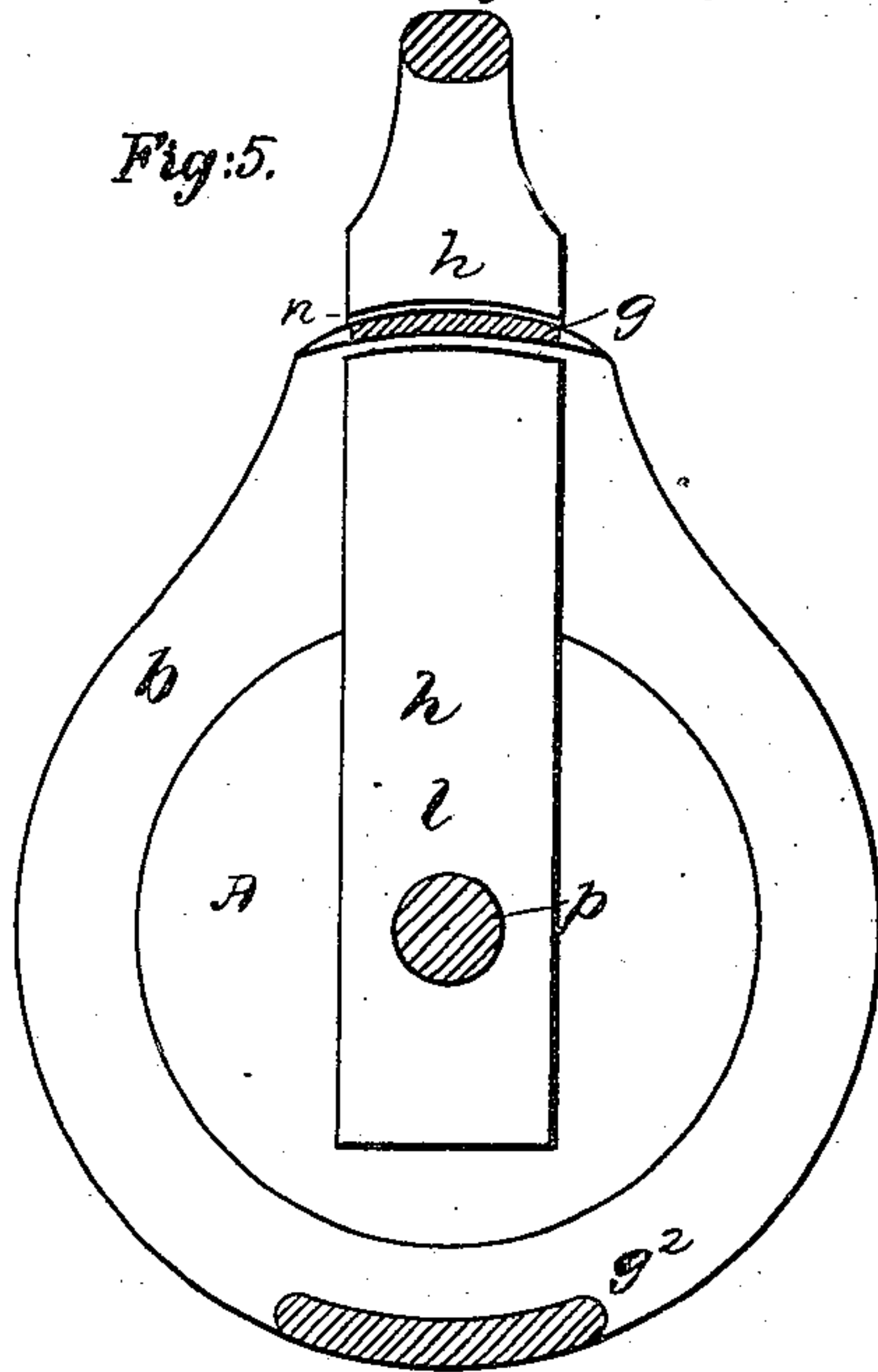
