

J. Boiles, Stearn Bearings for Propellers

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PATENTED JUL 18 1871

Fig:1.

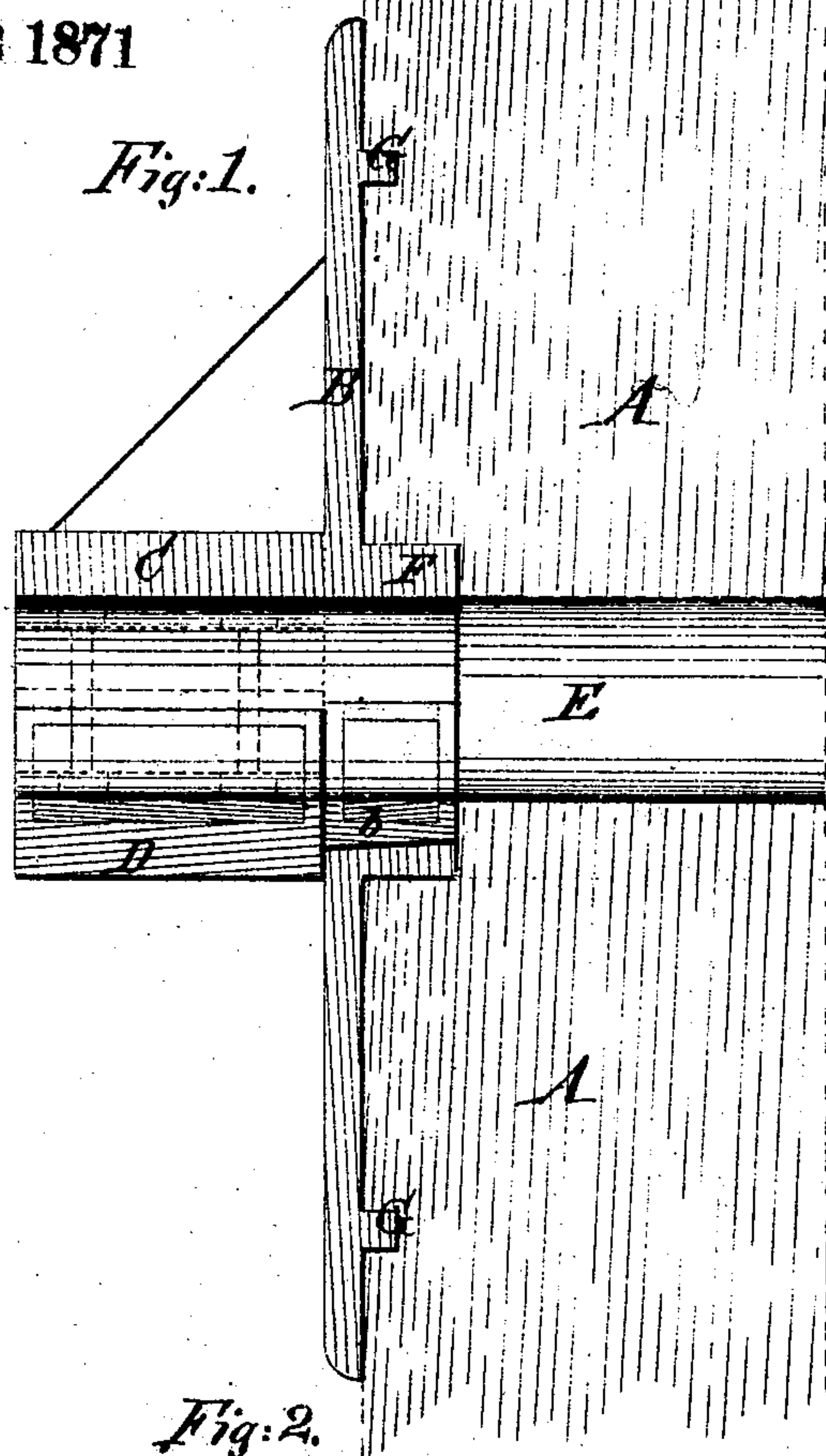
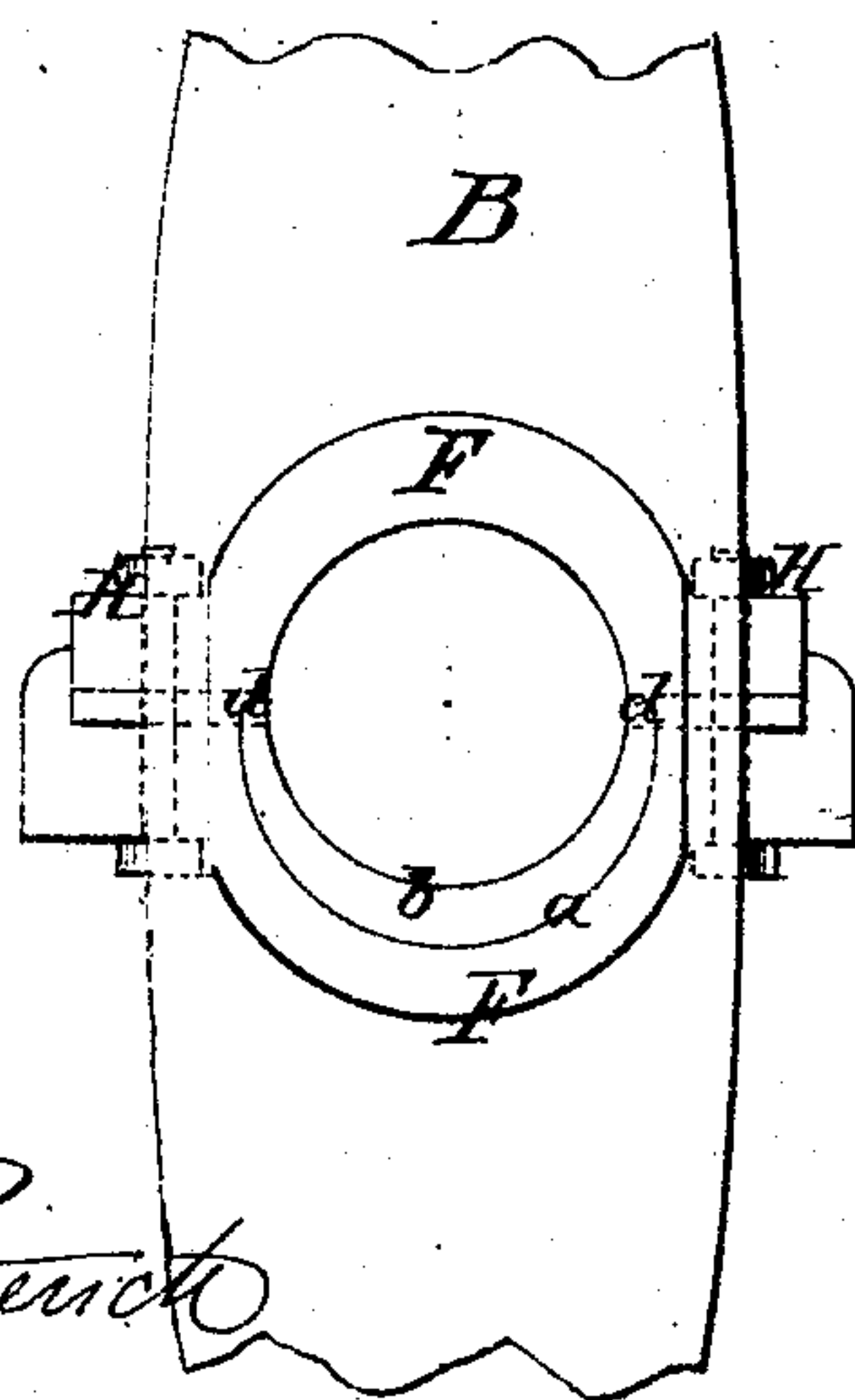


