

No. 876,950.

PATENTED JAN. 21, 1908.

E. DIXON.
TOP ROLL SADDLE.
APPLICATION FILED FEB. 19, 1904.

FIG. 1.

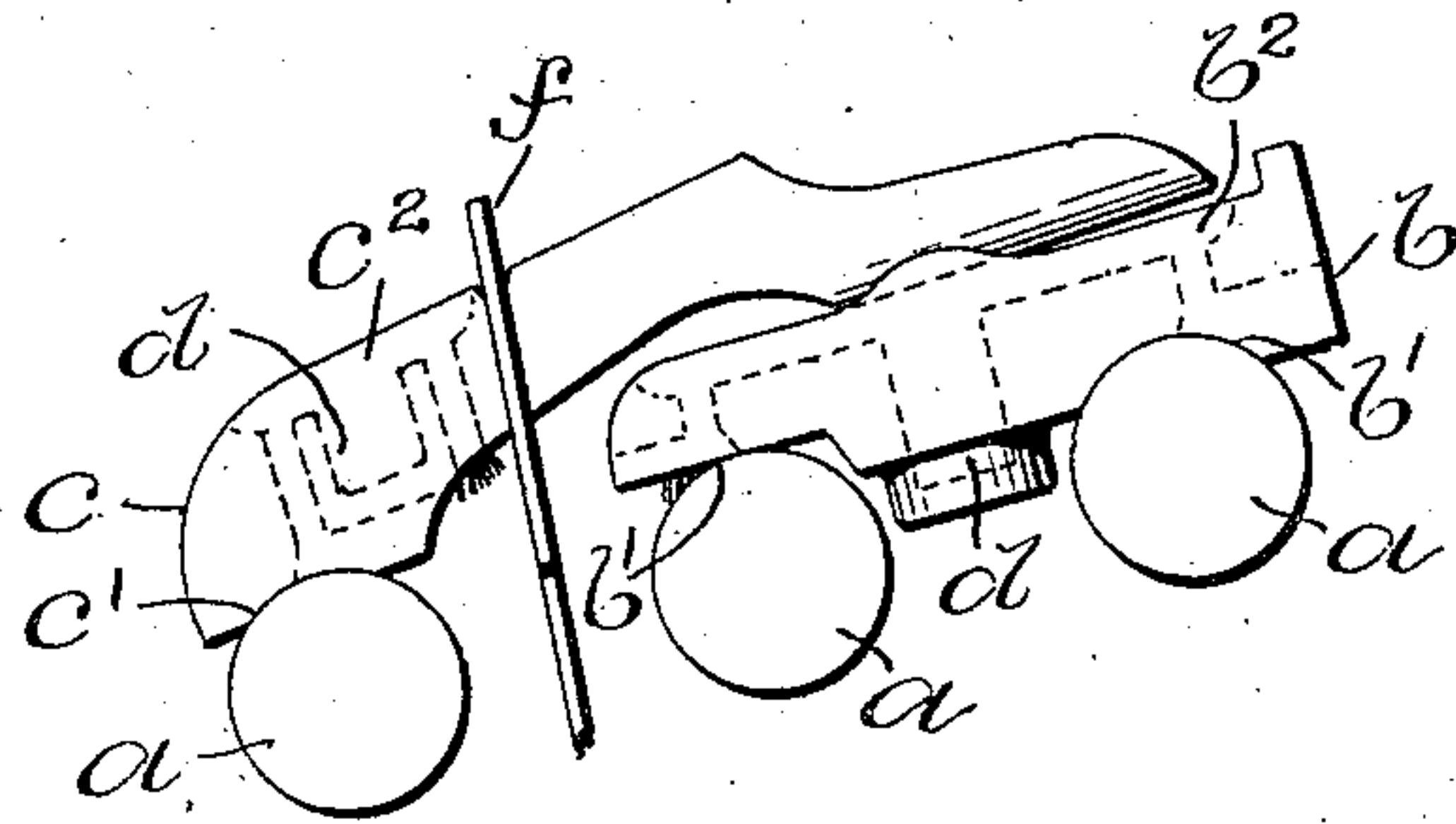


FIG. 2.

