

No. 748,258.

PATENTED DEC. 29, 1903.

J. BUKER.
JOURNAL BEARING.

APPLICATION FILED MAR. 23, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

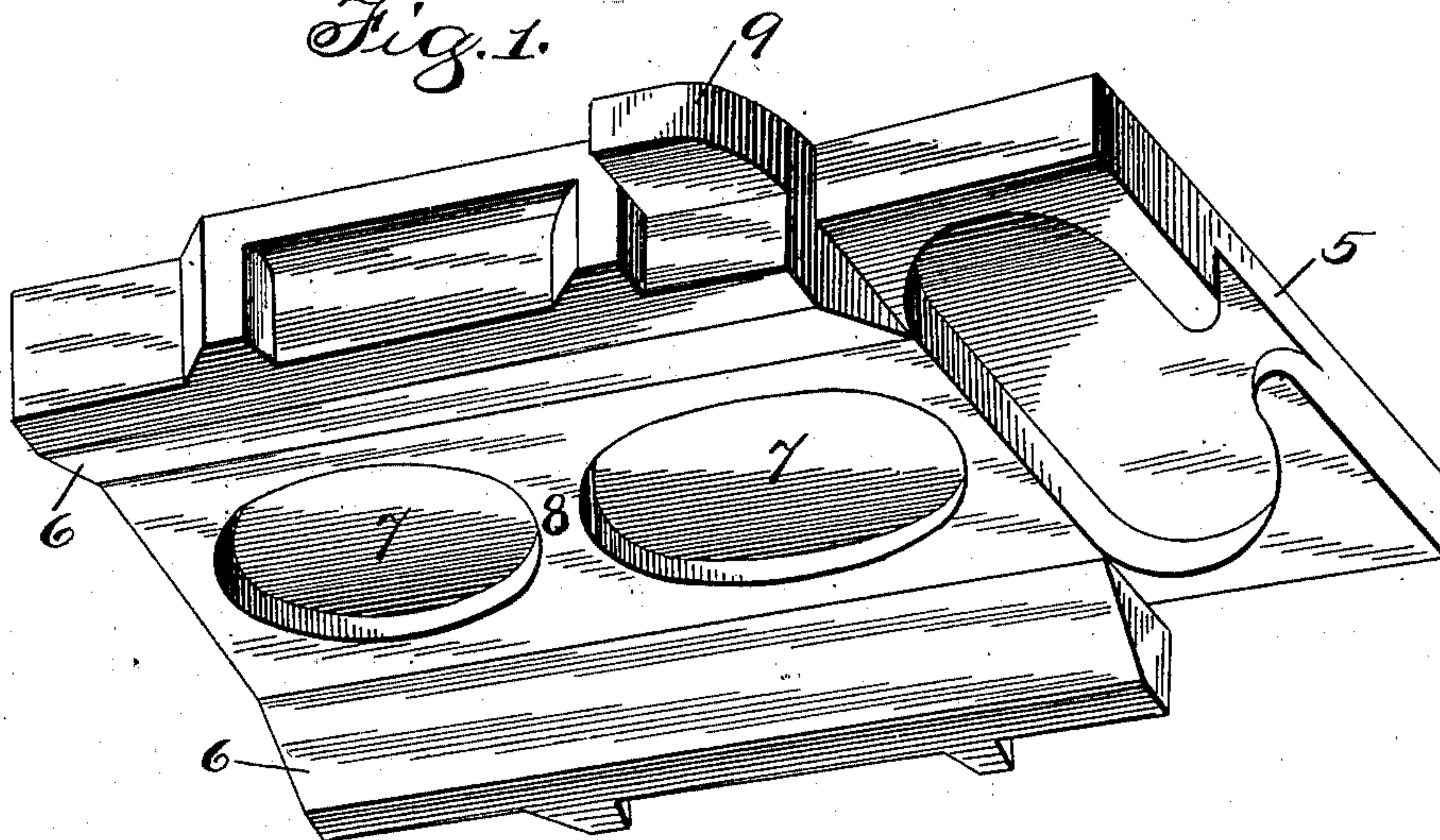
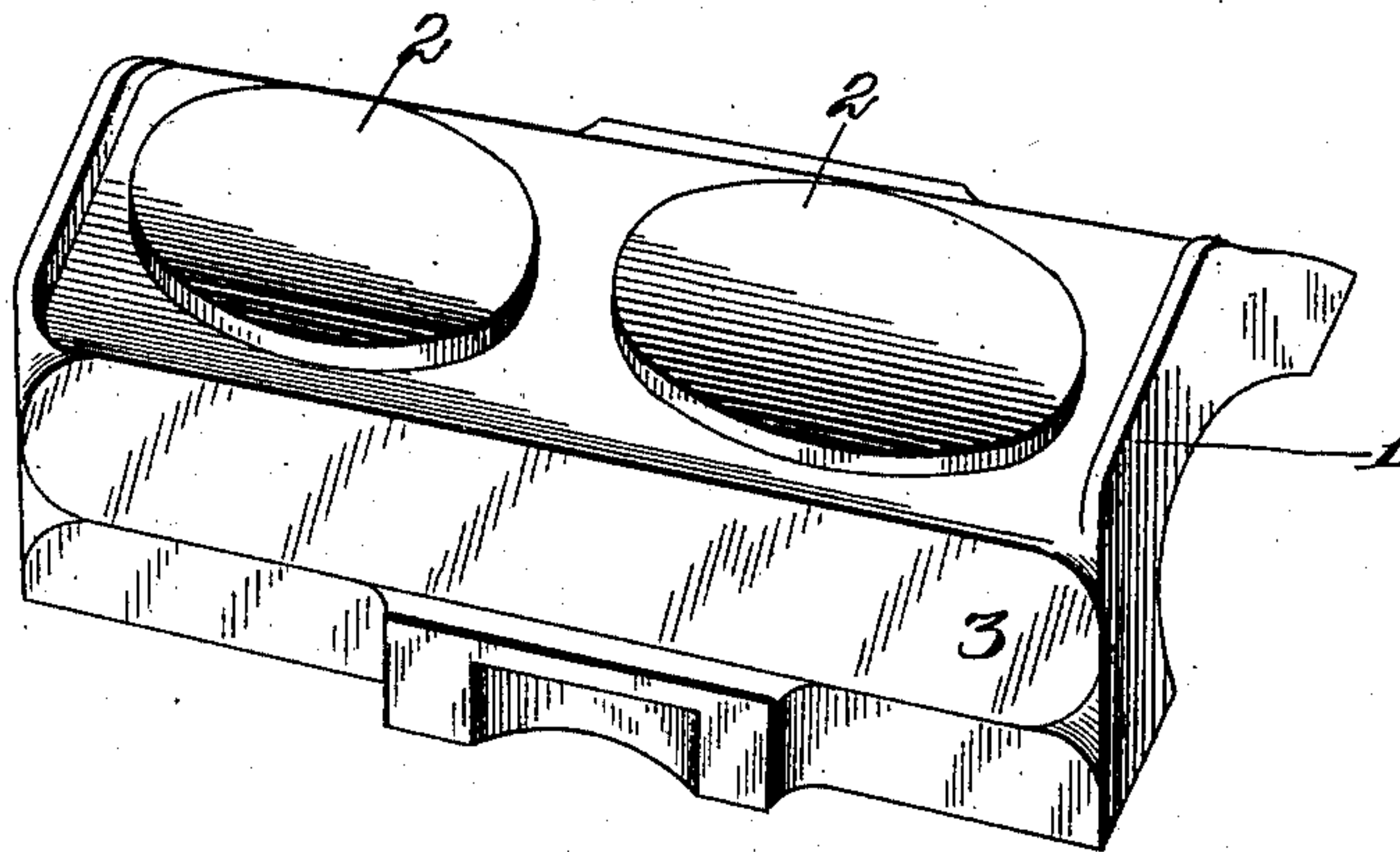


