

No. 886,007.

PATENTED APR. 28, 1908.

J. M. MALLOY.
COUPLING HEAD.

APPLICATION FILED JUNE 12, 1907.

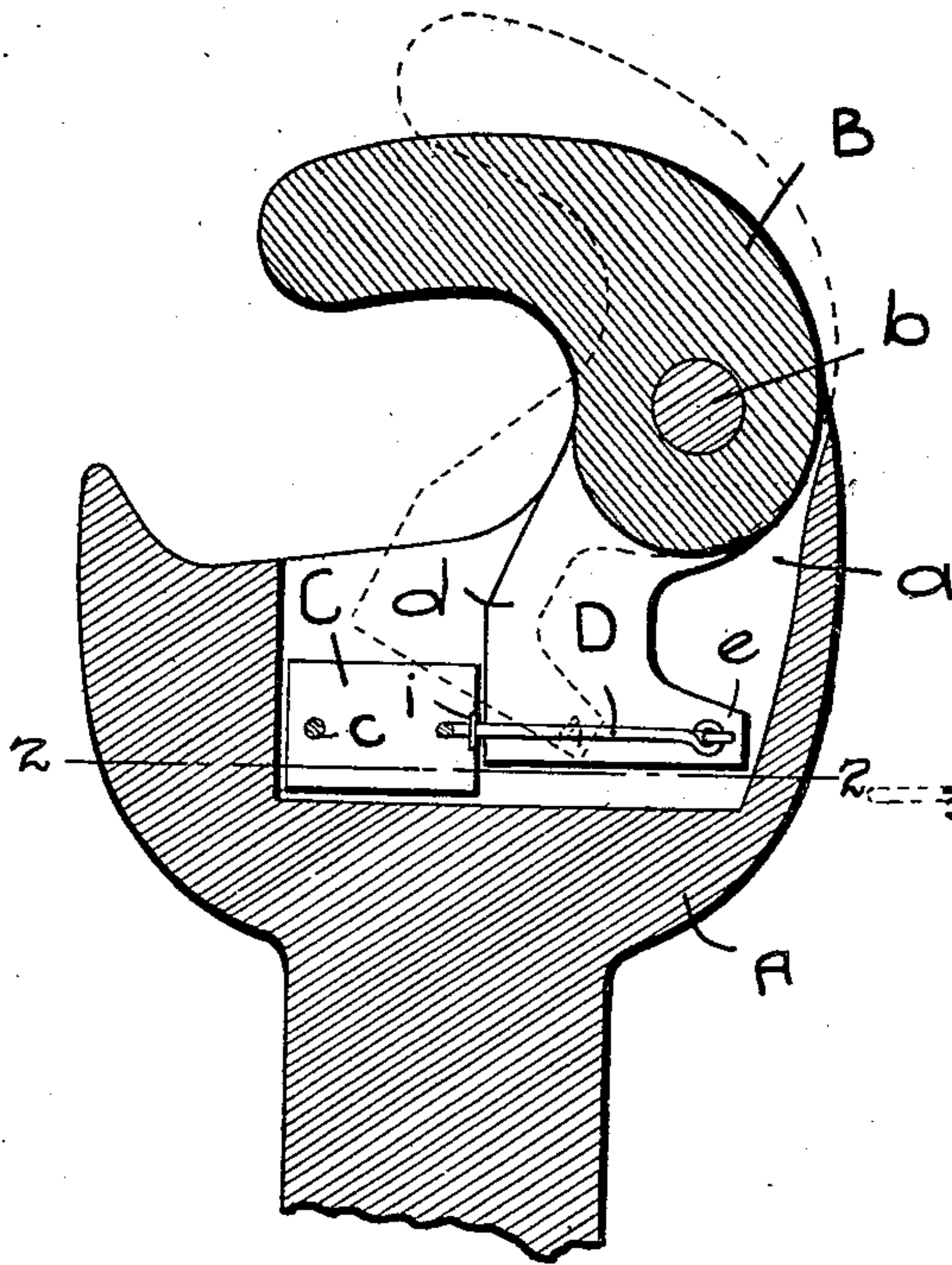


FIG. 1.

