D. TRUE.

SOCKET FOR BOAT KNEES.

No. 176,901. Patented May 2, 1876.

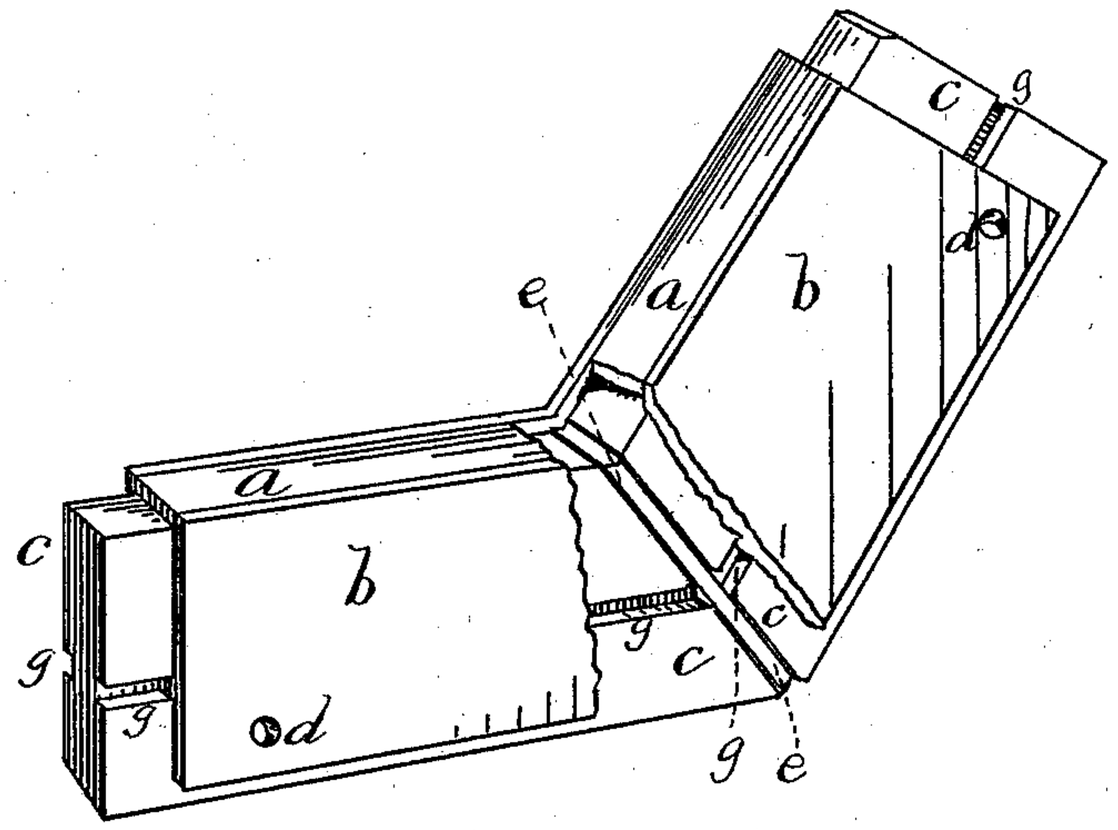


Fig. 1.

