

No. 705,263.

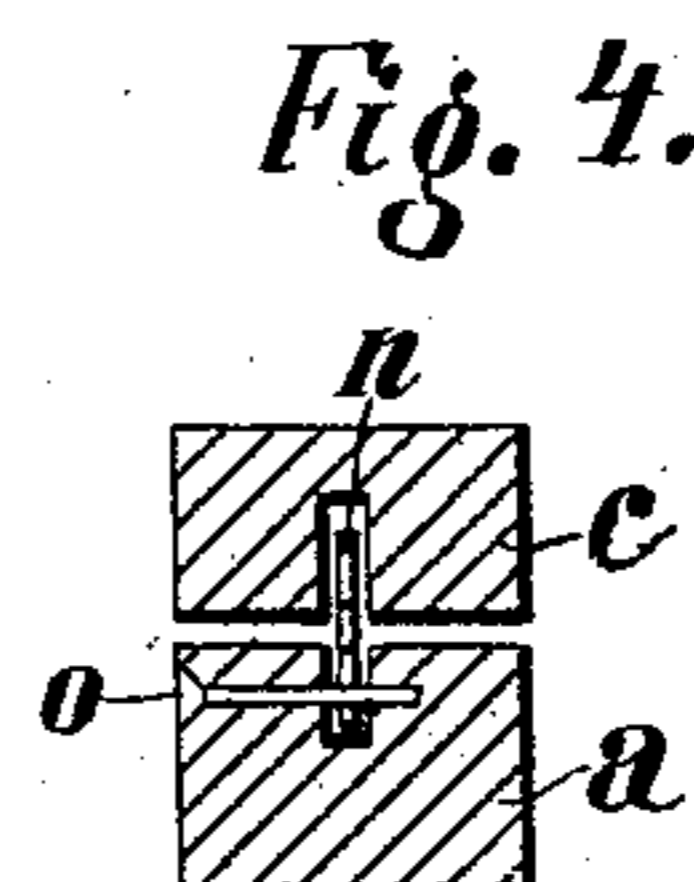
