

No. 607,576.

Patented July 19, 1898.

J. SWAN.
JOURNAL BEARING.

(Application filed Oct. 14, 1897.)

(No Model.)

Fig. 1.

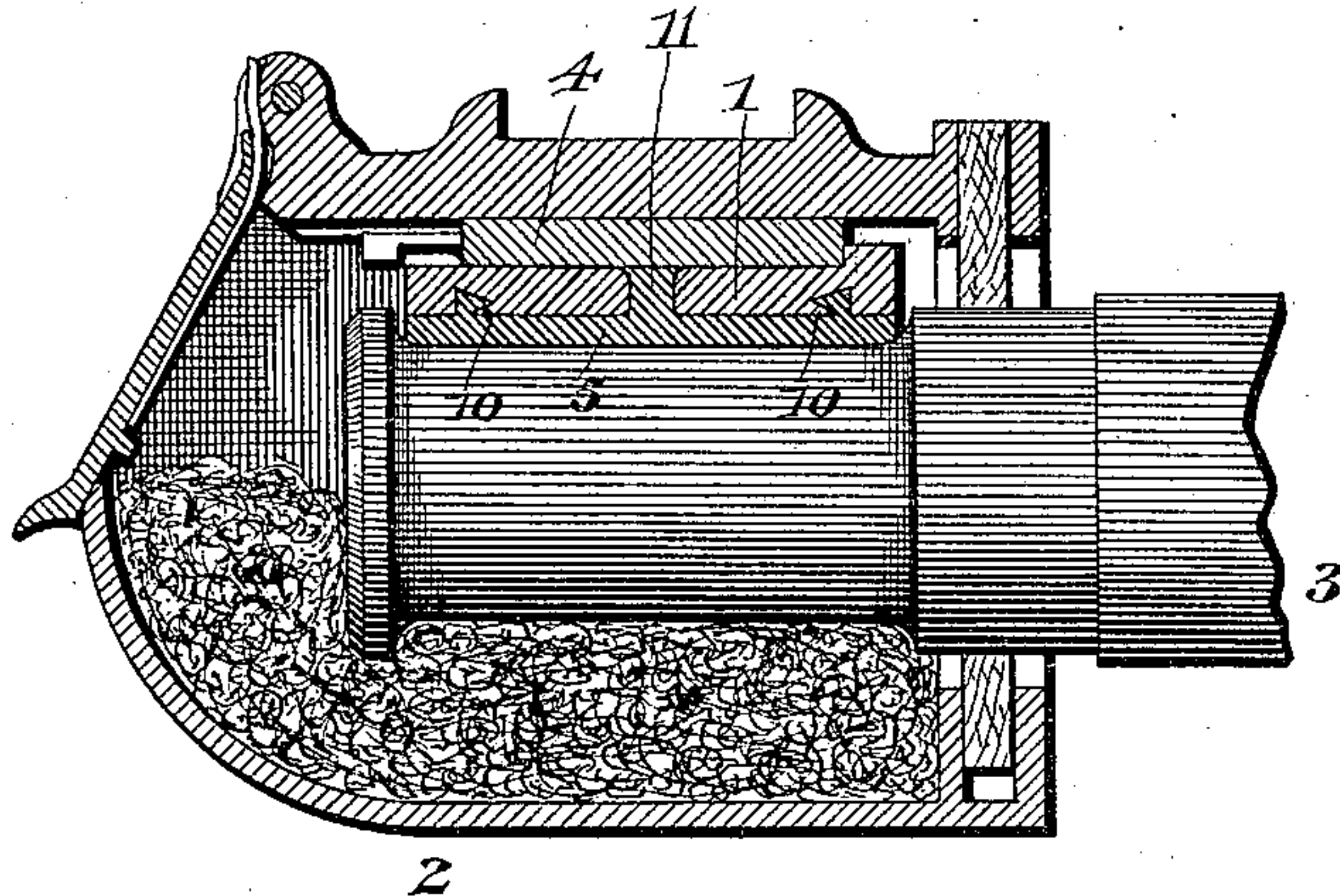


Fig. 2.