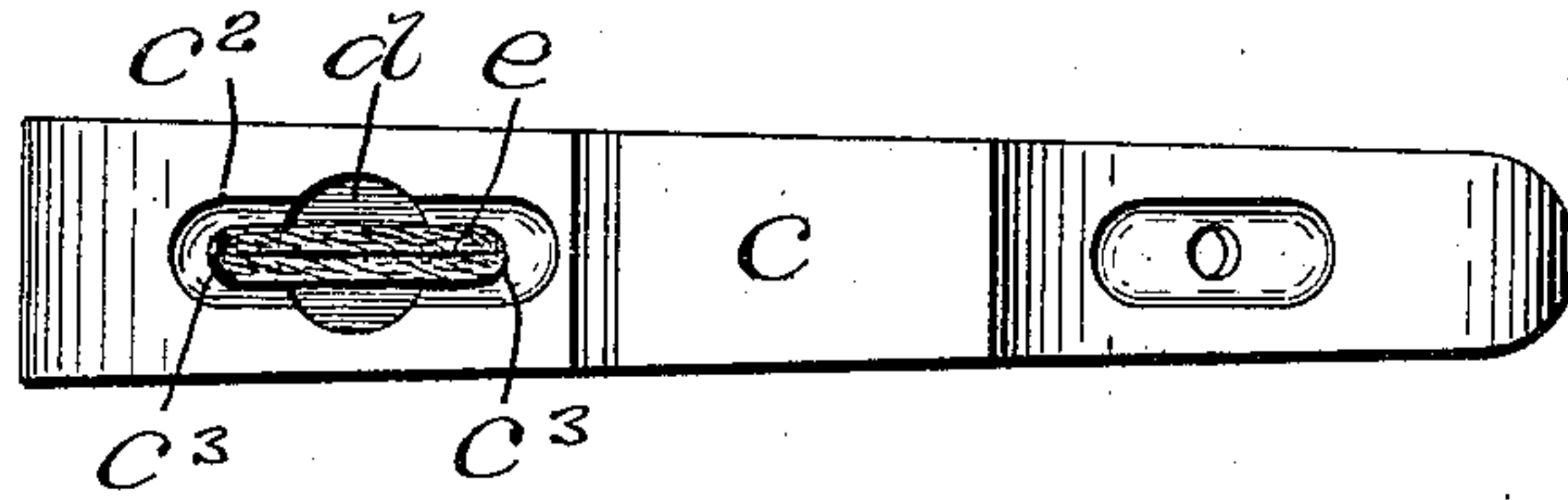


FIG. 3.

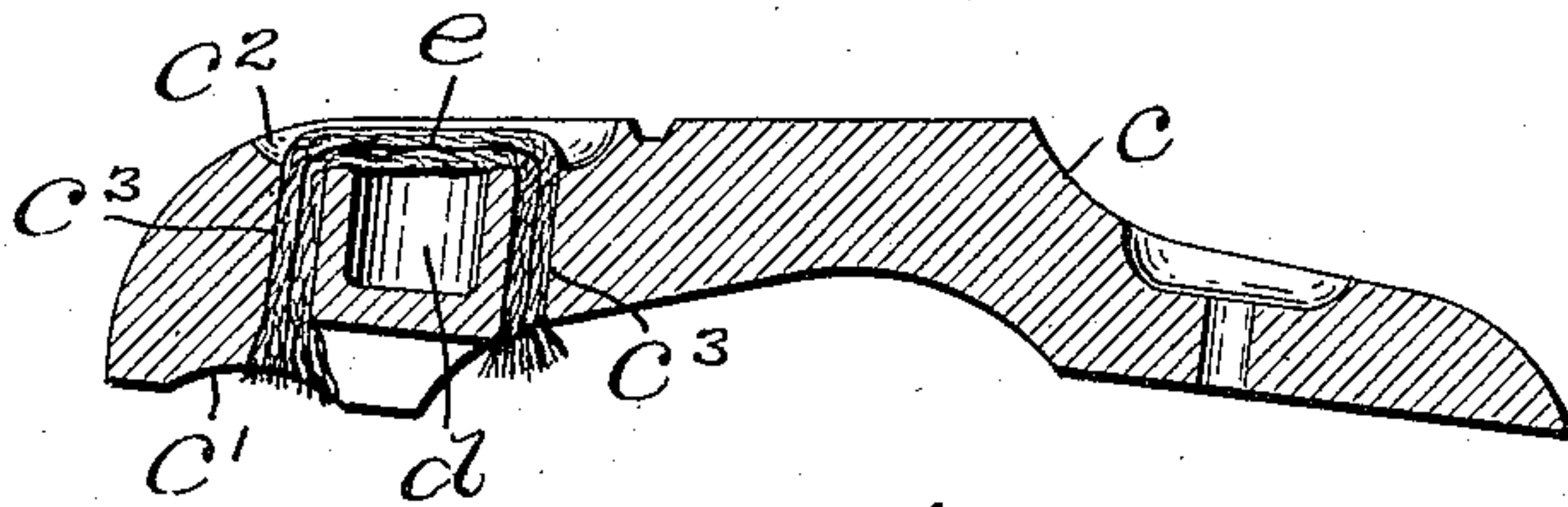


FIG. 4.