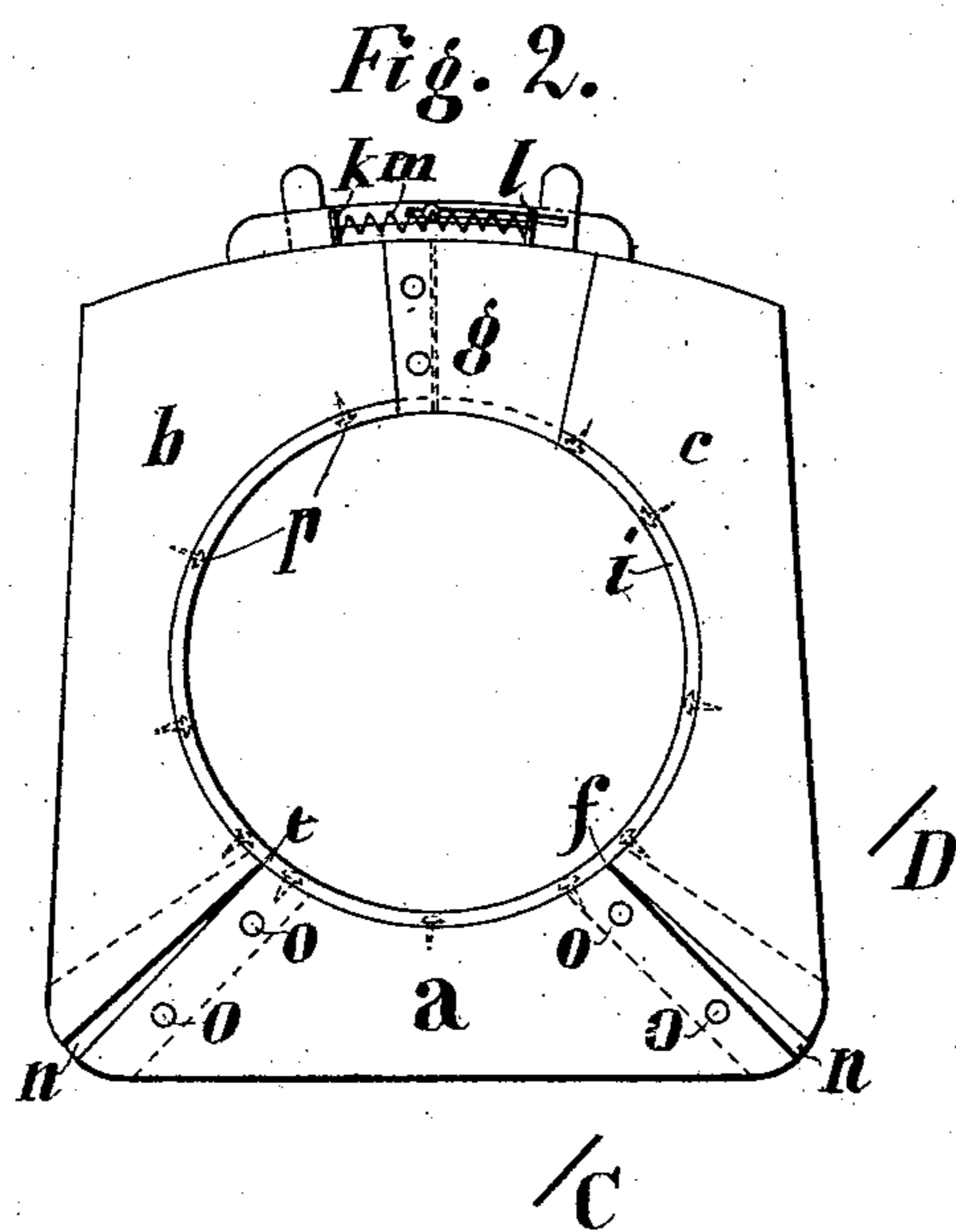
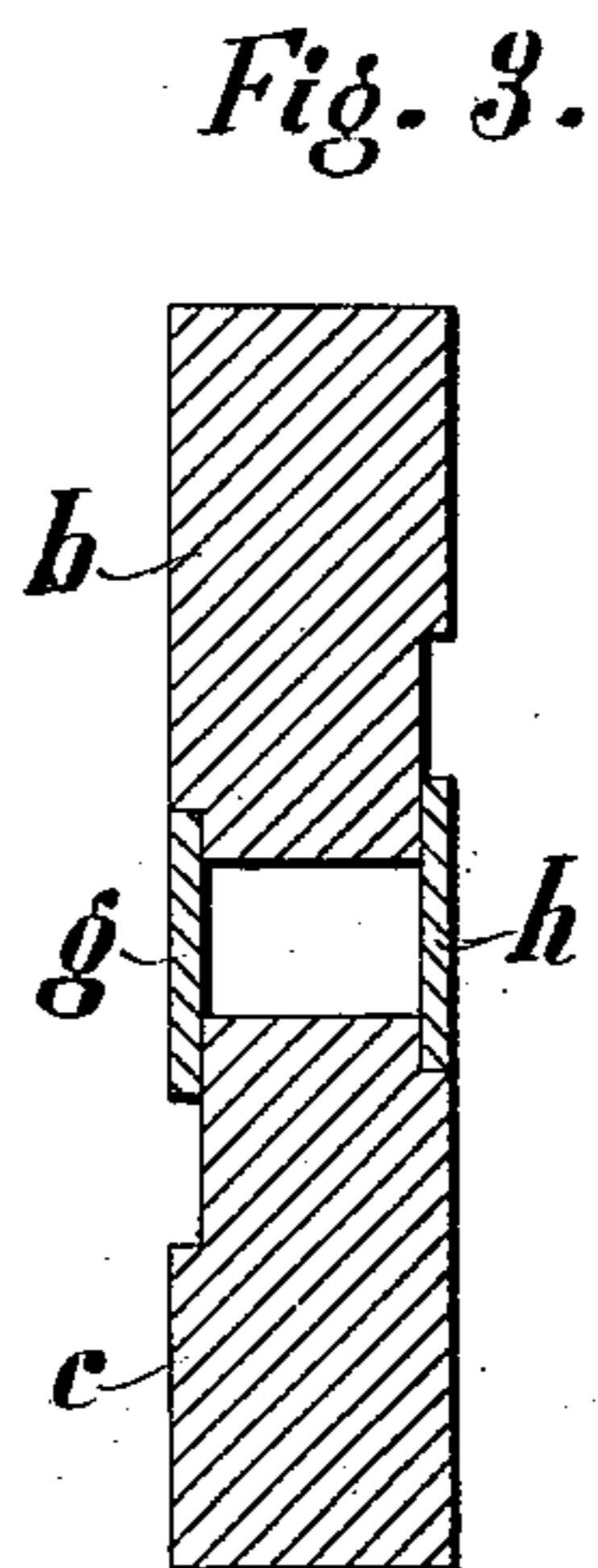