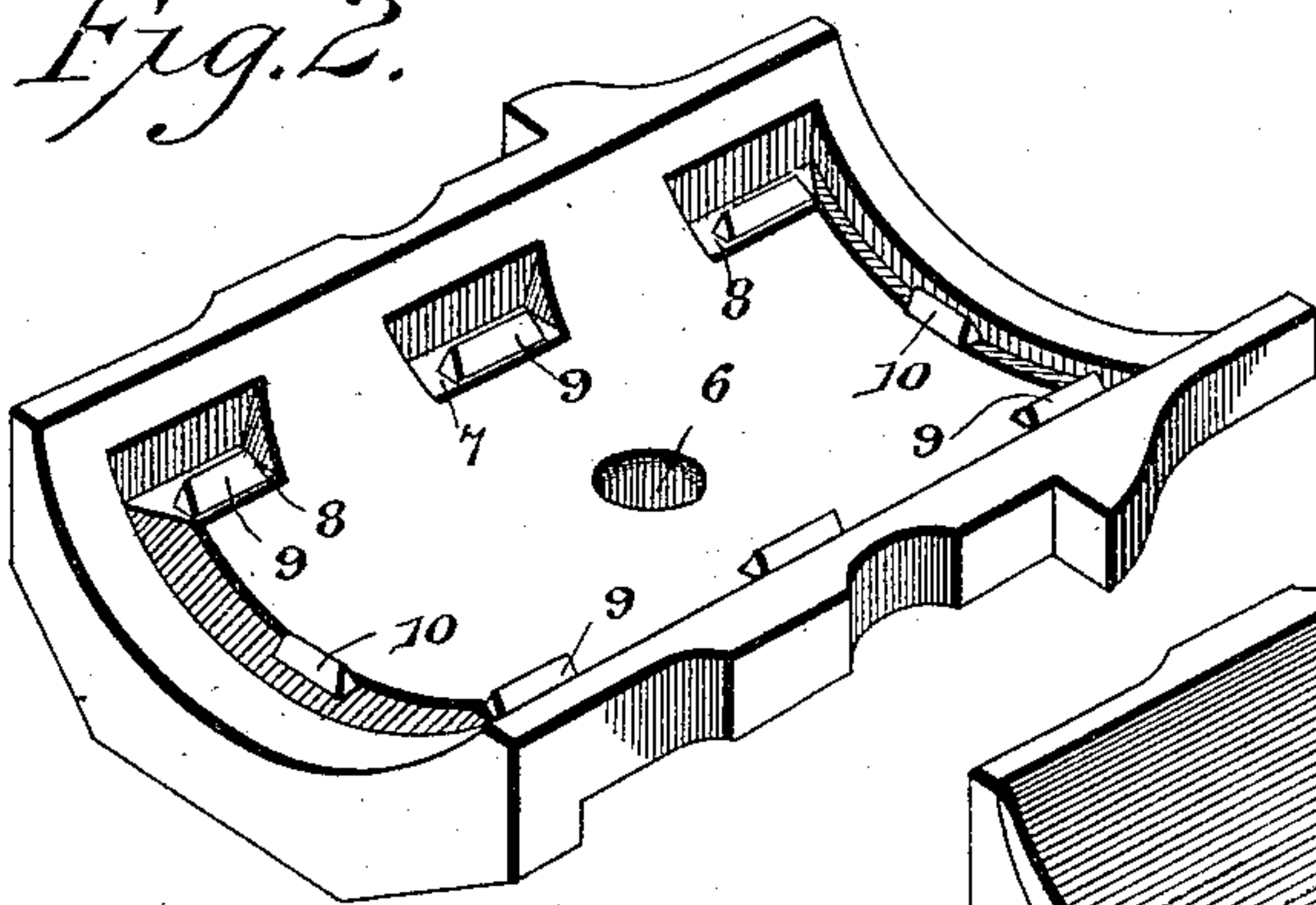


Fig. 5.