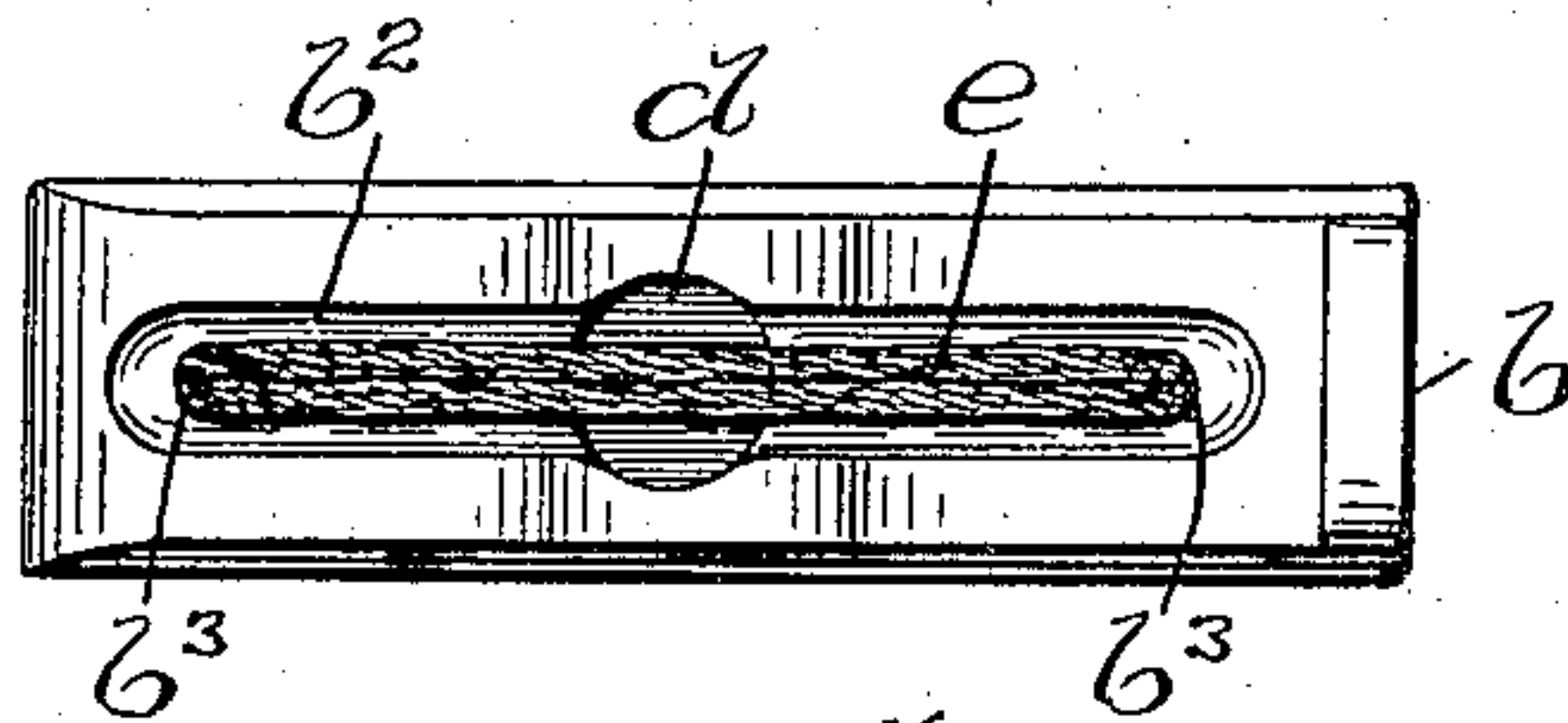