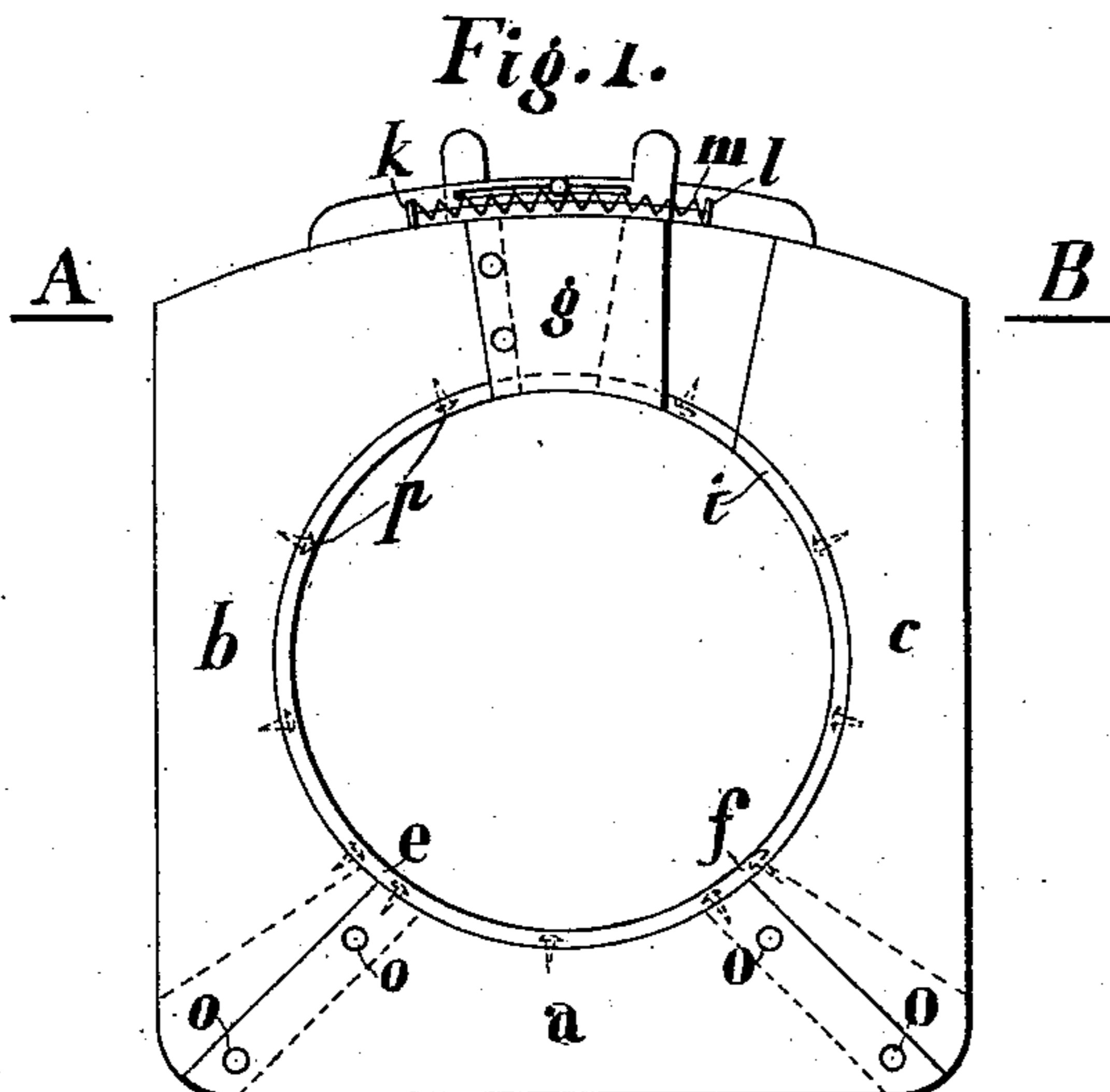
Patented July 22, 1902.