Fig. 2.



Witnesses:

J. B. Weir

Geo. L. Homarus

Inventor:

James Buker

By John W. Hill

Atty.

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2 SHEETS—SHEET 2.

Fig. 3.

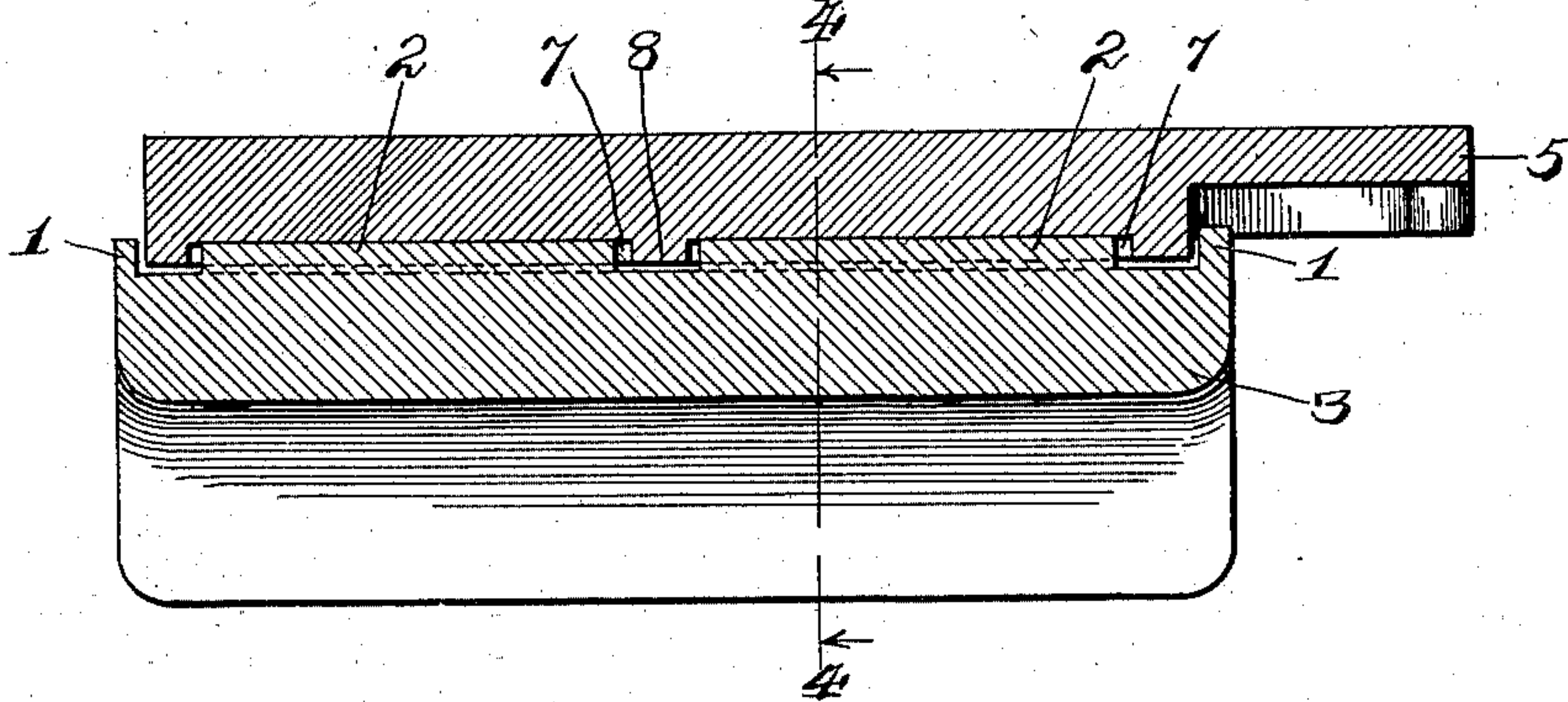


Fig. 4.