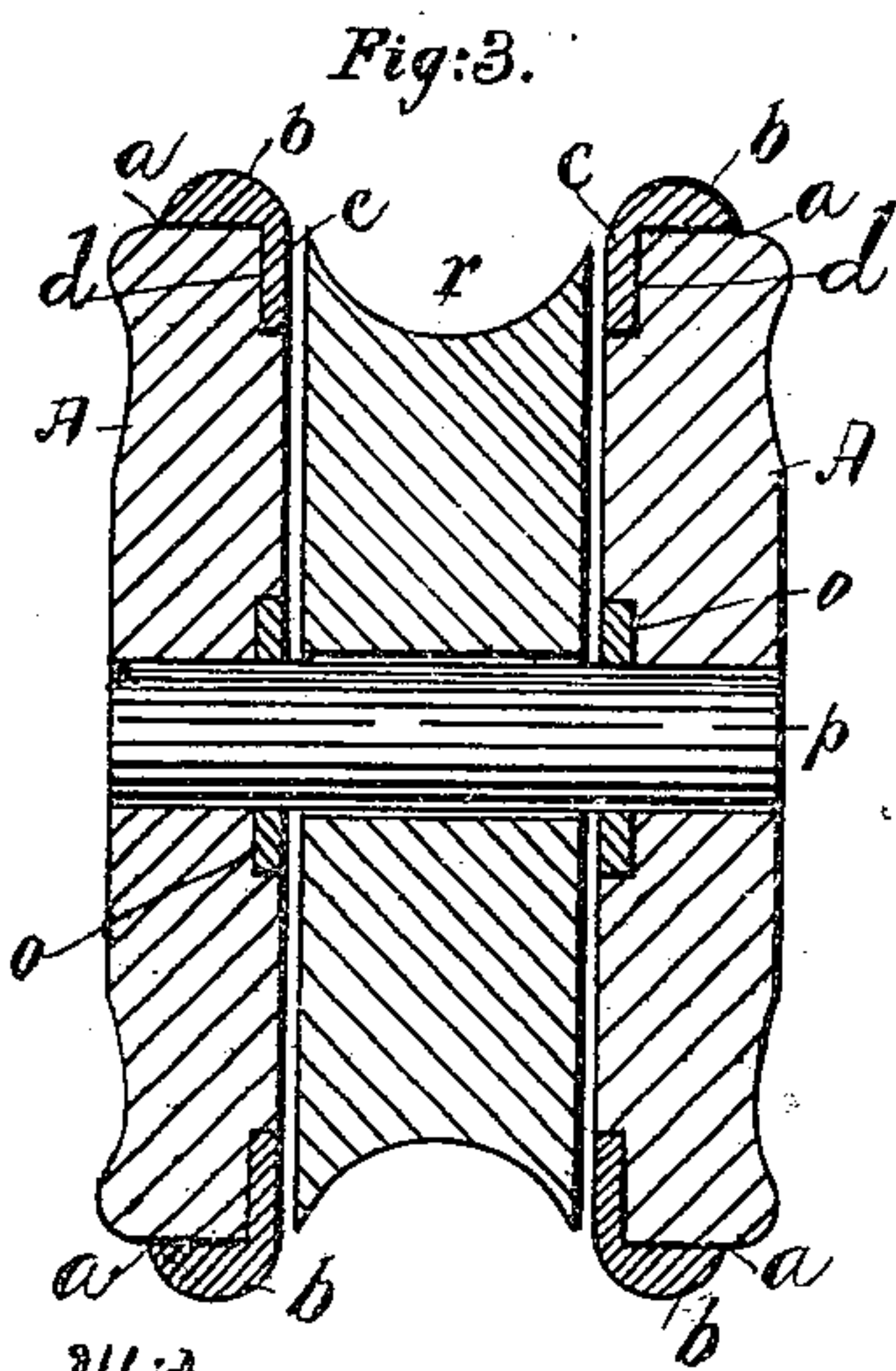