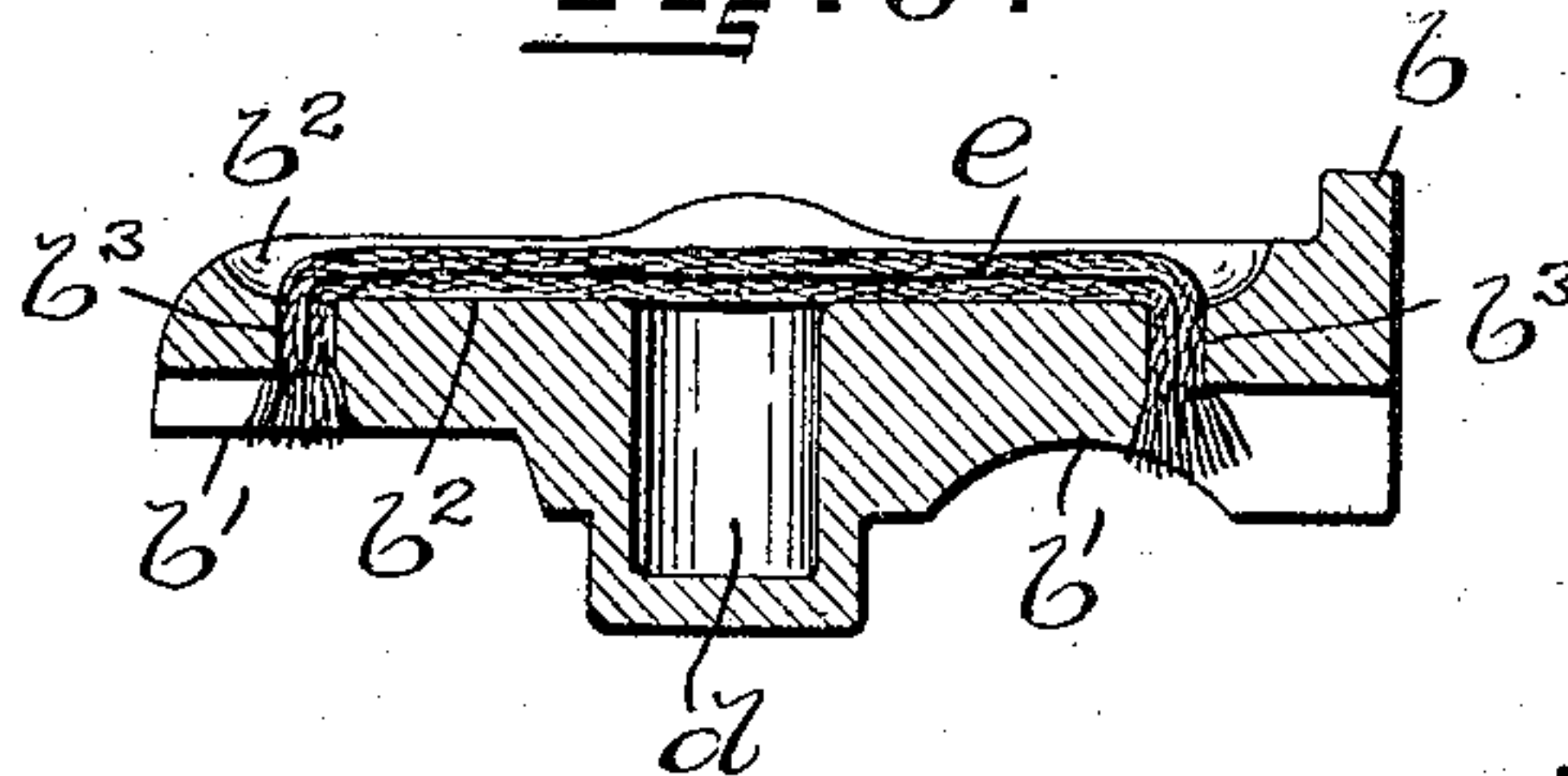


