

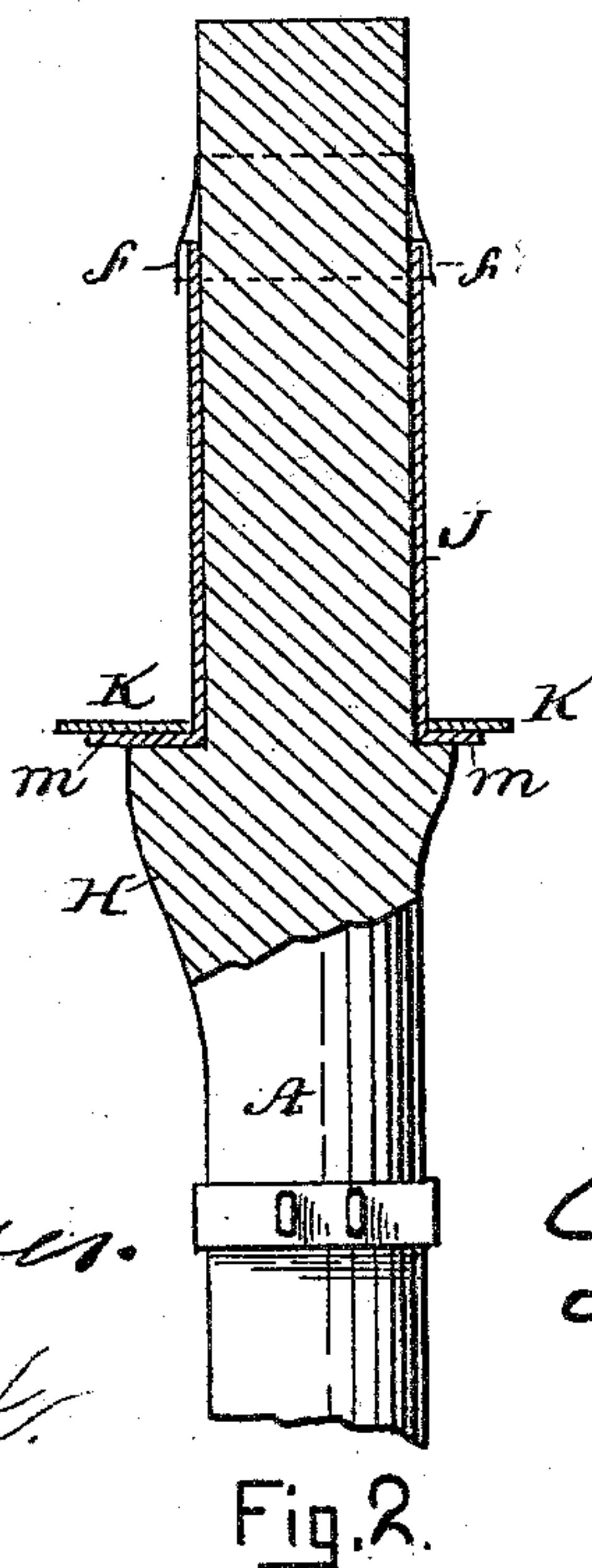