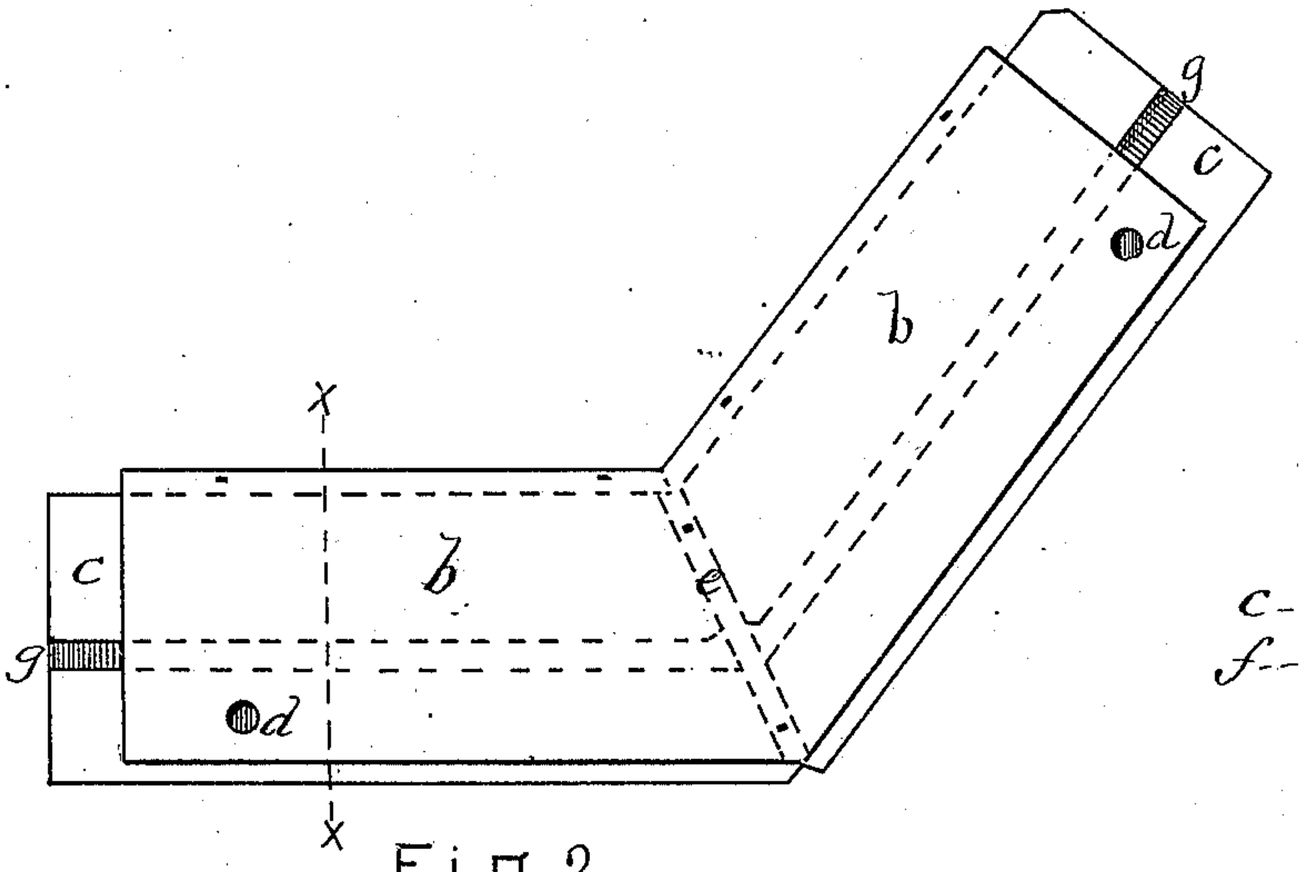


Fig. 2.

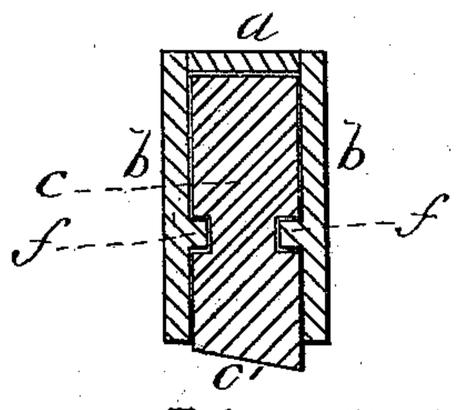


Fig. 3.

WITNESSES.
B. W. Williams.
R. A. George

David True INVENTOR

By his Att'ys
Henry C. W. Williams & Co.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

DAVID TRUE, OF SALISBURY, MASSACHUSETTS.

## IMPROVEMENT IN SOCKETS FOR BOAT-KNEES.

Specification forming part of Letters Patent No. **176,901**, dated May 2, 1876; application filed April 7, 1876.

*To all whom it may concern:*

Be it known that I, DAVID TRUE, of Salisbury, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Sockets for Boat-Knees; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates particularly to sockets used in connection with knees for dories and similar craft.

The nature of the invention consists, first, in making a boat-knee socket with whole top and sides and open bottom—in other words, a bottomless socket; second, in making a partition at or near the center of the socket; and, third, in providing one or more heads or ribs within the socket, which will fit into corresponding grooves in the timbers forming the knee, and running lengthwise with the same.

The nature and objects of my invention are described in detail below.

In the accompanying drawings, Figure 1 is a view in perspective of a dory-boat knee and socket embodying my invention. A portion of the center of the socket is represented as having been broken out in order to more clearly exhibit the invention. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse vertical section.

Similar letters of reference indicate corresponding parts.

*a* represents the top, and *b b* the sides, of my improved socket. The bottom is entirely open. *c c* are the two timbers forming the boat-knee, riveted into the socket by means of the openings *d d* in the side of the socket. It will readily be perceived that, inasmuch as the flat bottom of a dory gradually inclines upward from the center toward the bow and stern, all the knees excepting the center ones do not have a perfectly horizontal surface upon which to rest. Therefore, in order that the knees may assume a perpendicular position, their under sides or bottoms must be beveled to suit the angle of that portion of the boat-bottom upon which they rest. This angle grows greater as it nears the two ends of the boat. Now, in order that a single socket may accommodate itself to any portion of the boat, the bottom is left open, and the knee is made wide enough to project a short distance through the bottom of the socket, as seen in the drawing, and then the bottom of the knee may be beveled at any angle desired, as exhibited by *c'*, Fig. 3, without interfering with the socket. *e* is a partition dividing the socket into two parts. The socket is rendered much stronger and less liable to spread by means of this partition, and the soft wood *c*, when driven into the socket, is provided with a hard solid substance to rest against, which would not be the case if no partition were provided and each piece *c* were driven against the piece entering from the opposite side, both being more or less soft.

In order to strengthen the socket still more, and also to hold the knee in place, the casting is provided with one or more ribs, *f*, fitting into the grooves *g* in the timber *c*.

In practical operation the two timbers *c c* are driven into the socket, into the positions shown in the drawing, and held in place by means of the grooves *g* and rivets through openings *d*. Having been beveled to fit its position in the boat, it is nailed to the bottom in the usual manner. Of course, that portion of the knee which rests against the side of the boat may be beveled to fit its position.

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

1. A socket or clamp for holding the inner ends of two portions of a boat-knee, consisting of sides and top extending from side to side, but without complete bottom, for the purpose of allowing the bottom of said boat-knee to be beveled to fit its position in the boat.

2. In a socket or clamp for holding the inner ends of two portions of a boat-knee, a partition, for the purpose herein described.

3. In combination with the timber *c*, provided with the groove *g*, the rib *f*, substantially as and for the purpose above set forth.

DAVID TRUE.

Witnesses:

HENRY W. WILLIAMS,

R. A. GEORGE.