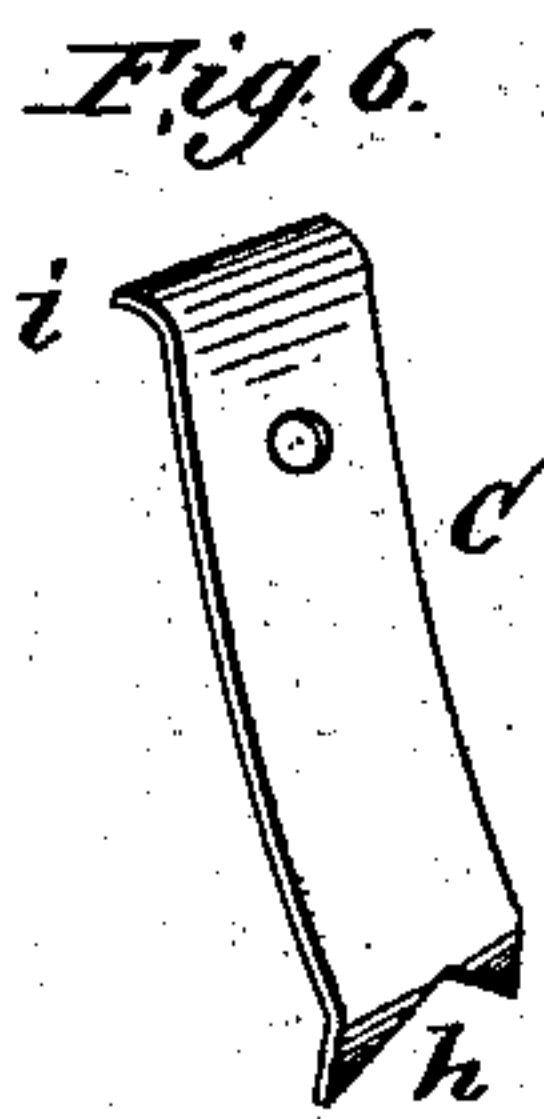
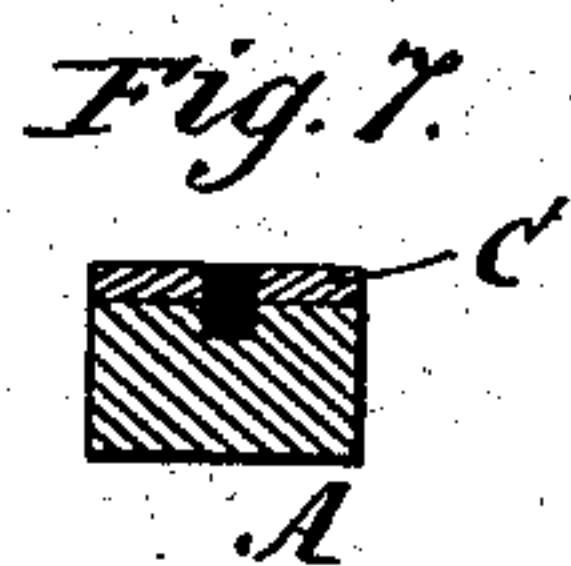