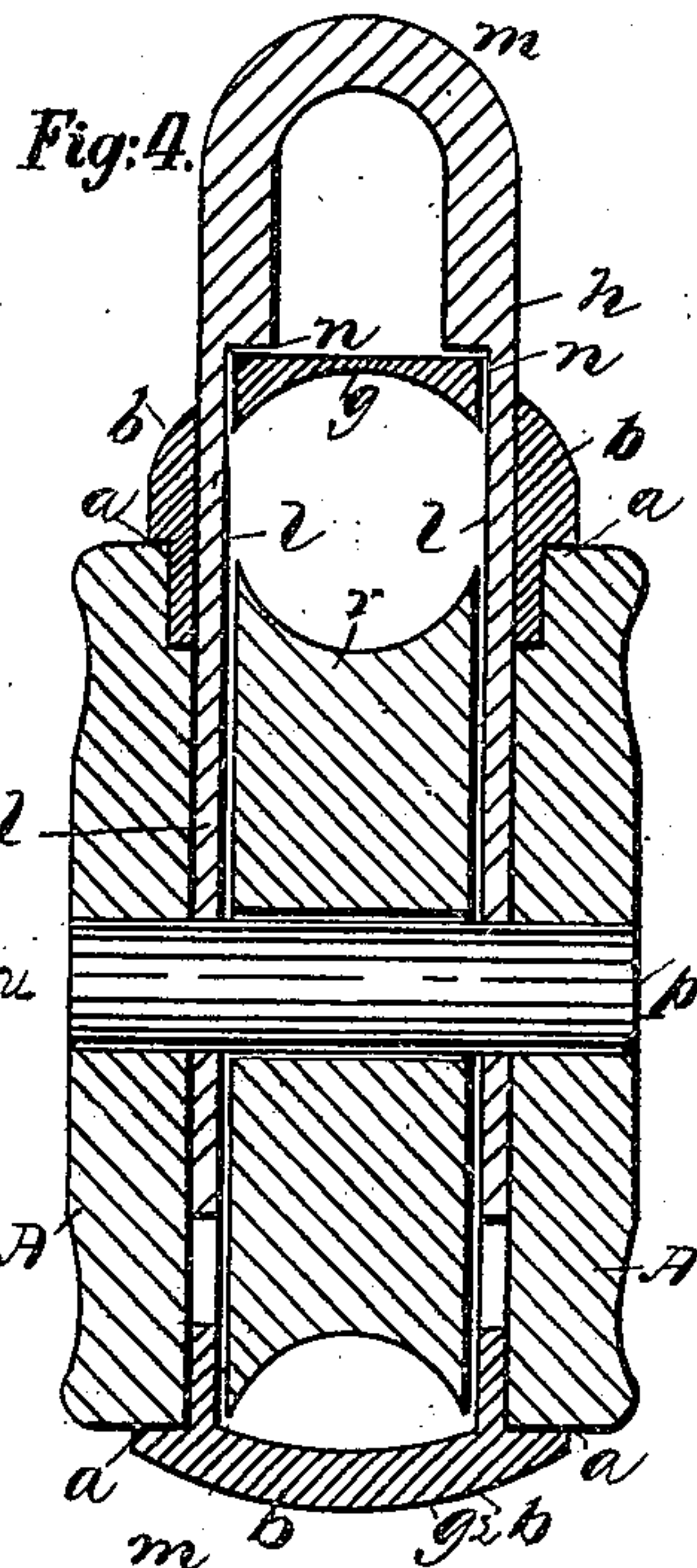