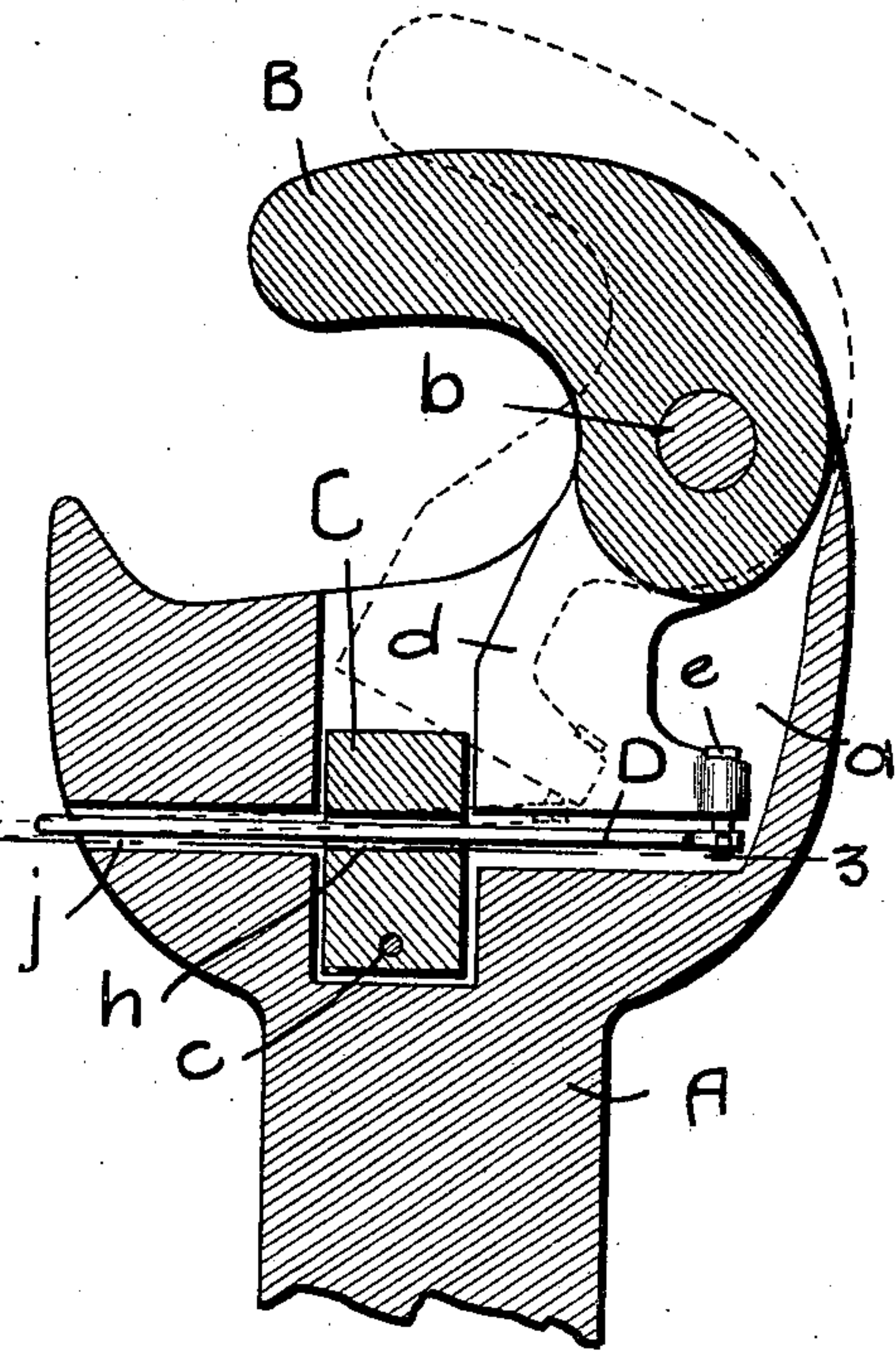


FIG. 3.