G. MAASS.

DUST RING OR DISK FOR AXLE BOXES.

(Application filed Mar. 12, 1902.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

GOTTFRIED MAASS, OF DUISBURG, GERMANY.

DUST RING OR DISK FOR AXLE-BOXES.

SPECIFICATION forming part of Letters Patent No. 705,263, dated July 22, 1902.

Application filed March 12, 1902. Serial No. 97,874. (No model.)

To all whom it may concern:

Be it known that I, GOTTFRIED MAASS, a subject of the Emperor of Germany, residing at Duisburg, in the Empire of Germany, have
5 invented certain new and useful Improvements in Dust Rings or Disks for Axle-Boxes, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

10 Figures 1 and 2 are front elevations of a dust-ring embodying my invention. Fig. 3 is a cross-section according to A B of Fig. 1, and Fig. 4 is a cross-section according to C D of Fig. 2.

15 Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to construct a dust ring or disk for axle-boxes of vehicles—in particular of railway-carriages—for
20 shaft-bearings, and the like which, although being made of rigid material, permits an expansion, and so renders a permanent packing of the axle or shaft possible.

The invention consists in the construction
25 and combination of parts hereinafter described and claimed.

The ring or disk consists of three parts *a*, *b*, and *c*, of which *a* is the bottom portion, *b* and *c* being articulated to the respective ends
30 of the latter. The free ends of the portions *b* and *c* overlap each other with their leather plates *g* and *h*, so that no spaces or intervals will result if these ends are shifted in the direction of the plane of the ring. The ring
35 has an inner cover or lining *i*, made of felt, leather, or similar flexible material, rigidly connected with the three portions *a*, *b*, and *c* by pins *p*, so forming the flexible joints *e* and *f*. The free ends of the portions *b* and *c* are
40 moved toward each other by a spring *m*, connected to said portions by the pegs *k* and *l*. This spring *m* attempts to shift the portions *b* and *c* in the position shown in Fig. 2, thereby opening the joints between the parts *b a*
45 and *c a*.

To prevent the dust entering the axle-box or shaft-bearing provided with the new dust-ring through the open joints, metal plates or sheets *n* are provided in slots or apertures of
50 the ends of the part *a* and the adjacent ends

of the portions *b* and *c*, which metal plates or sheets *n* are rigidly fastened to one of the adjacent ring portions and reach into slots or apertures of the other ring portions. In the drawings said plates or sheets are connected
55 by rivets or pins *o* to the bottom part *a* of the ring. In case the so-constructed joints *e* and *f* will be opened the plates or sheets *n* give an entirely dust-proof covering for said slits. It will therefore be seen that I have produced
60 a dust ring or disk with the essential characteristics and advantages of a dust-excluding ring compressed or closed by an annular spring capable of being manufactured of wood or any similar rigid material.

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

1. In a journal dust-guard, the combination, with a guard-plate formed of sections,
70 of an inner lining-ring of flexible material which bears against the shaft and forms a hinge for the said sections, and a spring for contracting the said sections and lining-ring upon the shaft, substantially as set forth.

2. In a journal dust-guard, the combination, with a guard-plate formed of sections,
said sections being provided with cover-plates *g* and *h* at one joint, of an inner lining-ring
80 of flexible material which bears against the shaft and forms a hinge for the said sections, and a spring for contracting the said sections and lining-ring upon the shaft, substantially as set forth.

3. In a journal dust-guard, the combination
85 with a guard-plate formed of sections, one of the said sections being provided with a projecting joint-plate *n* which engages with a groove in the next adjacent section, of an inner lining-ring of flexible material which
90 bears against the shaft and forms a hinge for the said sections, and a spring for contracting the said sections and lining-ring upon the shaft, substantially as set forth.

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

GOTTFRIED MAASS.

Witnesses:

HENRY HASPER,

WOLDEMAR HAUPT.