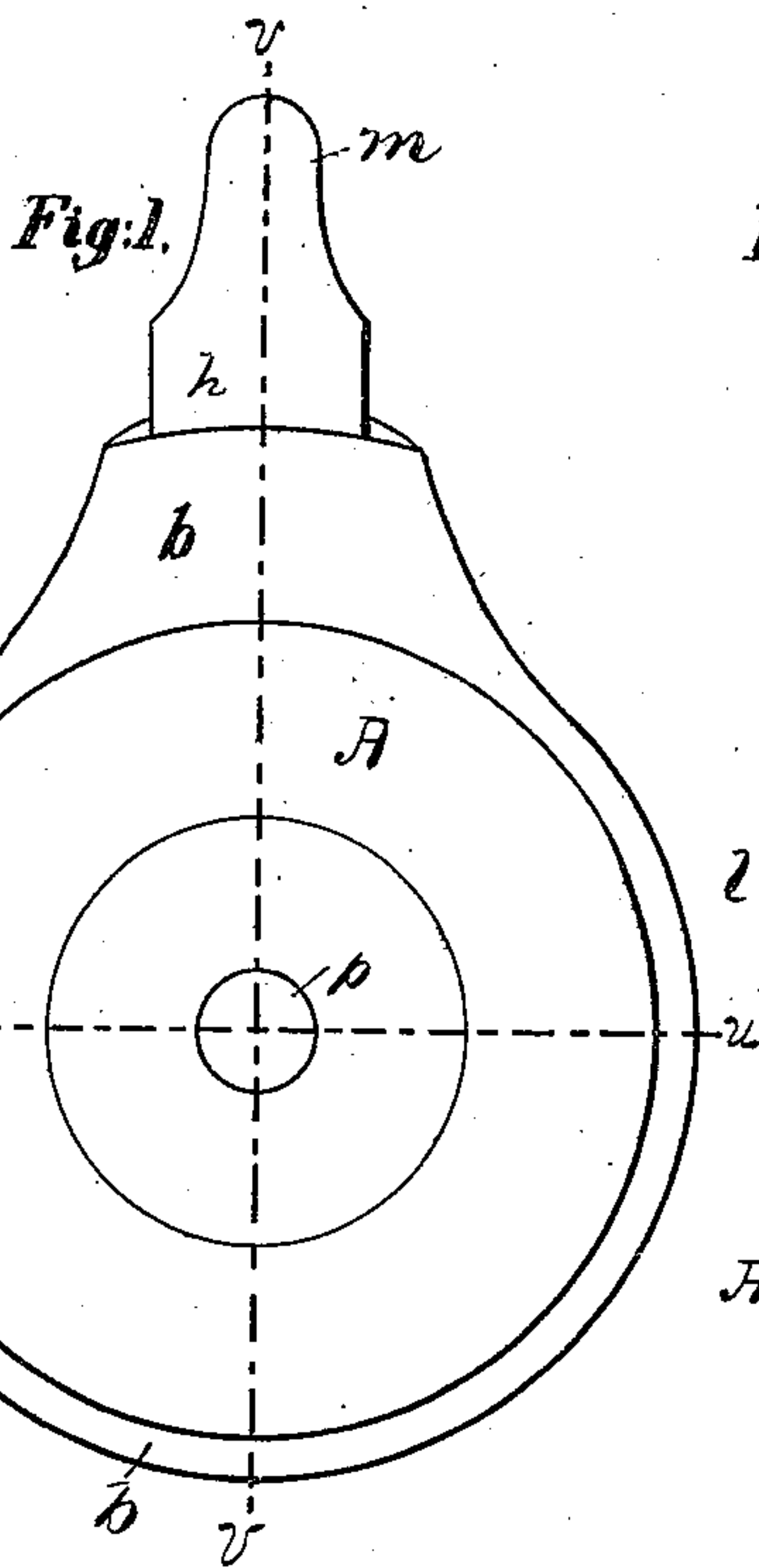