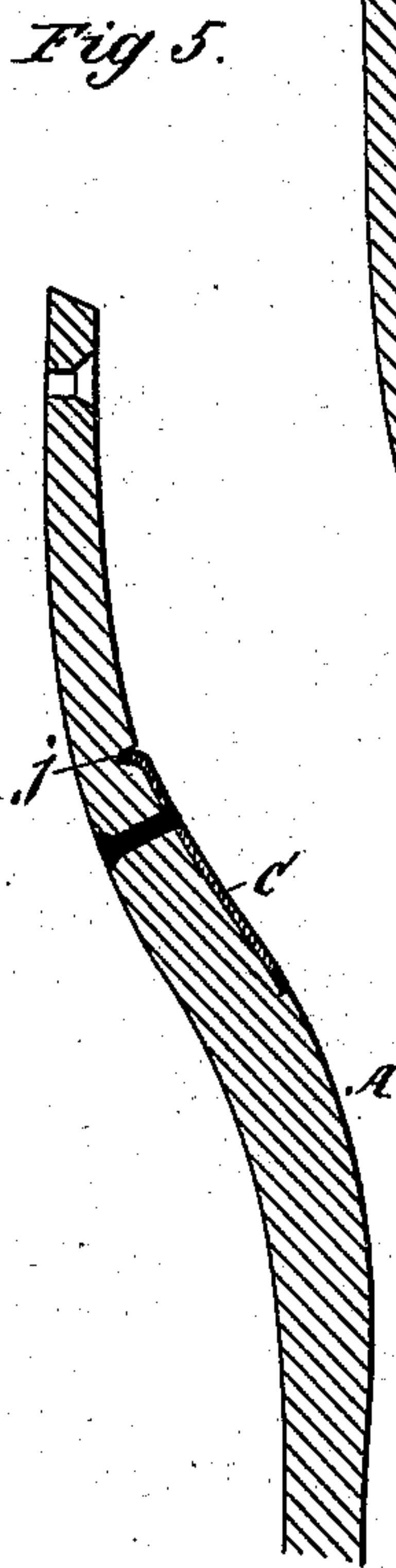
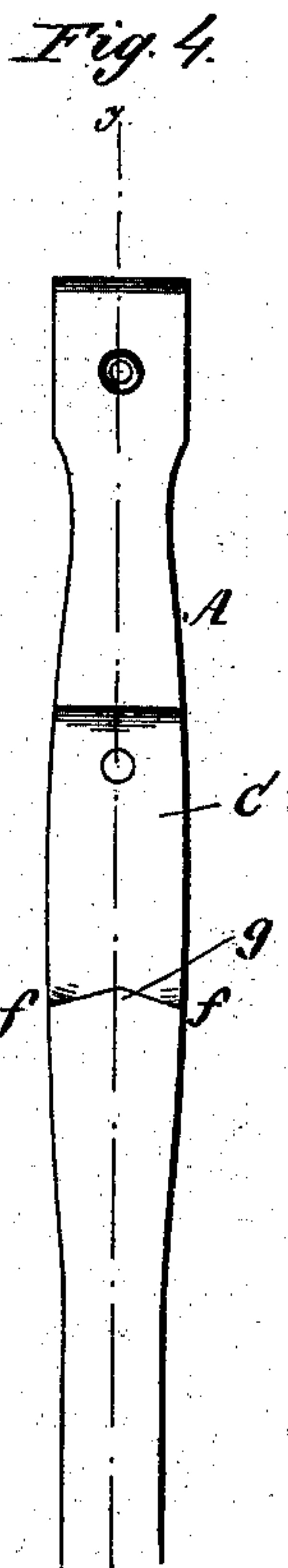
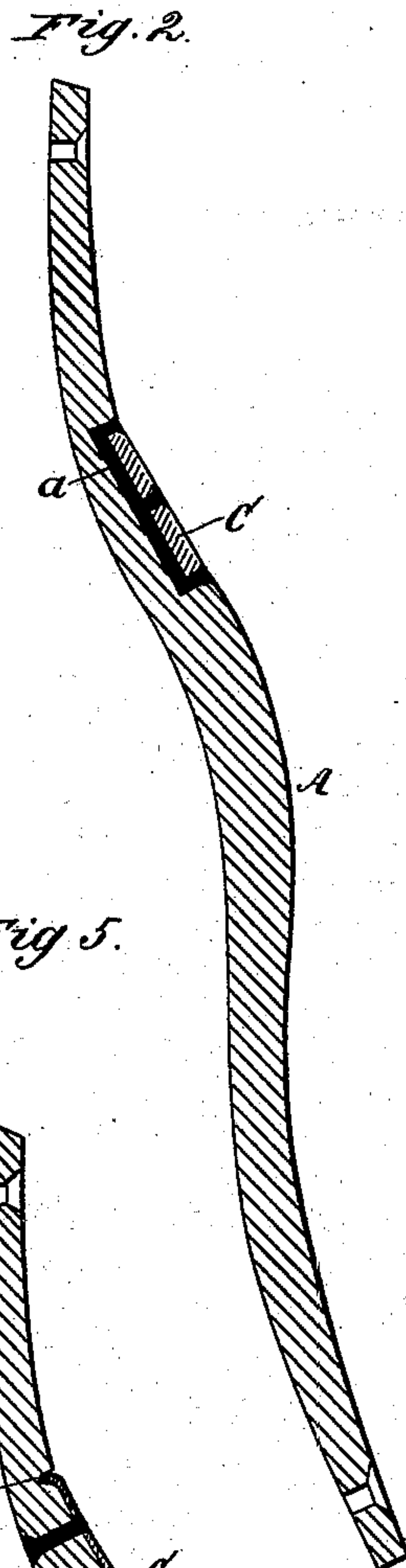