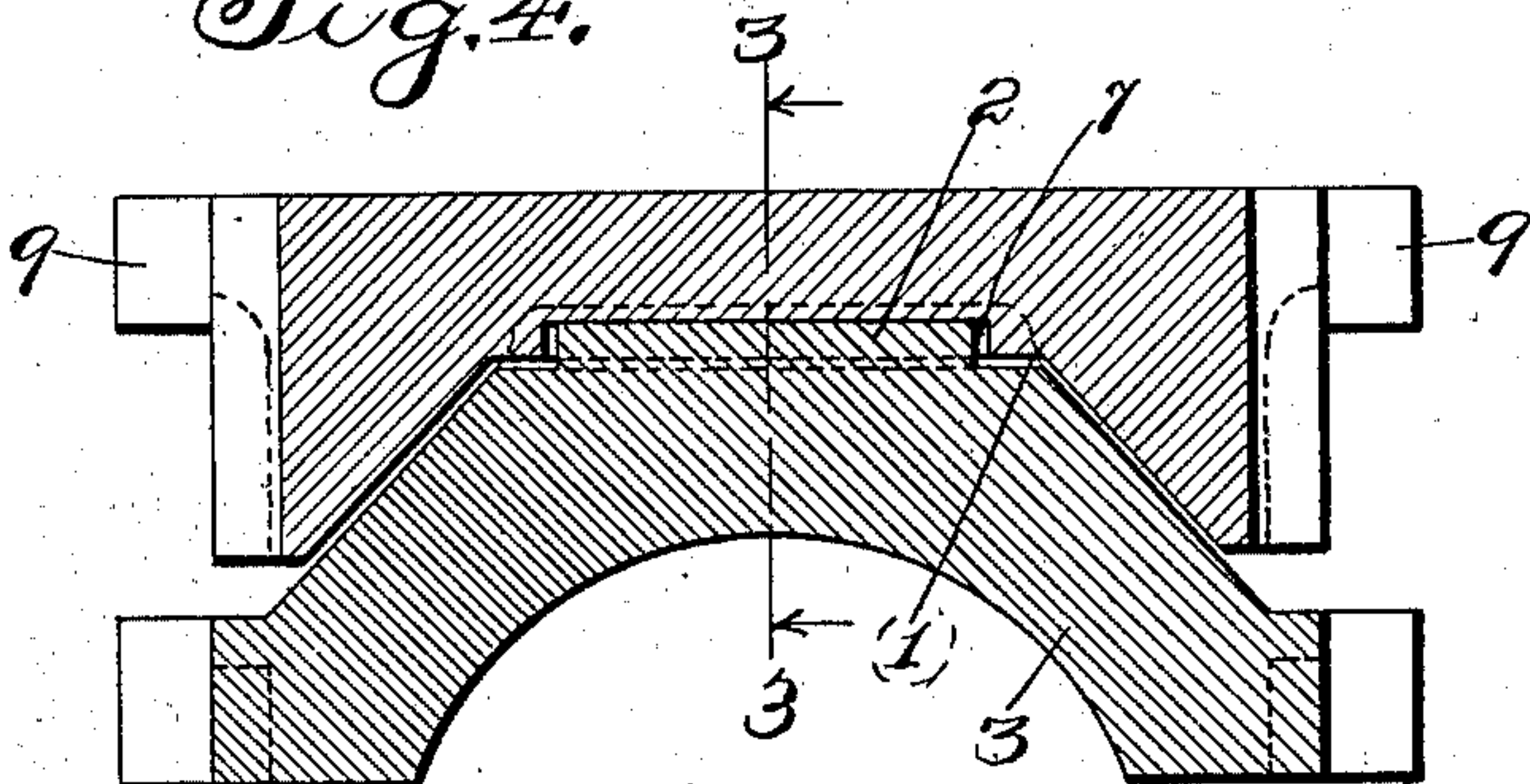
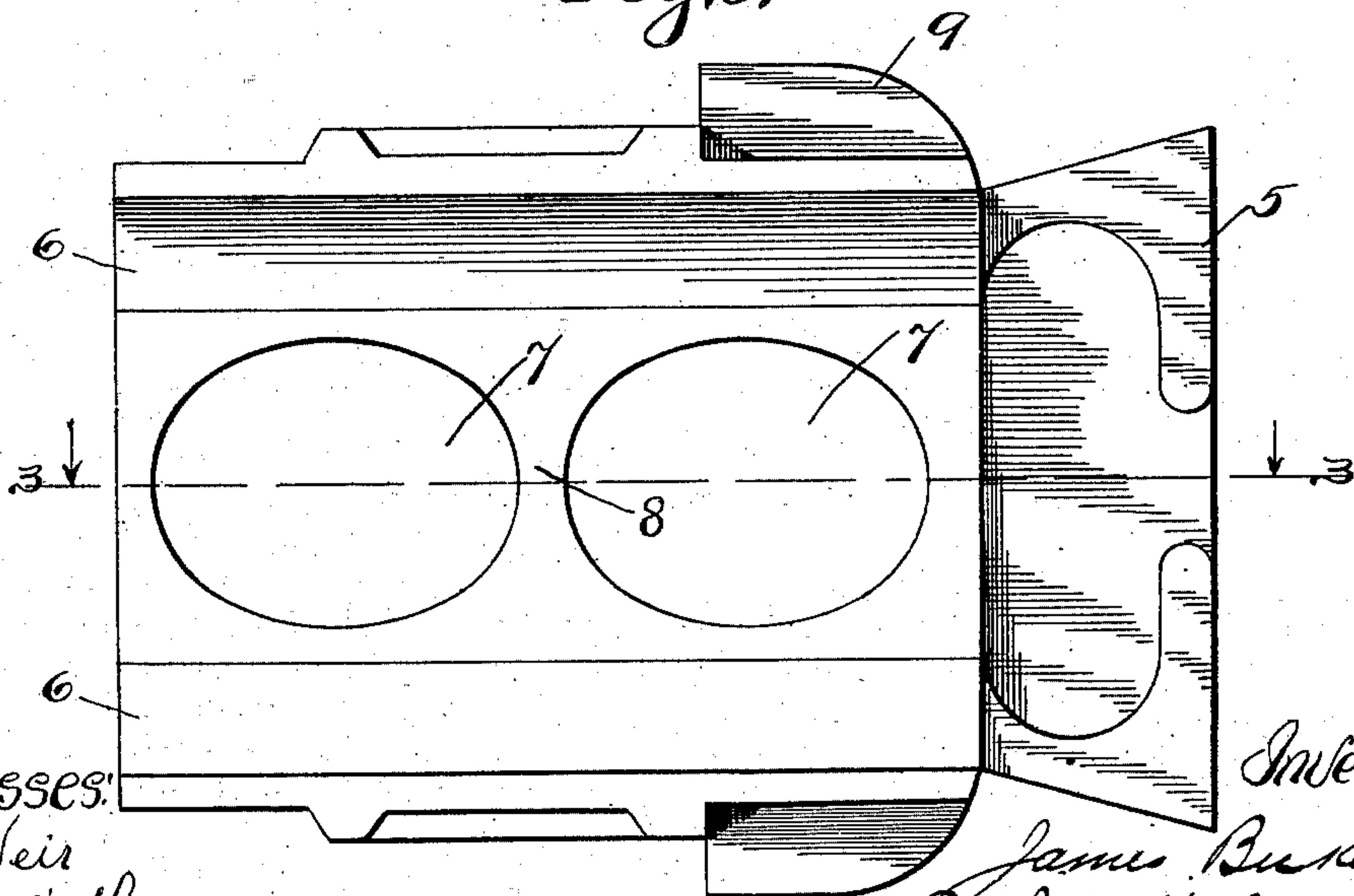


