

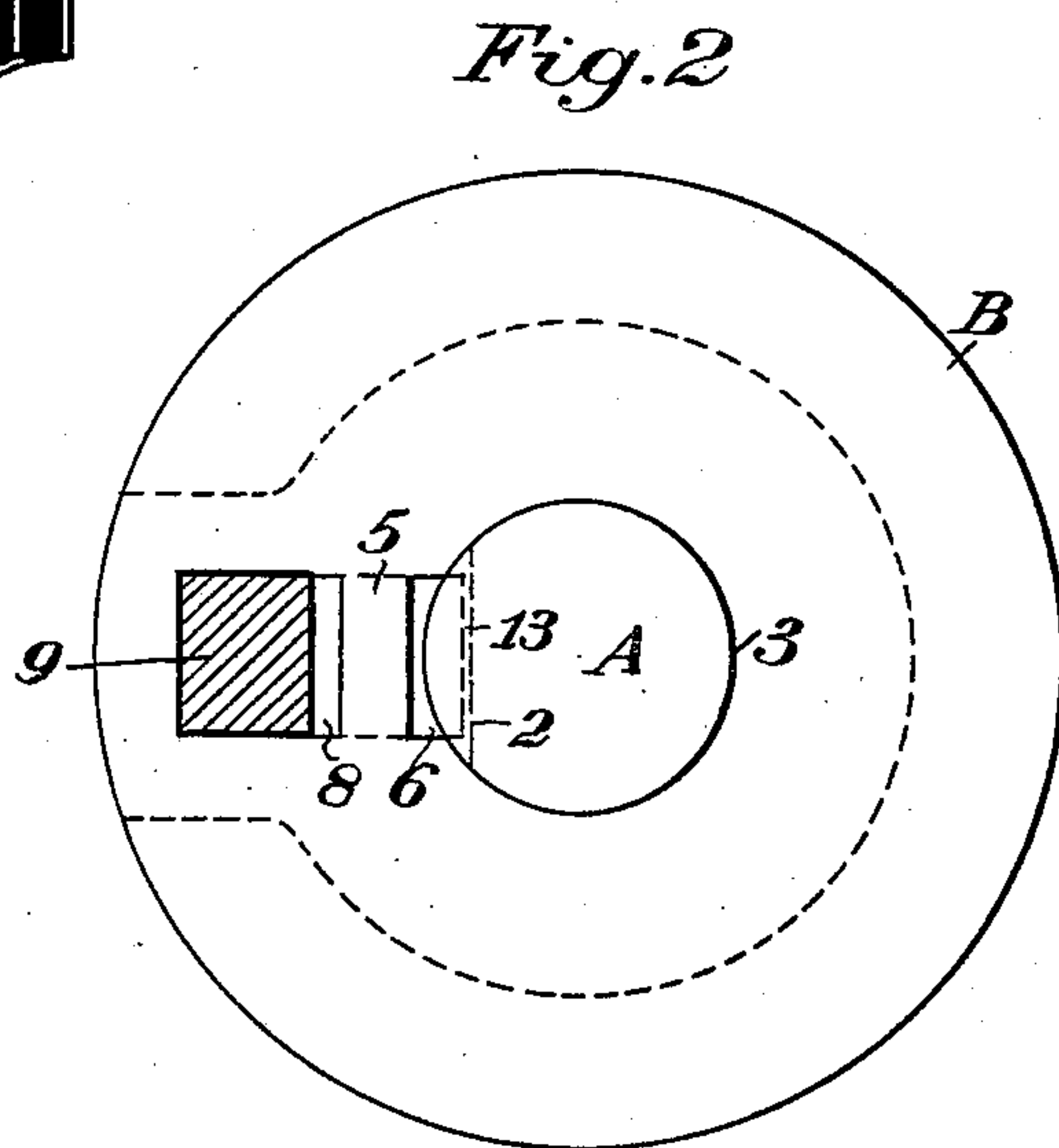
