

F. E. SUTHERLAND & J. A. BROWN.

DIE SECURING MEANS.

APPLICATION FILED NOV. 9, 1909.

978,508.

Patented Dec. 13, 1910.

Fig. 1.

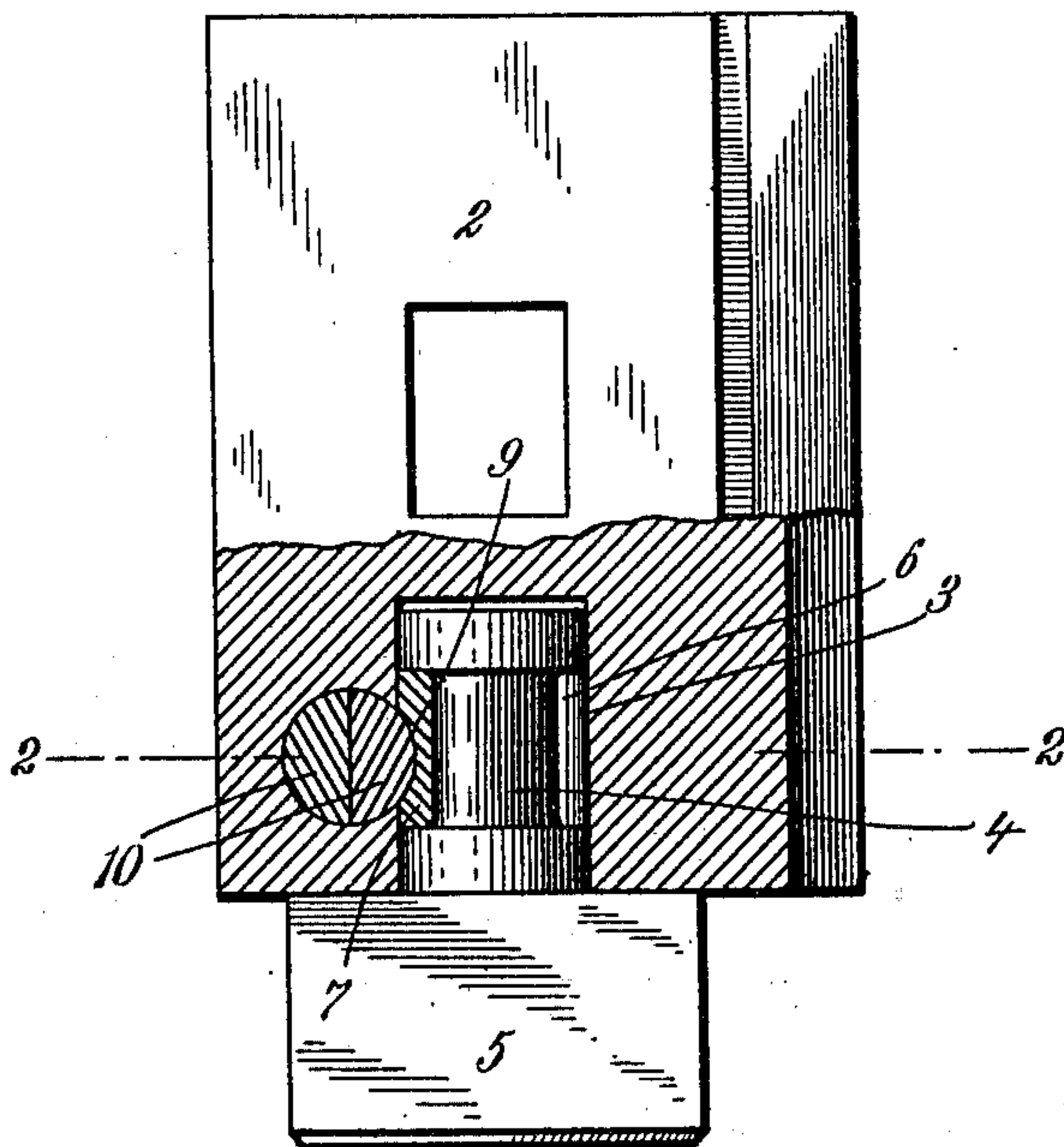
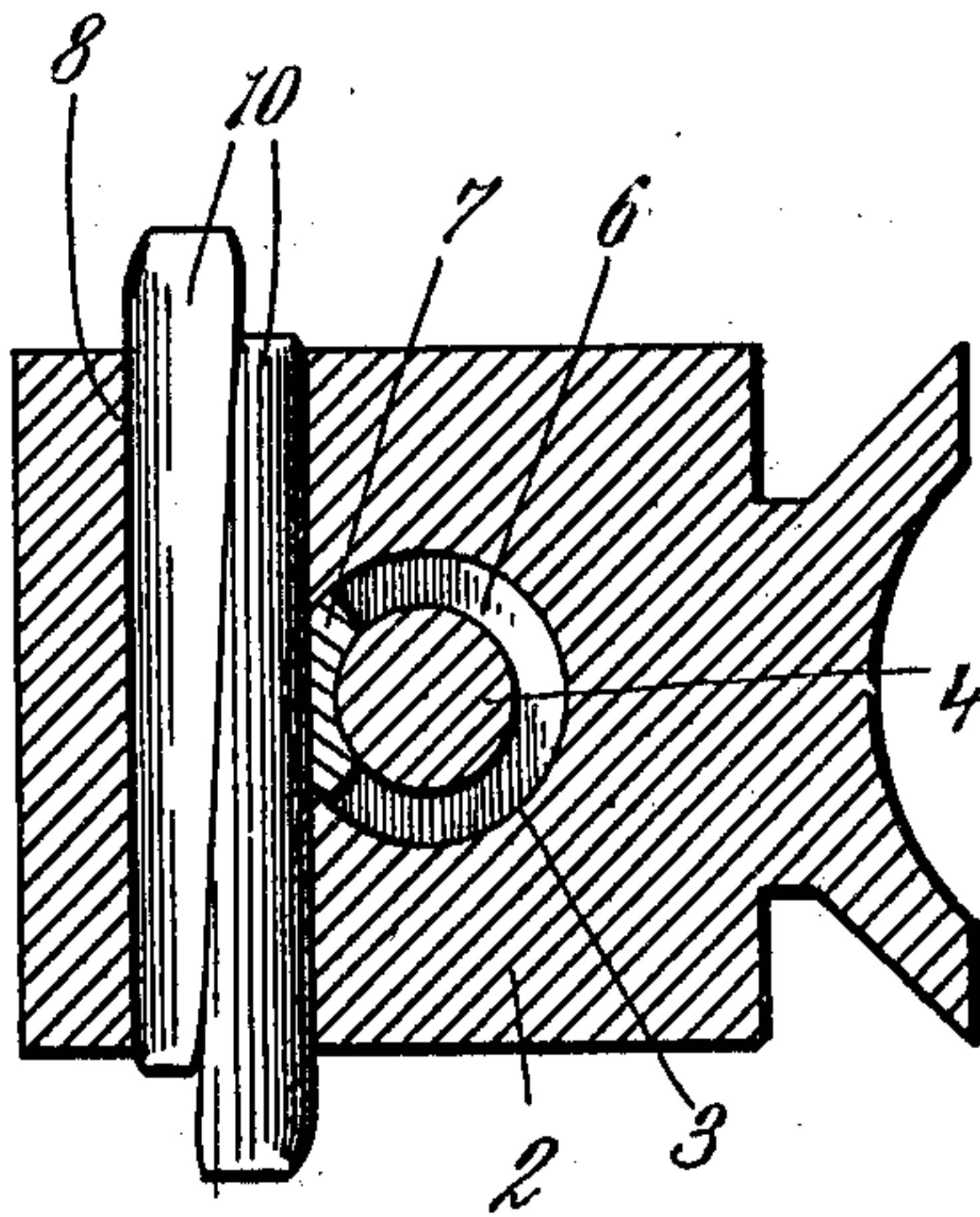