Fig:2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES BOILES, OF NEW YORK, N. Y.

IMPROVEMENT IN STERN-BEARINGS FOR PROPELLERS.

Specification forming part of Letters Patent No. 117,039, dated July 18, 1871.

To all whom it may concern:

Be it known that I, JAMES BOILES, of the city, county, and State of New York, have invented a new and useful Improvement in Stern-Bearings for Propellers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in stern-bearings for propellers; and it consists in an enlargement of the said bearing by means of a secondary bearing applied to the extension of the casting, which is applied to the stern-post for supporting the ordinary bearing, the said extension being let into the stern-post in a recess surrounding the shaft, to maintain said casting in its position vertically.

Figure 1 is a vertical section through the stern-post and the casting, and Fig. 2 is an elevation of the side of the casting which is fitted to the stern-post.

Similar letters of reference indicate corresponding parts.

A indicates the stern-post; B, the casting usually fitted to the outside of the post, and having the cap C to which the under bearing D for the shaft E is bolted. F indicates the tubular projection of this plate, which, together with the lugs G, is let into the side of the stern-post for holding the plate vertically to its place, the said plate being also bolted to the post.

Now, I propose to utilize this extension as a means of supporting a secondary bearing for the

shaft, and to this end core out the inner part of the lower half of this extension, as indicated by the line *a*, and fit therein a bearing, *b*, of cast metal lined with Babbitt-metal or other composition used for bearings, and I arrange it so that when the upper edges *d* bear snugly against the shoulders of the extension F above them, the bearing *b* will receive its due proportion of the weight of the shaft, while the main portion will be borne by the ordinary bearing D, which is bolted to the flanges H of cap C. As the bearing *b* wears away it may be raised by keys driven between it and the part of the extension F wherein it rests. This bearing may be readily put in its place and taken out by moving it endwise, when the bearing D is removed and the weight of the shaft lifted off from it.

By this plan I considerably enlarge the total area of bearing-surface of the stern-bearing, and thereby insure much greater durability and permanence with little or no cost above the ordinary cost of the plate B and the ordinary bearings.

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

The arrangement of the secondary bearing *b* in the extension F of the plate B, as a re-enforcement to the ordinary bearing D, substantially as specified.

The above specification of my invention signed by me this 3d day of May, 1871.

JAMES BOILES.

Witnesses:

GEO. W. MABEE,
T. B. MOSHER.