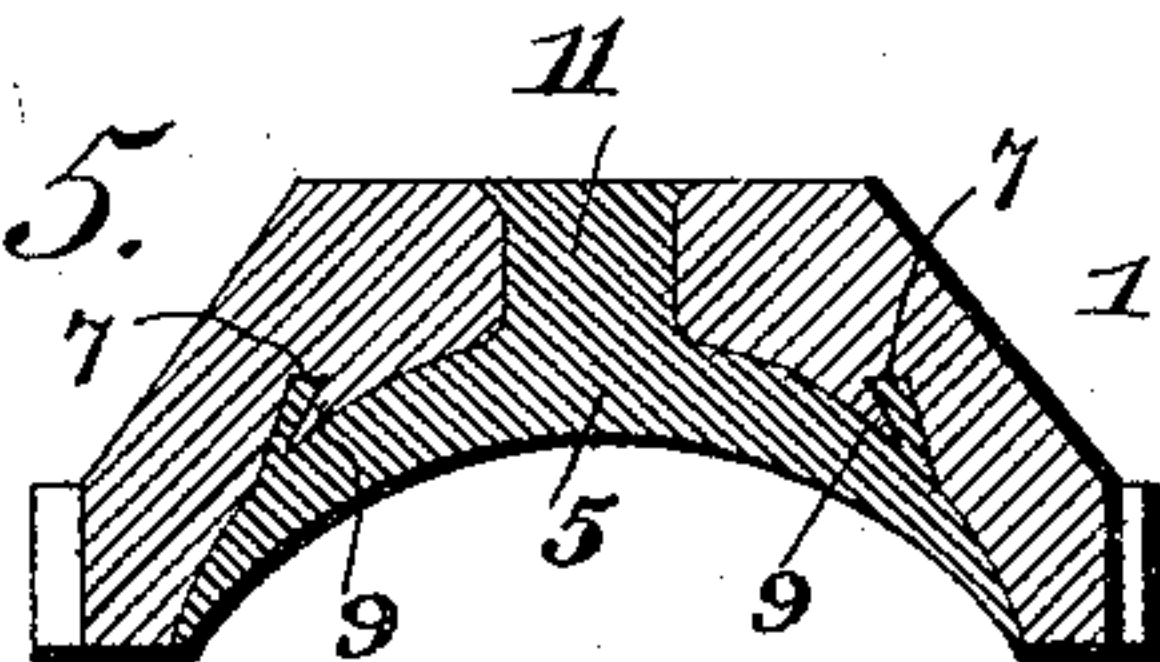


Fig. 4.