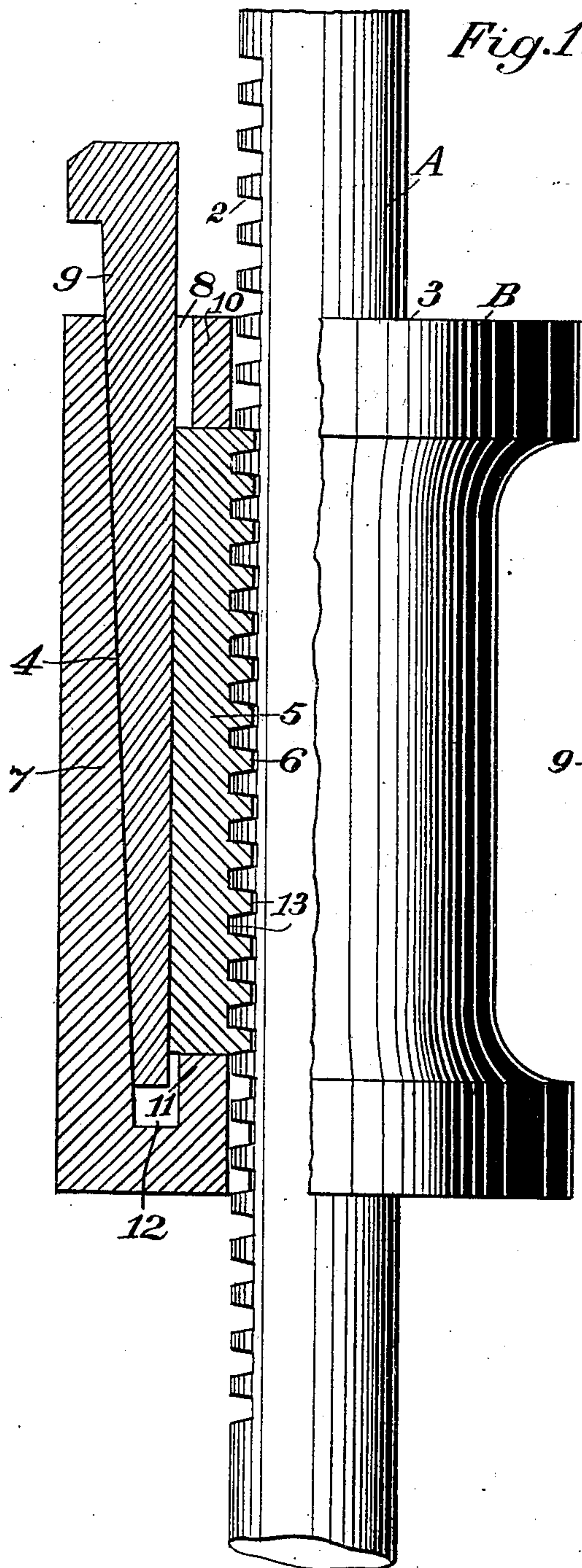
No. 763,146.