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

FRED E. SUTHERLAND AND JAMES A. BROWN, OF LOS ANGELES, CALIFORNIA, ASSIGNORS TO THE RADIAL POWER HAMMER COMPANY, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF CALIFORNIA.

DIE-SECURING MEANS.

978,508.

Specification of Letters Patent.

Patented Dec. 13, 1910.

Original application filed May 27, 1909, Serial No. 498,765. Divided and this application filed November 9, 1909. Serial No. 527,087.

To all whom it may concern:

Be it known that we, FRED E. SUTHERLAND and JAMES A. BROWN, citizens of the United States of America, residing at Los Angeles, in the county of Los Angeles, State of California, have invented a certain new and useful Die-Securing Means; and we do hereby 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.

This application is a division of application Serial No. 498,765, filed May 27, 1909.

The invention relates to die securing means, and consists of the peculiar form, arrangement and combination of the coacting parts, as will hereinafter more fully appear.

One of the objects of the invention is to provide for the purpose specified, a construction which is simple in character, effective in use, and which will permit of ready adjustment of the die.

Other objects and the advantages of the invention will be apparent to those skilled in the art, from a consideration of the following description of one form of construction embodying the invention, taken in connection with the accompanying drawings, in which—

Figure 1 is a view in elevation, partly in section, of a hammer head and a die secured thereto; Fig. 2 is a transverse view on line 2—2 of Fig. 1, the key parts being shown entire.

As shown in the drawings, the hammer head 2 is preferably provided in its bottom portion, with a cylindrical socket 3, adapted to accommodate the round shank 4 integral with or secured to the top portion of die 5. Intermediate of the ends of shank 4 is formed the annular groove 6, adapted to receive therein an arc-shaped bolster 7. Contiguous to the cylindrical socket 3 and at right angles thereto, is provided a key hole 8 running through the hammer head 2. As shown, the key hole 8 is but a portion of a cylinder in cross-section, and a recess 9 is formed in a portion of the bolster 7 adjacent to the keyhole, so that with the parts in position in the hammer head 2, the two bevel cut half parts 10 of a substantially

cylindrical pin slightly larger in cross-section than the key hole 8 and recess 9, may occupy the space in said keyhole and recess.

With the construction as above described, the parts may be assembled by first placing the bolster 7 in the groove 6 on shank 4 of the die 5, then moving the die to place the shank with the bolster thereon into the cylindrical socket 3 of the instrumentality to which the die is to be secured, in this case the hammer head 2, and then inserting with their thinner ends first, from opposite ends of the keyhole, the parts 10 to loosely fit in the keyhole 8 and recess 9, whereupon the die 5 may be adjusted to the desired angle with respect to hammer head 2 and the parts 10 driven to crowd into the keyhole and recess to securely lock the parts in position. When it becomes necessary to readjust the die in position on the hammer head, the parts 10 may be driven to sufficiently loosen the frictional engagement of the bolster with the shank, whereupon the die may be turned to the desired angle and the parts 10 driven back into place.

While one form of construction by which the invention may be embodied has been illustrated and described, the right is reserved to such changes as may be made by those skilled in the art, as do not depart from the spirit and scope of the invention as defined in the appended claims.

We claim:

1. The combination of a hammer head having a socket therein, with a die having a round shank provided with an annular groove, a bolster fitting said groove, and means interposed between said hammer head and said bolster for pressing said bolster in said groove.

2. The combination of a hammer head having a socket therein, with a die having a round shank provided with an annular groove, a bolster fitting said groove, and a key interposed between said hammer head and said bolster, said key comprising tapering parts, the larger end of each part being arranged contiguous to the smaller end of the other part.

3. The combination of a die holding member, with a rotatable die provided with an annular groove, and means interposed between said member and said groove for posi-

tively locating said die in any desired angular position.

4. The combination with a hammer head provided with a cylindrical socket and a
5 keyhole substantially at right angles thereto, of a die having a round shank provided with an annular groove, a recessed bolster adapted to fit in said groove, and locking means comprising a two-part key adapted to fit in
10 said keyhole and the recess in the bolster.

In testimony whereof, we have signed our

names to this specification in the presence of two subscribing witnesses at Los Angeles, county of Los Angeles, State of California, this 2nd day of November A. D. 1909.

FRED E. SUTHERLAND.
JAMES A. BROWN.

Witnesses:

ALEX. CURRIE,
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