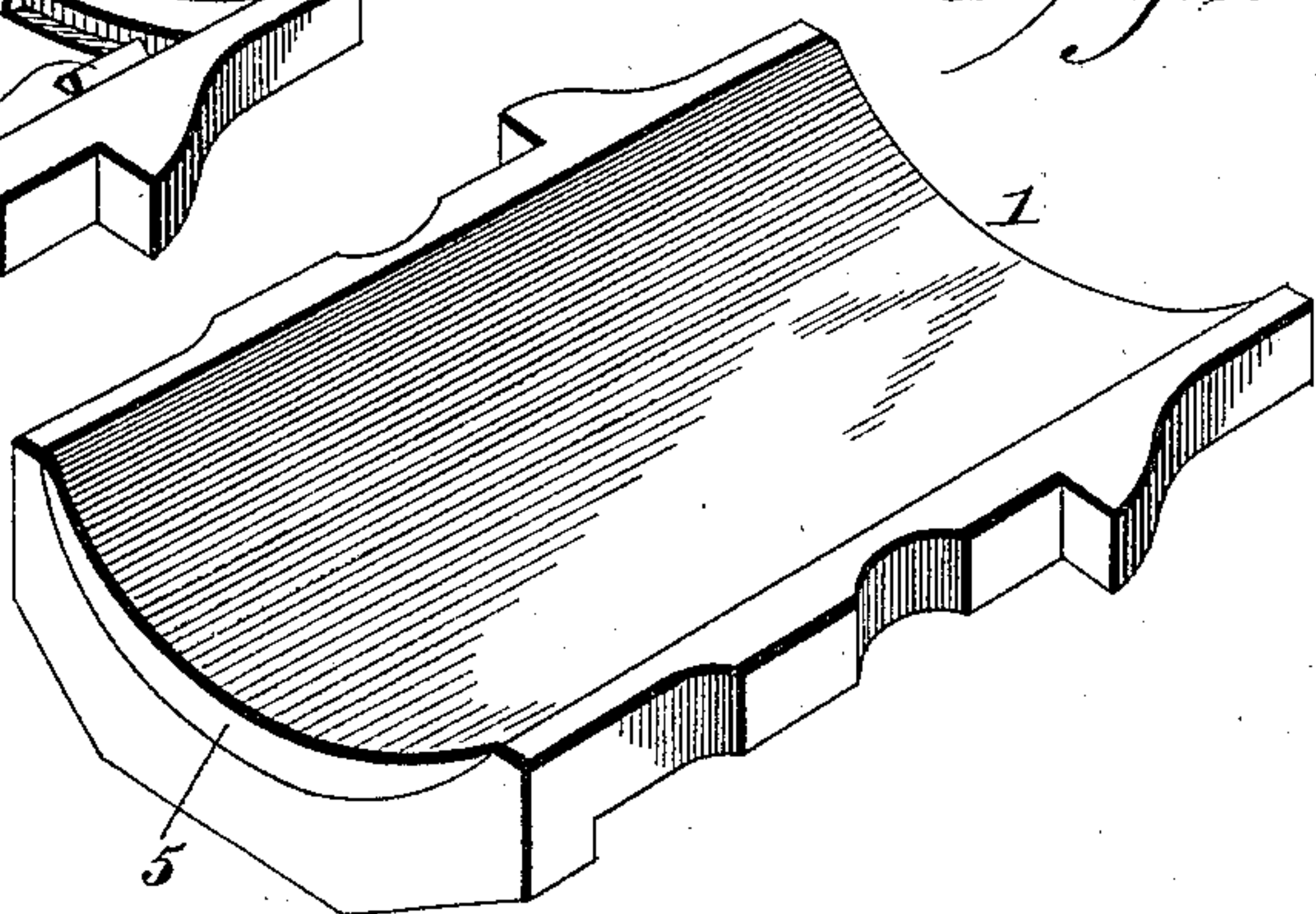
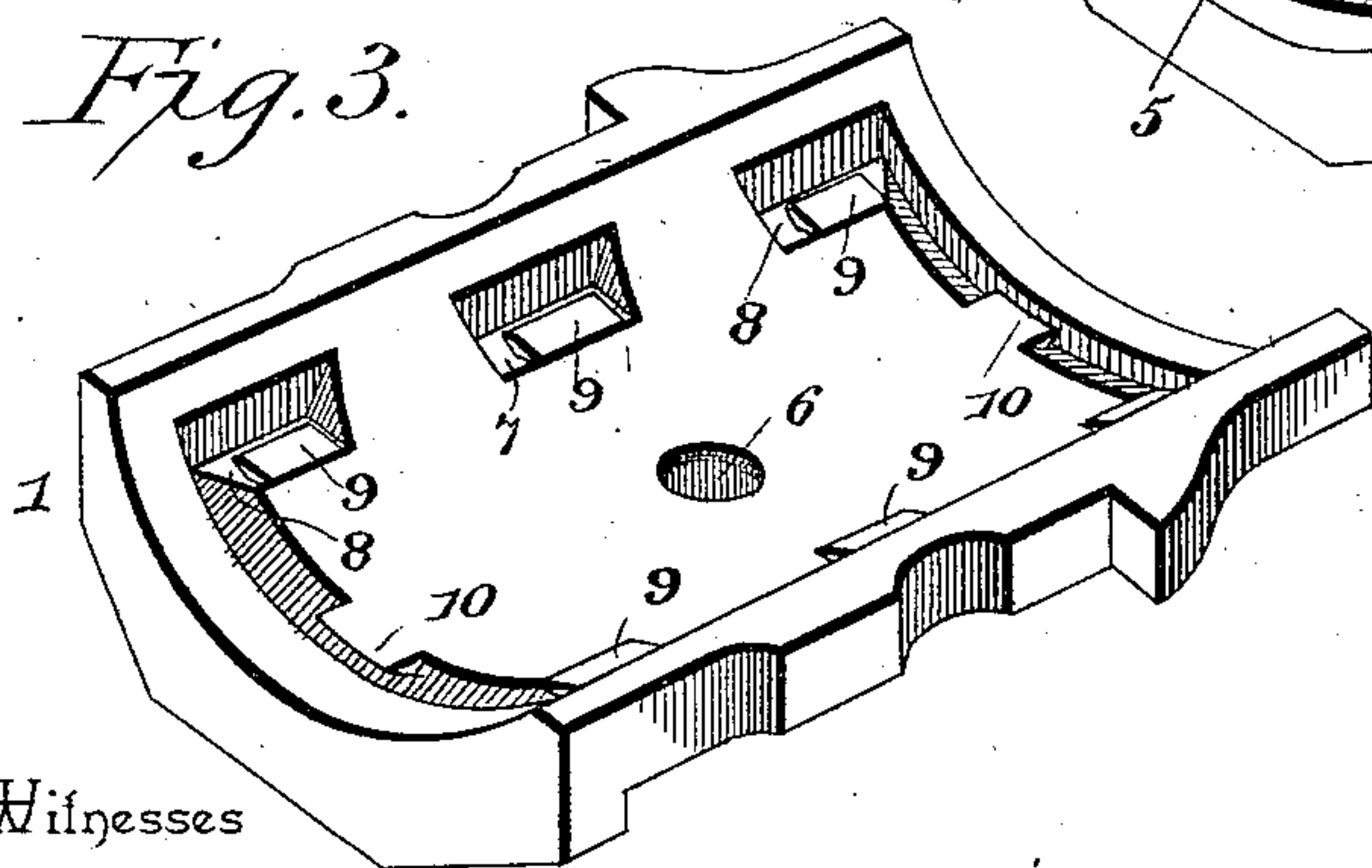