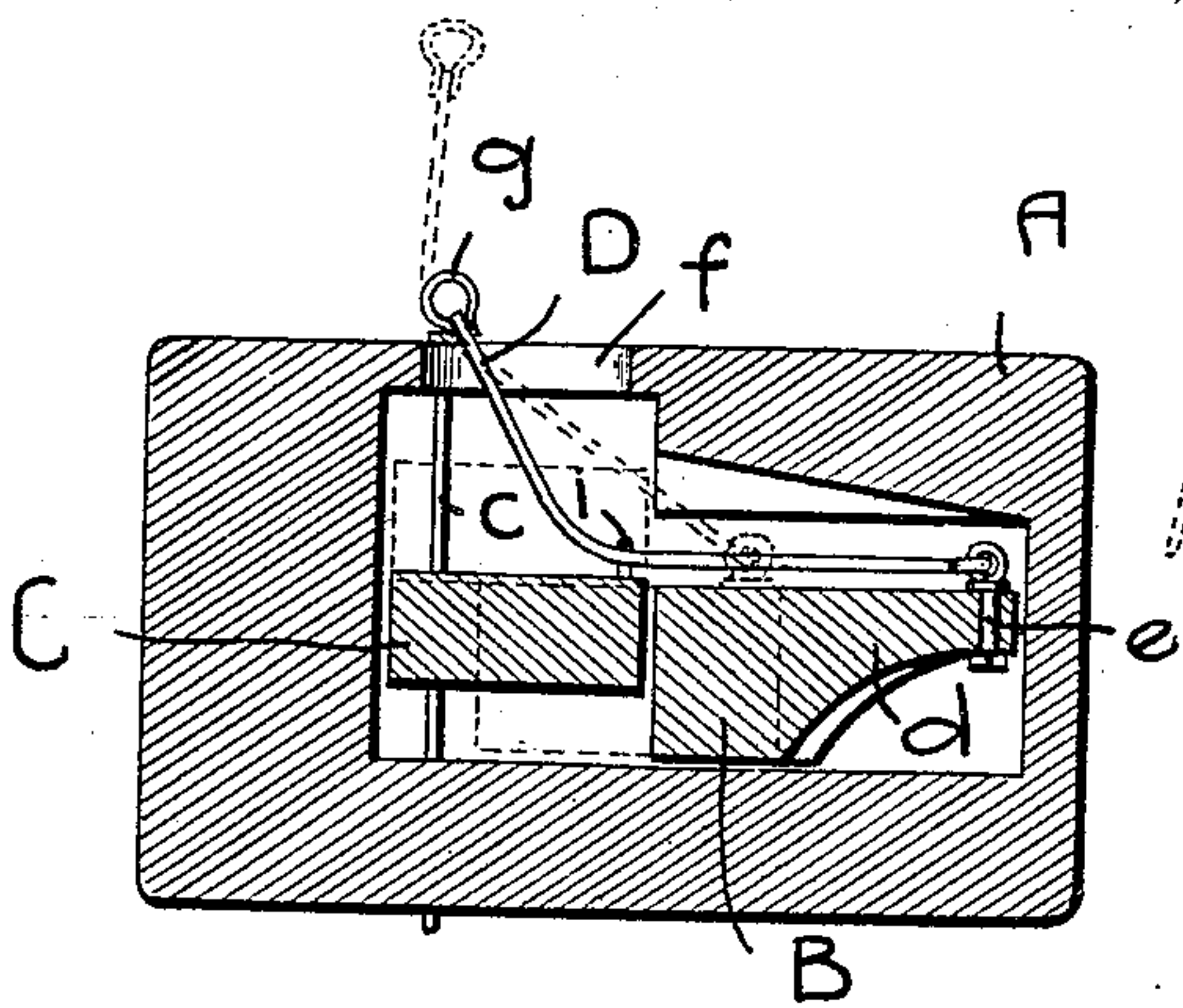


FIG. 2.