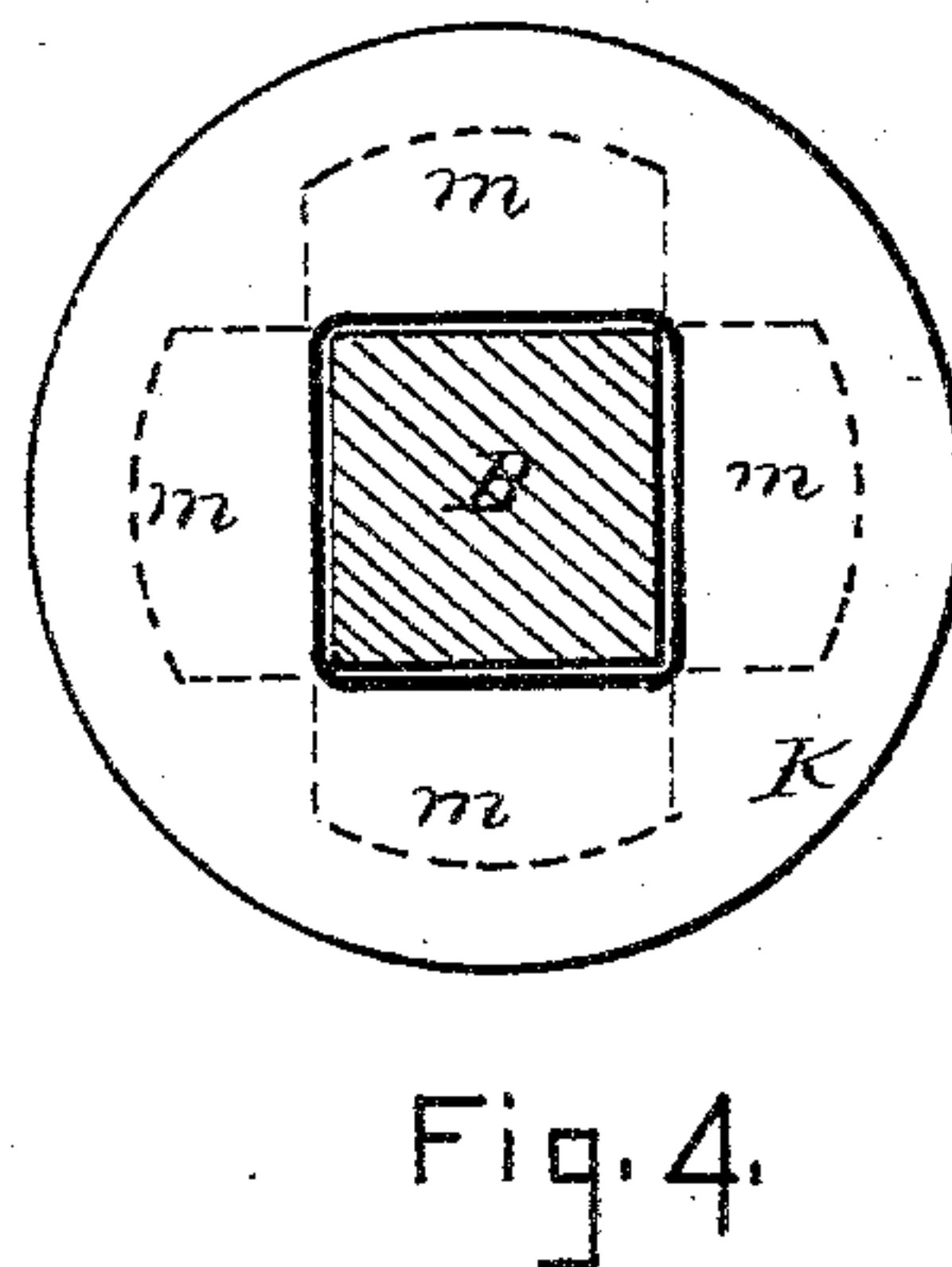
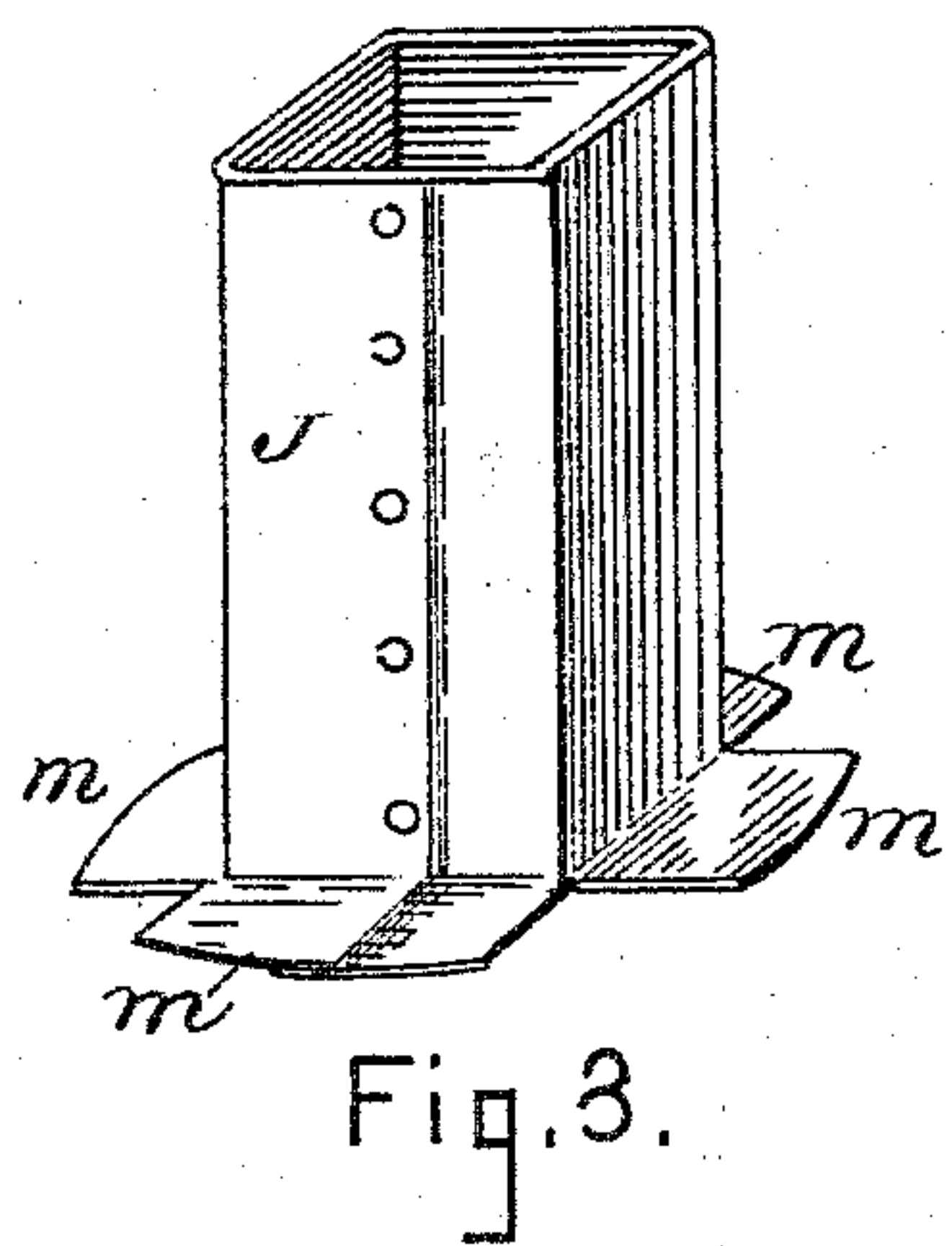
