or fastened to the steel disk *s* by means of screws, rivets, or cement, or some other suitable binding substance. The knob *k* is riveted to the steel disk or plate *s'*, Fig. III, and can be passed through the circular orifice or opening *o* of the steel disk or plate *s*. When these two steel plates or disks are placed upon each other, the forked locking-plate *g*, Fig. VI, is, with its projection upward, introduced into the orifice or opening *a* in the india-rubber plate *v*, and entirely pressed into it, thus taking hold of and embracing the bolt of the knob *k*, whereby the steel disk or plate *s* is able to revolve around its own axis—*i. e.*, around that of the knob *k*. In order to disjoin the heel or to take the component parts of same to pieces, I employ the extractor *z*, Fig. VII, which is pressed into the india-rubber plate below the forked locking-plate, Fig. IV, where the bent or hooked point of the said extractor catches into the hole *c* of the locking-plate *g*, whereupon the latter can be pulled out without difficulty.

These heels are made of the best material, and the component parts of same are firmly connected with each other by rivets and screws, the india-rubber plate *v* and leather plate *l* being secured to the disk *s* in a similar manner.

When in use, it is desirable to grease the heels between the two steel plates or disks about once a week with oil or paraffine.

The modification of the fixed cover-plate shown in Fig. 5 consists of a plate of the same form as plate *s'*, with the difference, however, that the knob *k* is not rigidly secured or fixed to the same, but that a removable knob *k'*, is employed instead of the same. The manner of securing the various parts with each other, however, remains the same.

It need hardly be mentioned that the lower or outside leather plate, *l*, may be omitted so



that the wearer could walk on the india-rubber, or that the india-rubber plate may be omitted, and that, consequently, the whole heel could consist of leather.

5 Having now particularly described and ascertained the nature of my invention and in what manner the same is to be performed, I declare that what I claim as new and patentable, and desire to secure by Letters Patent, is—

10 A rotary heel for boots and shoes, consisting of an upper part or steel disk, *s'*, rigidly fixed to the boot or shoe, and an under part or steel plate, *s*, which is carried and rotates in the

former, both parts being suitably connected with each other by a knob, *k*, and forked locking-plate *g*, substantially as described, and represented in the accompanying drawings. 15

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORG NICOLAUS THURZÓ.

Witnesses:

VICTOR TISDELER,  
*Engineer.*

EDMUND JUSSEN.