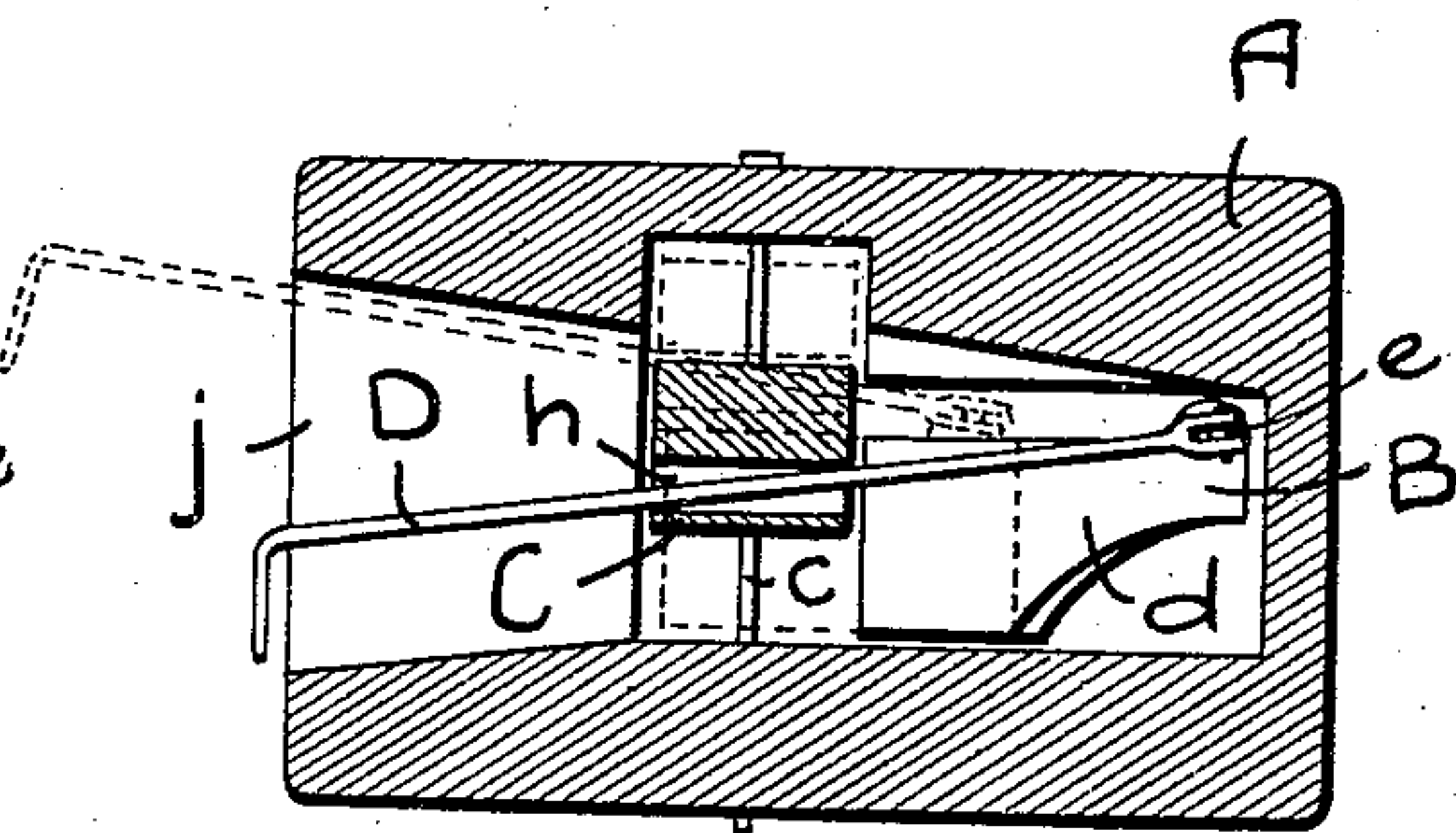


FIG. 4.

WITNESSES.

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COUPLING-HEAD.

No. 886,007.

Specification of Letters Patent.

Patented April 28, 1908.

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To all whom it may concern:

Be it known that I, JOHN MICHAEL MALLOY, of Depot Harbor, in the District of Parry Sound, Province of Ontario, Canada, have invented certain new and useful Improvements in Coupling-Heads, of which the following is a specification.