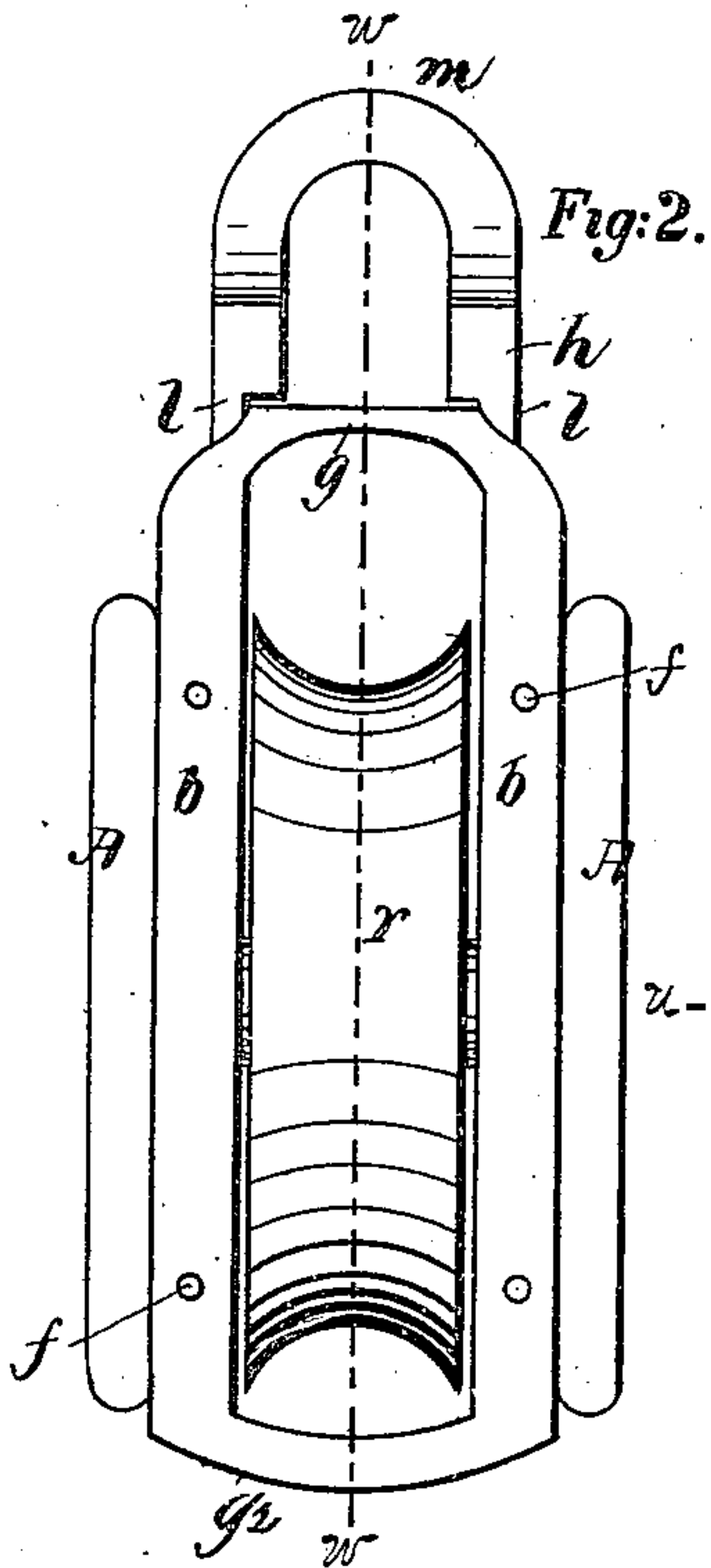