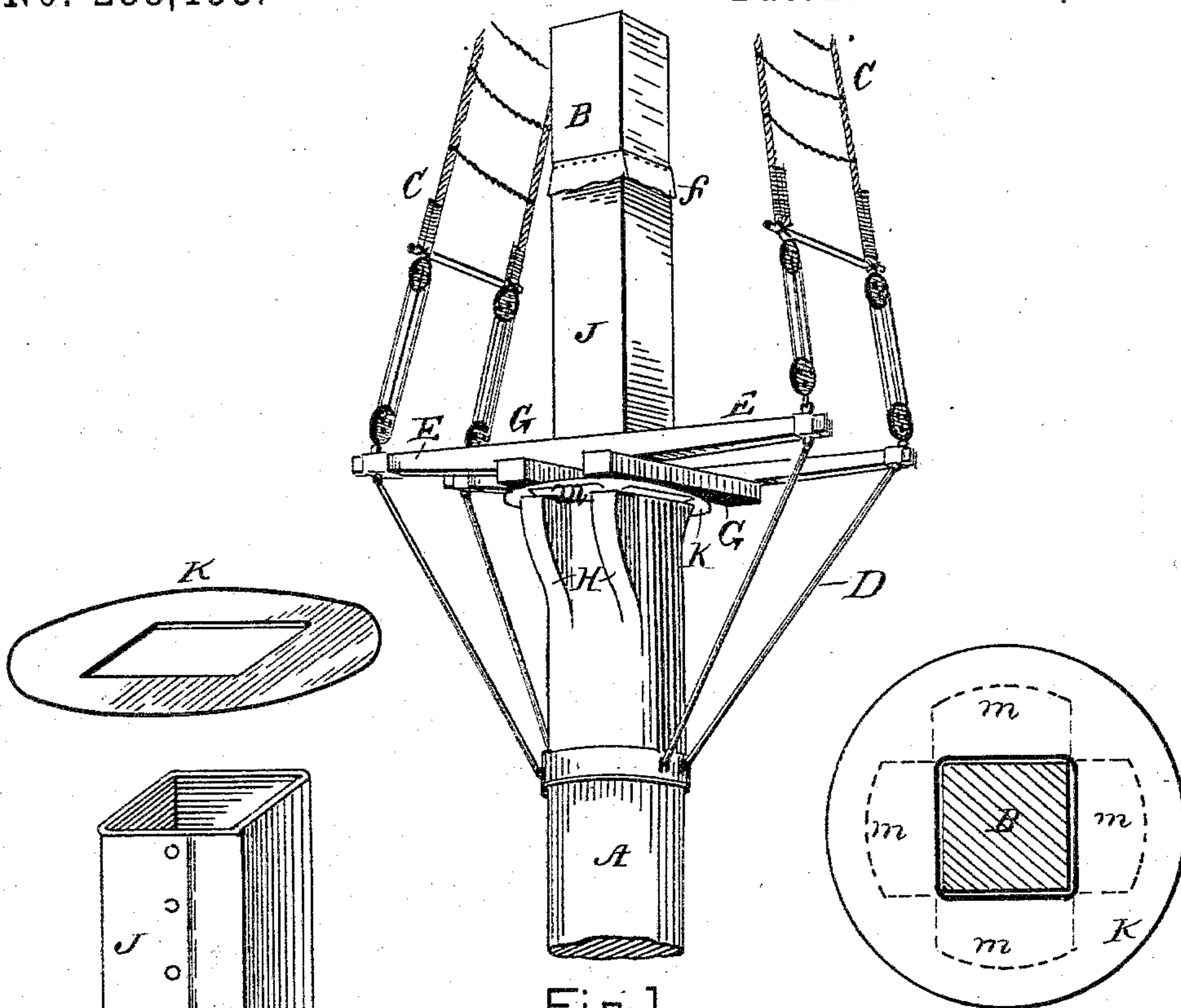
(No Model.)