Fig. 5.



Witnesses:

W. Weir
Geo. V. Thomas

Inventor:

James Buker
By John W. Hill Atty.

UNITED STATES PATENT OFFICE.

JAMES BUKER, OF CHICAGO, ILLINOIS.

JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 748,258, dated December 29, 1903.

Application filed March 23, 1903. Serial No. 149,066. (No model.)

To all whom it may concern:

Be it known that I, JAMES BUKER, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Journal-Bearings, of which the following is a description.

My invention belongs to that class of bearings particularly adapted for use in car construction, and has for its object the production of a simple and effective bearing of the kind described at a reasonable cost and at the same time to greatly increase the durability or wearing power of the device.

To this end my invention consists in the novel construction, arrangement, and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts, Figure 1 is a perspective view of the wedge or key of a car journal-bearing. Fig. 2 is a similar view of the brass of the same.

Fig. 3 is a vertical longitudinal section taken substantially on line 3 3 of Fig. 4. Fig. 4 is a vertical transverse section taken on line 4 4 of Fig. 3, and Fig. 5 is a bottom plan of the key or wedge.

In the drawings, 1 represents the brass for a car journal-bearing, provided on its upper surface with a plurality of projections 2 2, preferably oval or elliptical in outline, as shown. The brass is also preferably formed with inclined sides 3 3 in the usual manner to aid in assembling the parts and maintaining them in proper relative position.