T. R. FERRALL,
Tackle or Pulley-Block.

No. 228,335.

Patented June 1, 1880.



Witnesses:

A. J. McKeever
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Inventor.

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UNITED STATES PATENT OFFICE.

THOMAS R. FERRALL, OF BOSTON, ASSIGNOR TO HERBERT LOUD, OF
EVERETT, MASSACHUSETTS.

TACKLE OR PULLEY BLOCK.

SPECIFICATION forming part of Letters Patent No. 228,335, dated June 1, 1880.

Application filed December 29, 1879.

To all whom it may concern:

Be it known that I, THOMAS R. FERRALL, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Tackle or Pulley Blocks, of which the following is a full, clear, and exact description.

This invention consists of a tackle or pulley block in substance constructed with wooden sides or cheeks and a cast-metal—preferably malleable-iron—frame, which is in two sections, each shaped to surround the edge of each of the wooden cheeks, to which they are secured by screws, rivets, or otherwise, and to permit the snug insertion and removal of said cheeks in an axial direction, and both joined or connected by cross-bars, which, preferably, are in one piece with them, and are diametrically opposite to each other, and with a metal—preferably wrought-iron—strap which has two prongs or legs, that at one end are joined by a cross-piece, which may be constructed with an eye or a hook, or otherwise, for suspension from any given point or support—as, for instance, from an eye or ring or mousing-hook, &c.—and that pass through holes in one of said cross-bars of the said metal frame and lie against or within the wooden cheeks, which at their inner portions are suitably grooved therefor, and, together with said cheeks, are bored or otherwise suitably adapted to receive the pintle or axle of the block, all substantially as hereinafter described.

In the accompanying plate of drawings this invention is illustrated.

Figure 1 is a face view of my improved tackle-block and a mousing-hook of my improved construction, which has two hooks or eyes or rings in the same plane and direction; Fig. 2, an edge view of above; Fig. 3, a cross-section on line *u u*, Fig. 1; Fig. 4, a section on line *v v*, Fig. 1; Fig. 5, a section on line *w w*, Fig. 2, with the sheave or pulley removed.

In the drawings, *A A* represent the two sides or cheeks of a tackle-block. These two cheeks are each made of wood, lignum-vitæ or other hard wood being preferable, and the edge or periphery *a* of each cheek is surrounded by a similar rim or frame, *b*. Each

rim or frame *b* is metal, preferably malleable iron, which is suitably shaped to closely fit about its cheek, and is made with a flange, *c*, to lie against the inner face, *d*, of the cheek, which, preferably, is cut away so as to bring such flange flush therewith.

f f are pins or rivets passing through frames or rims *b b* and entering wooden cheeks, thus securing the same together. *g g* are two cross-bars, joining the frames or rims *b* together at points diametrically opposite to each other. These bars *g g* are metal, preferably malleable iron, and in one piece with the frames or rims *b*, which thus become one flange or rim, capable of receiving and holding the two cheeks *A*, as aforesaid.

h is a strap of metal, preferably wrought-iron, having two parallel legs or prongs, *l l*, which at one end are joined by a cross-bar, *m*, in one piece with the same, and pass through holes *n n* in one cross-bar, *g*, of the cheek frame or rim *b b*, and lie within diametrical grooves *o o* in the inner faces, *d*, of the cheeks, where, together with the said cheeks, they are bored to receive the pintle or axle-pin *p* of the pulley-wheel *r* to the block.

A tackle-block constructed as above described is light, strong, safe, and durable, all essential in its wear and tear. It enables a sheave or pulley-wheel to be used of as nearly as large diameter as that of the metal frame—as, for instance, with an eight-inch tackle-block a pulley or sheave can be used as large as the pulley or sheave heretofore capable of being used with a ten-inch tackle-block of the ordinary construction, and by rounding the exposed edges of the metal frame the wear of the rope by contact therewith is in a great measure prevented.

Blocks of the construction above described obviously may be made for two or more pulley-wheels or sheaves on a common pintle or axle-pin, separated by partitions having their edges or peripheries covered with metal rims, or flanged, as described, for the cheeks.

The metal frames may be fastened to the wooden cheeks in various ways other than that herein particularly described—as, for instance, by screwing the wooden cheeks into

the metal frame; but that described obviously is most effectual, simple, and suitable.

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

A tackle or pulley constructed with the wooden cheeks or sides *A A*, the malleable-iron frame *b b*, surrounding such cheeks and attached thereto, as herein shown, and the

inside wrought-iron metal strap *h*, arranged in relation to the said frame *b b* and the cheeks *A*, all substantially as and for the purpose specified.

THOMAS R. FERRALL.

Witnesses:

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