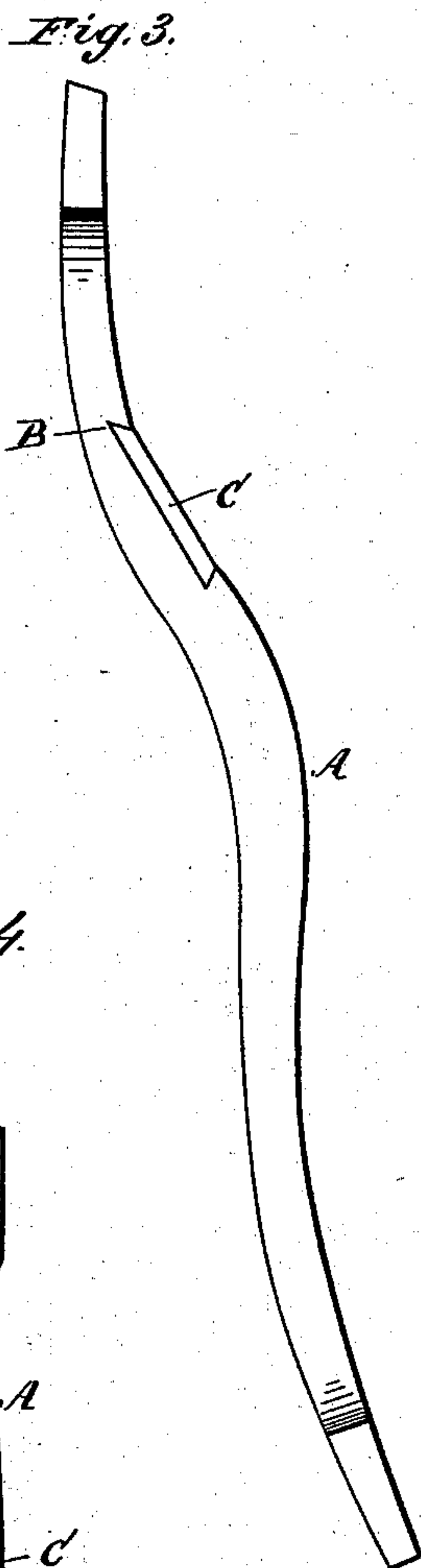
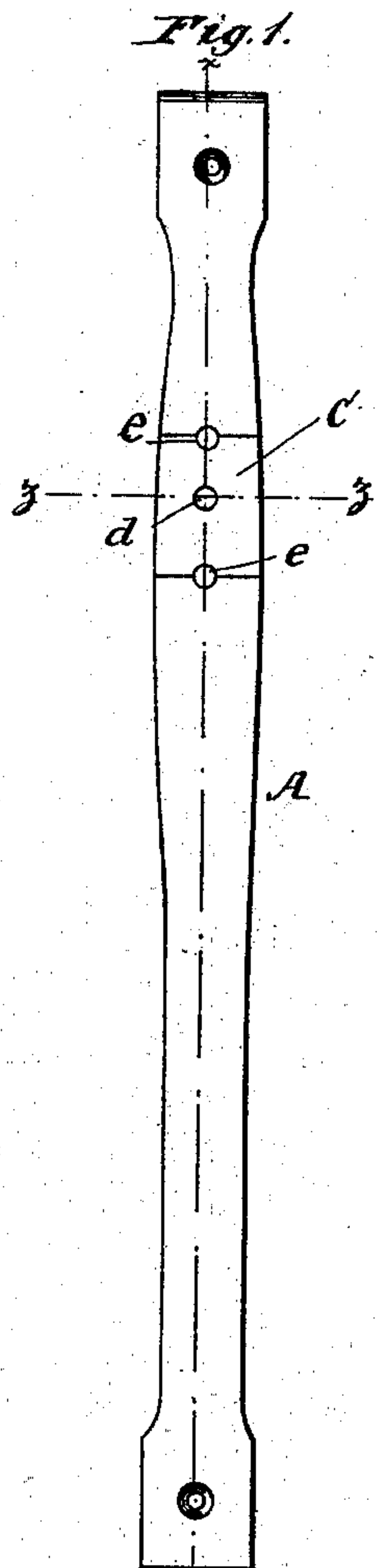