My invention relates to improvements in coupling heads, of the type in which the knuckle is pivoted to the coupling head proper, and normally held in position by means of a locking block, and the objects of my invention are to provide a simple coupling head of this type in which the operation of a single lever will remove the locking block and throw the knuckle outwardly; and it consists essentially of an operating lever pivoted to the knuckle and extending through a slot in the locking block, as hereinafter more fully set forth and described in the accompanying specifications and drawings.

In the drawings, Figure 1 is a horizontal section through my improved coupling head. Fig. 2 is a section on the line 2—2, Fig. 1. Fig. 3 is a horizontal sectional view through an alternative form of my invention. Fig. 4 is a sectional view along the line 3—3, Fig. 3.

In the drawings like letters of reference indicate corresponding parts in each figure.

Referring first to the form shown in Figs. 1 and 2, A is the coupling head of the usual construction having the knuckle B pivoted thereto, the rear part of said knuckle extending into a recess *a* in the head, in the top and bottom of which a pivoting pin *b* is journaled. C is a locking block located in the rear part of the recess and which slides vertically on a pin *c* extending through the recess. In its lowest position, this block is adapted to lock against a projection *d* on the knuckle *b* and so hold the same in closed position. D is the operating lever, which is suitably pivoted to the projection *d* of the knuckle, the means shown to accomplish this being an eyebolt *e*, which is engaged by the hooked end of the lever D. The lever D is curved in form and extends upwardly through a slot *f* in the head and is there provided, at its end, with a ring *g*, which serves to provide a convenient means of gripping the lever and also to prevent it slipping through the slot *f*. As it passes the block C

the lever is encircled by a staple *i* secured to or integral with the block.

In operation when the block is in the locking position, the head of the operating lever just rests on the edge of the slot *f*, and the block C is in its lowest position securely locking the knuckle. When, it is desired to throw the knuckle open, the lever D is raised, which first raises the block and then swings the head outwardly, the relative position after the movement, being shown in dotted lines in both Figs. 1 and 2. This operation is enabled to take place by the curved form of lever, which causes the first movement thereof to be operative, only in raising the block and the last movement in swinging the knuckle outwardly.

In the form shown in Figs. 3 and 4, the lever D is made straight and extends through a horizontal slot *h* in the block and through a like slot *j* provided in the side of the coupling head. The slot *j* is narrow and extends vertically, whereby the lever may be raised therein.

To open the knuckle, the end of the lever is first raised vertically, which moves the block C to its uppermost position and clear of engagement with the projection *d*. The lever is then pulled outwardly, which swings the knuckle outwardly, as indicated, the relative position of the parts, after operation of the lever, being shown in dotted lines in the two figures.

It will thus be seen that I have devised an exceedingly cheap and simple form of coupling head, which may be opened and closed by the operation of a single lever. When closed, it is absolutely impossible for the knuckle to open without operation of the lever and thus, the head is absolutely safe and sure in operation, and no amount of jarring can free it from engagement.

While the invention has been described herein, with great particularity of detail, yet it will be readily understood that in carrying out the construction of the same, changes, within the scope of the appended claims, may be made in the details thereof, without departing from the spirit of the invention.

What I claim as my invention is:—

1. An improved coupling head comprising a head having a recess therein, opening at the front, a knuckle pivoted in the recess, a pin extending vertically through the recess, a

locking block slidable thereon, and a lever connected to both the knuckle and the locking block and adapted when operated to release the block and swing the knuckle outwardly.

2. An improved coupling head comprising a head, a knuckle pivoted thereto, a pin on the head, a block slidable thereon adapted, in normal position, to lock the knuckle, and an operating lever pivoted to the knuckle having loose connection with the locking block.

3. An improved coupling head comprising a recessed head, a knuckle pivoted therein, a projection integral with the knuckle, a pin

through the recess, a locking block vertically slidable thereon adapted, in its lowest position, to engage with a projection on the knuckle, a lever pivoted to the knuckle extending through a slot in the block, and through a corresponding slot in the side of the coupling head, as and for the purpose specified.

Signed at Depot Harbor, in the Province of Ontario, this 1st day of June, 1907.

JOHN MICHAEL MALLOY.

Witnesses:

J. W. LAND,
E. S. CHURCH.