FIG. 5.



WITNESSES:

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EZRA DIXON, OF BRISTOL, RHODE ISLAND.

TOP-ROLL SADDLE.

No. 876,950.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed February 19, 1904. Serial No. 194,337.

To all whom it may concern:

Be it known that I, EZRA DIXON, a citizen of the United States, residing at Bristol, in the county of Bristol and State of Rhode Island, have invented a new and useful Improvement in Top-Roll Saddles, of which the following is a specification.

This invention has reference to an improvement in top roll saddles and more particularly to an improvement in the means for oiling the bearings of the saddles.

Top roll saddles as heretofore constructed require to be oiled frequently, and when oiled by the operator are usually given an amount of oil in excess of what the wicks in the saddles can hold, the excess of oil running off the saddle being wasted. In practice I find that the loss in time required to frequently oil the saddles and the waste of oil in excessively oiling the saddles are considerable. I also find in practice that the oil used in lubricating top roll saddles will creep up the sides of a metallic body to quite a height and therefore utilize this fact in the construction of my saddle.

The object of my invention is to improve the construction of top roll saddles whereby the bearings of the saddles are oiled for a longer time with one oiling and with less waste of the oil in oiling than has heretofore been done.

My invention consists in the peculiar and novel construction of top roll saddles, said saddles having longitudinal grooves connecting with holes leading to the saddle bearings, oil wicks in the grooves and holes, and an oil well intersecting the groove and adapted to feed oil to the wick by capillary attraction, as will be more fully set forth hereinafter.

Figure 1 is a side view of the front and back top roll saddles, showing the saddles bearing on the journals of the top rolls, and the oil wells in the saddles intersecting the longitudinal grooves in broken lines. Fig. 2 is an enlarged top plan view of the front top roll saddle, showing the oil well intersecting the longitudinal groove in which is the oil wick. Fig. 3 is a sectional view taken lengthwise through the front top roll saddle, showing the construction of the oil well. Fig. 4 is an enlarged top plan view of the back top roll saddle, and Fig. 5 is a sectional view taken lengthwise through the back saddle.

In the drawings, *a a* indicate the journals of the top rolls, *b* the back saddle, *c* the front saddle, *d d* the oil wells in the front and back saddle, *e e* the oil wicks, and *f* the weight strap. The back saddle *b* is constructed to form the bearings *b' b'* for the back and intermediate top roll journals, the longitudinal groove *b²* intersecting the oil well *d*, the holes *b³ b³* leading from the ends of the groove *b²* to the bearings *b' b'* and to support the rear end of the front saddle *c*. The forward end of the front saddle *c* is constructed to have the bearing *c'* for the journal of the front top roll, the longitudinal groove *c²* intersecting the oil well *d* and the holes *c³ c³* leading from the ends of the groove *c²* to the bearing *c'*, otherwise the front and back saddles may have the construction of any of the well-known forms of top roll saddles. The oil wicks *e e* extend across the open tops of the oil wells *d d* in the longitudinal grooves *b²* and *c²*, and then downwards through the holes *b³ b³* and *c³ c³* to the bearings of the saddles, as shown in Figs. 3 and 5.

In the use of my improved top roll saddles the wicks *e e* are oiled by the operator in the usual way, the excess of oil collecting in the oil wells *d d* from which it is fed to the wicks by capillary attraction, when required. If from unusual causes heat is generated in the bearings of the saddles, it materially assists the capillary attraction of the oil in the oil wells.

By the use of my improved top roll saddles, the bearings of the saddles are oiled for a greater period with one oiling and a more perfect oiling action is maintained on the bearings than has heretofore been done.

It is evident that the capillary attraction of the oil in the oil wells could be assisted if desired by filling the oil wells with an absorbent material without materially affecting the spirit of my invention.

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

1. In a top roll saddle, having a groove and holes connecting the groove with the bearings of the saddle, an oil well intersected by the groove, and an oil wick extending across the top of the oil well, as and for the purpose described.

2. In a top roll saddle, a groove, an oil wick in the groove extending across the top

of the oil well, and an oil well intersected by the groove and from which oil is fed to the wick by capillary attraction, as described.

3. A top roll saddle formed with a groove
5 and vertical holes, an oil wick in the groove and holes, the oil wick extending across the top of the oil well, and a recess forming an oil well intersected by the groove and from which oil is fed to the wick by capillary
10 attraction as described.

4. A top roll saddle having bearings, a groove above the bearings, holes connecting the groove with the bearings, an oil wick extending across the top of the oil well in the
15 groove and holes, and a circular recess forming an oil well intersected by the groove, and from which oil is fed to the wick in the groove by capillary attraction, as described.

5. A back top roll saddle, having the bearings $b' b'$, the groove b^2 , the holes $b^3 b^3$, a circular recess forming the oil well d intersected
20 at the top by the groove, and the oil wick e in the groove and holes, as described.

6. A front top roll saddle, having the bearing c' , the groove c^2 , the holes $c^3 c^3$, a circular recess forming the oil well d intersected
25 by the groove, and the oil wick e in the groove and holes, as described.

In testimony whereof I have signed my name to this specification in the presence of
30 two subscribing witnesses.

EZRA DIXON.

Witnesses:

ADA E. HAGERTY,
J. A. MILLER, Jr.