Fig. 3.



Witnesses

Jas. H. McLaughlin

By His Attorneys,

J. H. Riley

Inventor
James Swan

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES SWAN, OF TOPEKA, KANSAS.

JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 607,576, dated July 19, 1898.

Application filed October 14, 1897. Serial No. 655,146. (No model.)

To all whom it may concern:

Be it known that I, JAMES SWAN, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Journal-Bearing, of which the following is a specification.

The invention relates to improvements in journal-bearings.

The object of the present invention is to improve the construction of journal-bearings, more especially the means for securing a Babbitt metal or similar lining to the same, and to provide a simple and comparatively inexpensive device whereby such a lining will be securely fastened to a journal-bearing and will be prevented from becoming loose and displaced.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view of a journal-box provided with a journal-bearing constructed in accordance with this invention. Fig. 2 is a perspective view of the journal-bearing preparatory to receiving the soft-metal lining and before the lugs or projections are bent downward or inward to their engaging position. Fig. 3 is a similar view, the lugs or projections being bent inward to form hooks. Fig. 4 is a perspective view showing the journal-bearing complete. Fig. 5 is a transverse sectional view of the same.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates a journal bearing or brass of the construction adopted by the Master Car-Builders' Association, arranged within a journal-box 2 and interposed between the journal of an axle 3 and a key or wedge 4 in the usual manner.

The journal bearing or brass is provided at its inner or lower concave face with a lining 5, of Babbitt metal or other suitable material, and in order to fasten the same securely in place and prevent it from becoming loose when subjected to severe usage the journal-bearing has a central opening 6 and is pro-

vided with side and end recesses 7 and 8, in which are arranged tapering projections or lugs 9 and 10, located at the sides and ends of the journal brass or bearing, as clearly shown in Figs. 2 and 3 of the accompanying drawings. The recesses or gutters 7 and 8, which are located at opposite sides of the bearing or brass and which extend across the ends, are substantially triangular in cross-section, and the projections or lugs, which are malleable, are formed on the inner faces or walls and are adapted to be bent in the direction of the outer walls to form hooks. The Babbitt-metal or other soft-metal lining is applied to the journal brass or bearing in a liquid state, and the metal runs around and settles in the recesses or gutters. When the metal becomes cool and hard, it is firmly interlocked with the journal bearing or brass and is securely held by the hook-shaped projections or lugs. The opening 6, which extends entirely through the body portion of the bearing, is enlarged and flared at the top to form a head for the core 11, of Babbitt metal, molded in the opening.

The invention has the following advantages: The journal bearing or brass is simple and comparatively inexpensive in construction, and the means for fastening the Babbitt-metal lining are efficient, easily constructed, and capable of enabling the lining to obtain a firm hold on the concave face of the body portion of the journal brass or bearing.

The body portion of the journal bearing or brass consists of a single piece of metal, and the soft-metal lining is secured to the body by simply pouring it on the same without employing any fastening devices, such as rivets or the like.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

A journal bearing or brass comprising a solid body portion consisting of a single piece of metal and provided at opposite sides with narrow gutters formed by recessing the solid body portion, the malleable projections or lugs formed integral with the body portion and located at the sides of the recesses and

adapted to be bent over the latter to form
hooks, and a lining of soft material applied
to the body portion in a molten condition,
and having the projections or lugs embedded
5 in it, whereby it is retained on the body por-
tion, substantially as described.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in
the presence of two witnesses.

JAMES SWAN.

Witnesses:

WM. B. SWAN,

C. W. DICKERSON.