(No Model.)

T. C. GARLINGTON.
COTTON GIN RIB.

No. 268,007.

Patented Nov. 28, 1882.



Attest.

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UNITED STATES PATENT OFFICE.

THOMAS C. GARLINGTON, OF DADEVILLE, ALABAMA.

COTTON-GIN RIB.

SPECIFICATION forming part of Letters Patent No. 268,007, dated November 28, 1882.

Application filed May 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. GARLINGTON, a citizen of the United States, residing at Dadeville, in the county of Tallapoosa and State of Alabama, have invented certain new and useful Improvements in Cotton-Gin Ribs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The present invention relates to that class of ribs for cotton-gins which are provided with re-enforcing or wearing plates at the point thereof most subjected to wear—that is, at the upper end of the rib, where the cotton is drawn through by the saws.

Several expedients have been resorted to for securing attachable wearing-plates of steel to cotton-gin ribs, such as rivets, screws, and dovetail recesses; but the devices used have either been too expensive, making the repair of a worn rib cost more than a new one, or else the method employed for attaching the plates has materially weakened the rib at the point where strength is specially required. If the plate is attached by screws they are liable to rust, and often break when an attempt is made to unscrew them to remove the plate. Rivets are also difficult to remove.

My invention is designed to obviate the disadvantages above recited; and it consists essentially in obtaining a firm and intimate connection between the wearing-plate and rib by means of fusible metal poured into holes or channels in the rib and plate, as will hereinafter be more fully described.

In the drawings, Figure 1 is a face view of a cotton-gin rib having a hard-metal plate let into the same and secured by fusible metal. Fig. 2 is a sectional view taken through the plate and rib on line *x x* of Fig. 1. Fig. 3 is an edge view of the rib. Fig. 4 is a face view, illustrating a modification, showing the means for applying a wearing-plate to a gin-rib already in use or in a manufactured state. Fig. 5 is a section taken through Fig. 4 on line *yy*. Fig. 6 is a detailed view of the attachable

plate for repairing a worn rib. Fig. 7 is cross-section through line *z z* of Fig. 1.

Referring to the construction exemplified in Figs. 1 and 3, inclusive, and Fig. 7, A designates a cotton-gin rib of any approved form or construction, which is provided with the customary end holes for the passage of the screws that serve to secure the rib to the breast of the gin. A dovetail recess or groove, B, made near the upper end of the rib at the time of manufacture or casting of the rib, has a series of shallow recesses or depressions or a continuous channel or groove, *a*, in its bottom face, for the object hereinafter stated.

C designates the wearing or re-enforcing plate, which is made of steel or other hard metal, and has the top and bottom edges beveled to fit into the dovetail recesses in the rib. The face of the plate is flush with the face of the rib, and the side edges of the plate project slightly beyond the rib, which will lessen the draft and improve the "staple." A hole, *d*, is drilled through the middle of the plate C, and notches *e* are made in the top and bottom edges of the latter, as is clearly shown in Fig. 1. The object of the hole *d* is to permit the pouring in or introduction of molten metal—such as lead or its alloys—which metal will find its way into the depressions or cavities, or the channel in the rib and notches and hole in the plate, and when hard will make a firm and intimate connection between the rib and plate. In order to remove the plate, when worn, for the insertion of a new one, it is only necessary to hold the rib over a hot fire, when, the fastening metal being easily fusible, the plate is readily removed. It will be obvious that a firm adhesion between the plate and rib can only be obtained by using a proper soldering-flux. The construction shown in Figs. 4, 5, and 6 also involves the use of a plug of fusible metal for fastening the plate to the rib. In this instance, however, the rib is of the well-known form, having a hardened or chilled face at the point where the cotton is drawn through by the saws. Such a face, when worn out, is repaired by securing thereto a wearing-plate in the following manner, viz: Notches *f* are made at each side of the rib by means of a cornered file or saw, these notches extending below the hardened face of the rib, and diverg-

ing from a central point on the face thereof, so
as to leave a projection, *g*. The wearing-plate
C is provided with a forked end, *h*, which is
made to fit into the aforesaid notches and on-
5 to the projection *g*, and the opposite end, *i*, of
the plate is turned down slightly, or beveled,
so as to fit into an undercut notch, *j*, extend-
ing across the face of the rib. The plate hav-
ing been applied in this manner, a hole is
10 drilled through it and the rib and countersunk
on each side of the latter. This hole is filled
with molten metal after the parts have been
properly prepared with the soldering-fluid, this
metal, when hard, forming a plug for retaining
15 the plate in position. The hole need not ex-
tend entirely through the rib, and it can be
made slanting.

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

1. A cotton-gin rib having an attachable and
detachable wearing or re-enforcing plate se-
cured to the rib by a fusible metal plug or fill-
ing, as and for the purpose set forth.

2. The attachable and detachable wearing 25
or re-enforcing plate, having one end forked
and the other end turned down or beveled, and
provided with a hole in its face, in combination
with the gin-rib having side notches and cen-
tral projection, a transverse undercut groove 30
and hole coinciding with the hole in the plate,
for receiving a plug of fusible metal, as and for
the purpose set forth.

In testimony whereof I affix my signature in
presence of two witnesses.

THOMAS C. GARLINGTON.

Witnesses:

GLOVER TRENT,
P. G. TRENT.