PATENTED JUNE 21, 1904.

C. BROWN & F. HAYES.
STAMP TAPPET AND SECURING MEANS THEREFOR.

APPLICATION FILED DEC. 10, 1901.

NO MODEL.



Witnesses,
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UNITED STATES PATENT OFFICE.

CLARENCE BROWN, OF BISHOP, AND FRANK HAYES, OF ELMONTE,
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STAMP-TAPPET AND SECURING MEANS THEREFOR.

SPECIFICATION forming part of Letters Patent No. 763,146, dated June 21, 1904.

Application filed December 10, 1901. Serial No. 85,344. (No model.)

To all whom it may concern:

Be it known that we, CLARENCE BROWN, residing at Bishop, county of Inyo, and FRANK HAYES, residing at Elmonte, county of Los Angeles, State of California, citizens of the United States, have invented an Improvement in Stamp-Tappets and Securing Means Therefor; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to improvements in tappets which are secured upon the stamp-stems of ore-crushing mills and the like.

The invention consists of the parts and the construction and combination of parts, which will be hereinafter described and claimed.

These tappets are adapted to be engaged by cams upon a revolving shaft, whereby the stamps are alternately lifted and dropped and at the same time given a slight rotary movement. The constant striking of the cams upon the tappets to lift the heavy stamps soon loosens tappets of ordinary construction, causing annoyance and delay.

The object of our invention is to provide a tappet which may be quickly placed in position upon a stem and quickly removed therefrom and which is prevented absolutely from slipping when once it has been secured on the stem.

Figure 1 is a part vertical section and part elevation of our invention. Fig. 2 is a plan of the same.

A represents a stamp-stem which has had a portion of its surface milled, as shown at 2. This milling need only extend on that portion of the stem which is to receive the tappet.

The tappet B consists of a cylindrical block having a central bore 3 adapted to receive the stem A. On one side of the bore a longitudinally-extending chamber 4 is formed, in which a gib 5 is adapted to be inserted. This gib has its surface serrated, as at 6, and these serrations correspond with the milling on the stamp-stem, so that when the key has been suitably driven home it is absolutely impossible to move the tappet lengthwise of the stem. The inner wall 7 of the chamber is inclined outwardly from the lower end of the tappet.

A portion of the top of the tappet is cut away, as at 8, so as to offer an opening into the chamber 4, through which the key 9 is inserted. The portion 10 of the tappet remaining between the opening 8 and the stem forms a stop or shoulder against which one end of the gib abuts. The other end of the gib is supported against the lower end wall 11 of the chamber, so that when the gib is once in position against the stem it is held firmly within the tappet and in turn supports the tappet. The inclined wall 7 extends to a point below the bottom wall 11 to form a recess, and said wall 11 and a corresponding integral portion of the top of the tappet between said recess or bore form stops or shoulders, as shown, and the gib is of such thickness that it is capable of endwise insertion through the top recess of the tappet and adapted to enter said chamber and occupying the space between said top and bottom stops, said gib and a corresponding portion of the stem being serrated or notched and adapted to interlock. The key is of a single tapering form disposed longitudinally of the stem and insertible through the top recess of the tappet and is adapted to lie between said inclined wall 7 and the back of the gib, and it has a continuous bearing at all points on the back of the gib and has its lower end or point adapted to enter said bottom recess 12.

It is to be noted that when the tappet and gib are in position on the stem and the key has been inserted to lock the parts together a space 13 is left in the bottom of each of the notches formed in the stem and gib, so that compensation is made for wear of the corresponding projections fitting these notches. Likewise the openings 8 and recess 12 are of such dimensions that a space is left for the key at either end of the gib, so that it may be driven in from time to time to take up any wear of the parts.

A tappet of this construction is rapidly placed in position upon a stem, is absolutely prevented from slipping when once secured in place, and less force is required to drive in the key than is usual with tappets of ordinary construction. Consequently these keys are not

so likely to be battered up, and it is but the work of a moment to remove the key, whereupon the gib slips out of engagement with the stem and the tappet is quickly removed.

5 It is obvious that the form of the indentations on the stem and gib may be varied from the present showing without in any way departing from the principle of our invention.

10 Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination with a stamp-stem, of a tappet having a central bore to receive the stem and having, at one side of said bore, an
15 inner longitudinally-extending chamber with a bottom wall 11, the upper end of the tappet being recessed to communicate with said chamber and the inner wall of the chamber being inclined in the direction of the length of the
20 tappet said inclined wall extending to a point below the bottom wall 11 to form a recess, and said bottom wall and a corresponding integral portion of the top of the tappet between said

recess and bore forming stops or shoulders; a gib of such thickness that it is capable of end- 25 wise insertion through the top recess of the tappet and adapted to enter said chamber and occupy the space between said top and bottom stops, said gib and the corresponding portion of the stem being serrated and adapted to in- 30 terlock; and a single tapering key disposed longitudinally of the stem and insertible through the top recess of the tappet and adapted to lie between said inclined wall and the back of the gib, said key having a continuous bearing at 35 all points on the back of the latter, and having its lower end or point to enter said bottom recess.

In witness whereof we have hereunto set our hands.

CLARENCE BROWN.
FRANK HAYES.

Witnesses:

W. A. CHALFANT,
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