5 is the key or wedge adapted for use with the brass just described. The key is provided with inclined dependent sides 6 6, adapted to loosely embrace the inclined sides 3 3 of the brass, and also with depressions 7 7, so formed and arranged as to loosely engage the projections 2 2 on the brass. As shown, there are two of such elliptical or oval projections 2, and accordingly two of the depressions 7. As thus formed a web or bridge 8 is formed between the depressions 7 7 to greatly strengthen the key. When the parts are assembled, the bridge 8 is loosely positioned between the projections 2 2 of the

brass, which is particularly formed for this purpose. The various parts of the key or wedge and the brass are so constructed as to permit both longitudinal and lateral play of the parts upon one another to a limited extent, as shown in Figs. 3 and 4. This construction permits the requisite play for proper action when the car is rounding a curve or on a rough track to accommodate the parts to a slight movement of the car. The wedge is preferably provided with the usual lugs 9, constructed to engage corresponding parts on the side of the journal-box to hold the wedge in its proper position. The brass may be similarly provided, if desired; but in the preferred construction the usual lugs upon the brass are omitted, thus reducing the weight without in any way detracting from the efficiency of the construction. The tops of the projections 2 2 may be either flat or crowned, as preferred, and it will be observed that, as shown, they are greater in height than the depth of the depressions 7 in the wedge, thus permitting the wedge to rest upon the top of the projections, as shown. In this construction the connecting web or bridge 8 is important, as it adds greatly to the strength of the wedge or key, and thus increases the durability of the device and at the same time permits the brass to be cut away at that point, reducing the weight without reducing its wearing value.

My improved brass, as well also the key or wedge, is readily interchangeable with the corresponding parts of the Master Car-Builders' standard journal-bearings now in general use. When used together, however, they embody valuable improvements not found in the standard parts.

I have used the terms "oval" and "elliptical" in my description as synonymous terms to distinguish the form from rectangular. By curving or rounding the projections both longitudinally and laterally the parts will more readily assume their proper relative positions whether from side or end thereto. This result is also aided by slightly "crowning" the projections 2.

After thus describing my improvement it is obvious that various immaterial modifications may be made without departing from

the spirit of my invention. Hence I do not wish to be understood as limiting myself to the exact form and construction shown.

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

1. A car journal-bearing, comprising a brass, provided with a plurality of projections extending from its upper face, the portion between the projections having a flat upper surface, in combination with a wedge or key provided on its under surface with corresponding depressions adapted to loosely embrace the projections on the brass, the said depressions being separated by a reinforcing-bridge having a flat lower surface, and loosely positioned between the projections on the brass.

2. A car-journal, comprising a brass provided with a plurality of projections extending from its upper surface, and with inclined sides, the portion between the projections being continuous and uninterrupted so as to afford a smooth bearing-surface, in combination with a key or wedge provided with corresponding depressions adapted to loosely engage the depressions on the brass, and with inclined sides, the depressions being separated by a reinforcing-bridge having a smooth uninterrupted lower surface, and being spaced from the adjacent ends of the projections on the brass.

3. A car journal-bearing comprising a brass provided with a plurality of projections extending from its upper surface, said projections being elliptical in outline and separated from each other by unobstructed spaces, in combination with a key provided on its lower surface with corresponding depressions adapted to loosely embrace the projections

on the brass, the said depressions being separated by a bridge spaced from the adjacent ends of the projections on the brass, and said bridge having a flat lower surface arranged to fit within the unobstructed spaces between the projections on the brass.

4. A car journal-bearing comprising a brass, provided with a plurality of projections extending from its upper surface, said projections being elliptical in outline and slightly crowning, in combination with a wedge or key provided on its lower surface with corresponding depressions adapted to loosely embrace the projections on the brass, said projections being greater in height than the depth of the depressions, and said depressions being separated by a bridge or wall spaced from the adjacent ends of the projections on the brass.

5. A car journal-bearing comprising a brass, provided with a pair of elliptical projections upon its upper surface, said projections being separated from each other by an unobstructed space, in combination with a wedge provided on its lower surface with a centrally-arranged reinforcing-bridge extending its entire width and having a continuous uninterrupted lower surface complementary to the unobstructed space between the projections on the brass, and depressions arranged intermediate the reinforcing-strip and the respective ends of the brass, adapted to engage the projections on the brass.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES BUKER.

Witnesses:

JOHN W. HILL,
CHARLES I. COBB.