J. A. AVERY.

MAST SHIELD.

No. 288,153.

Patented Nov. 6, 1883.



Witnesses:
A. W. Sawyer.
H. C. Rummick.

Inventor:
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Att'y.

UNITED STATES PATENT OFFICE.

JOHN A. AVERY, OF BOSTON, MASSACHUSETTS.

MAST-SHIELD.

SPECIFICATION forming part of Letters Patent No. 288,153, dated November 6, 1883.

Application filed June 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. AVERY, of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Mast-Shields, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view, representing the improvement in use; Fig. 2, a vertical longitudinal section of a mast provided with the shield; Fig. 3, a perspective view of the shield, detached; and Fig. 4, a top plan view.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

It is well known that the masts of ships, being constantly exposed to the weather, are liable to rapid decay in the vicinity of the cross and trestle trees, these parts retaining the moisture or preventing the mast from drying where they come in contact with the same or rest on the bibs. My invention is designed to obviate this difficulty, and to that end I make use of means which will be readily understood by all conversant with such matters from the following explanation, its extreme simplicity rendering an elaborate description unnecessary.

In the drawings, A represents the main or lower mast; B, the lower mast-head; C, the top-mast shrouds; D, the futtock-shrouds; E, the cross-trees; G, the trestle-trees, and H the bibs, these parts being all of the ordinary construction. To protect the mast at this point I cover it with the shield or sleeve J, composed of sheet metal, preferably copper or galvanized iron, and provided at its base with the outwardly-projecting flanges *m*. This

shield is passed over the top-mast and rests on the bibs H, and is so constructed as to fit closely to the mast when in position. A washer or plate of metal, K, is also passed over the mast and rests on the flanges *m*, the trestle-trees G being placed on the plate and the cross-trees E on the trestle-trees, as shown in Fig. 1. The mast is leaded around the top of the shield, as seen at *f*, to prevent the water from passing down inside the shield. The washer may also be soldered to the body of the shield, to prevent the water from passing between the same.

It will be obvious that the body of the shield may be made round, or to fit the mast on which it is to be used; also, that the flanges *m* may be dispensed with and the washer K secured to the body of the shield and kept in position without the aid of flanges, if desired.

Having thus explained my invention, what I claim is—

1. As an improved manufacture, the shield J, having the flanges *m*, provided with the washer K for preventing a ship's mast from decaying, substantially as described.

2. A ship's mast provided with a metallic shield or sleeve which surrounds the mast in the vicinity of the cross-trees and extends outwardly under the cross-trees and trestle-trees above the bibs, said shield being adapted to keep the cross-trees and trestle-trees out of contact with the mast, and thereby prevent it from decaying, substantially as specified.

3. The mast A, provided with the shield J, having the flanges *m* and washer K, in combination with the cross-trees E and trestle-trees G, substantially as set forth.

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Witnesses:

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