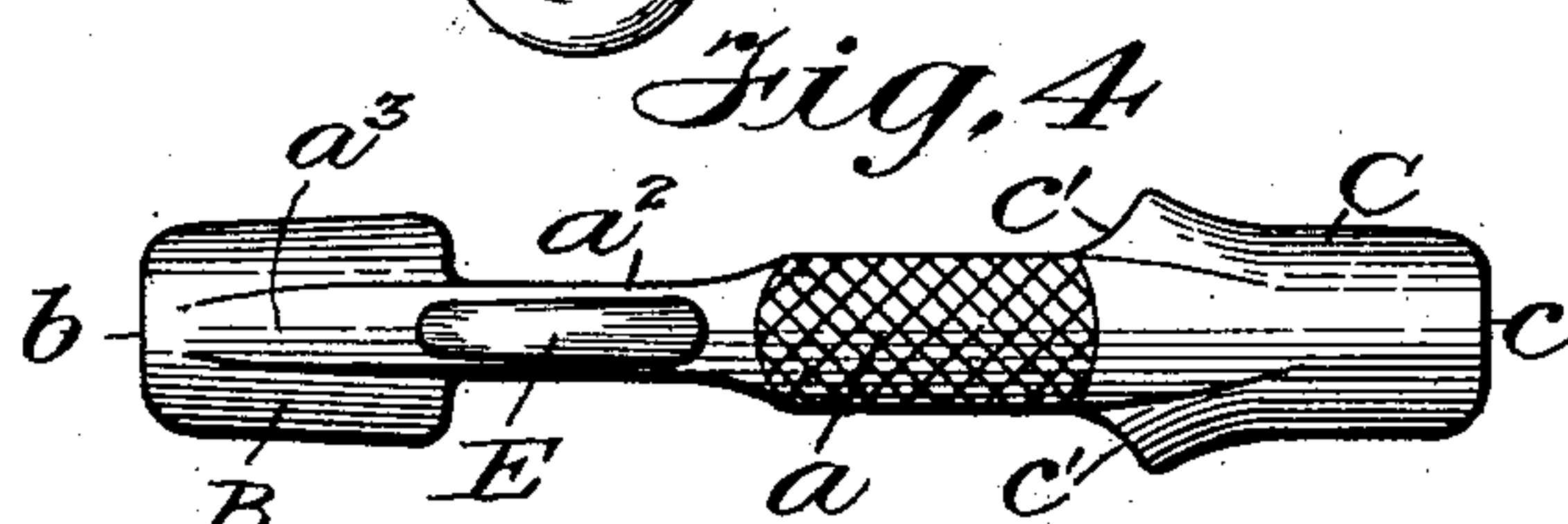
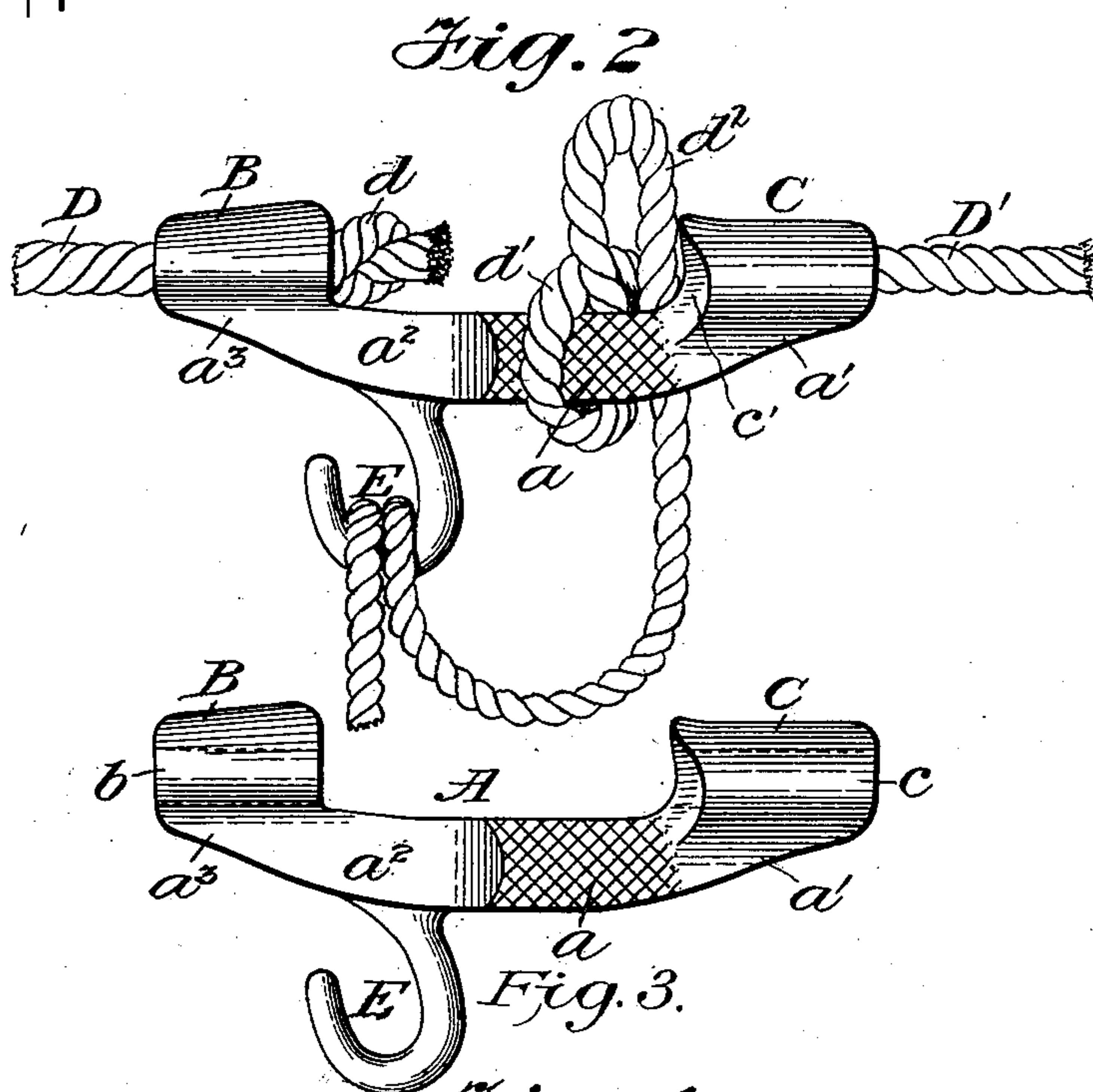
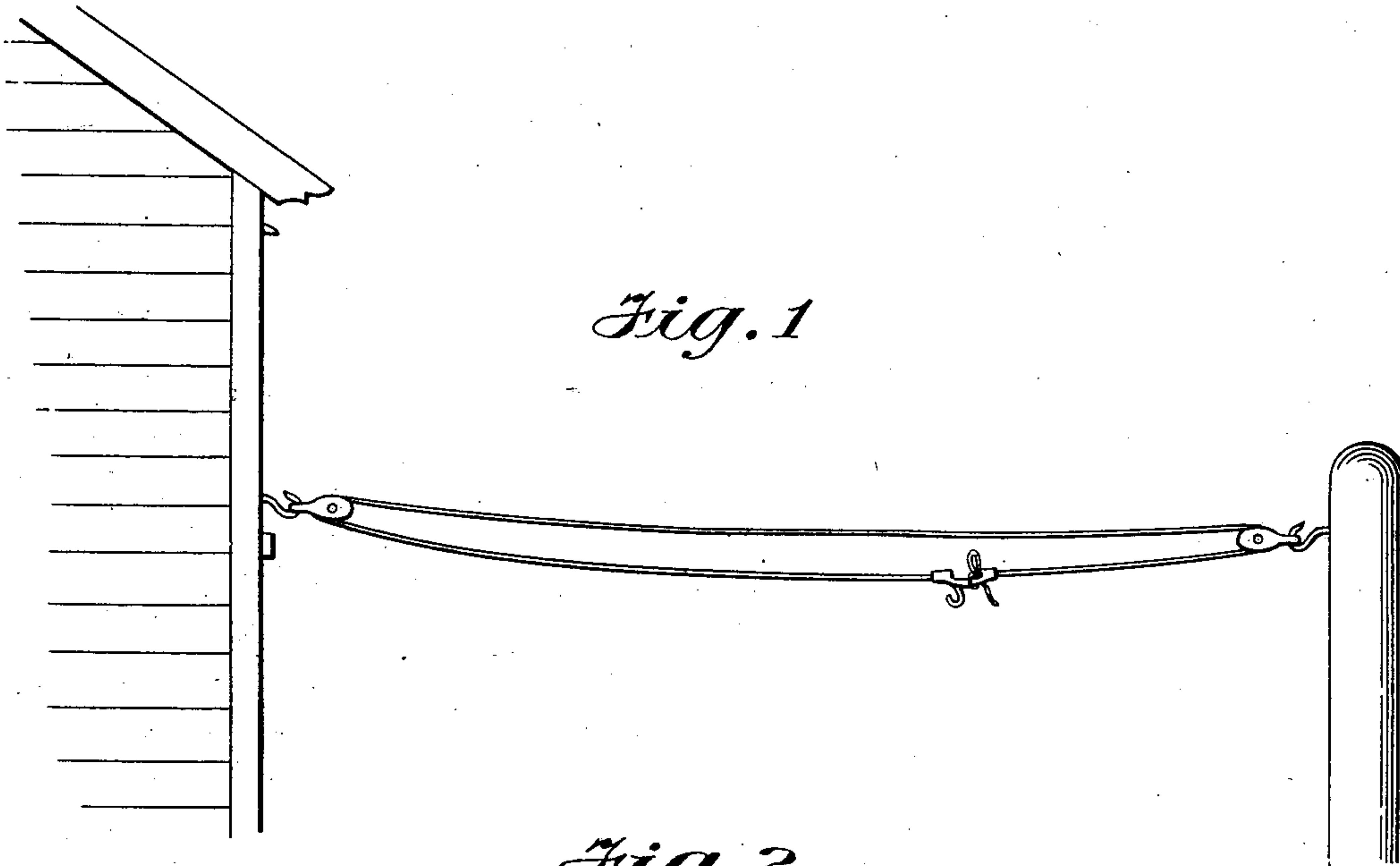


No. 749,235.

PATENTED JAN. 12, 1904.

C. F. SMITH.  
CLOTHES LINE FASTENER.  
APPLICATION FILED MAR. 9, 1903.

NO MODEL.



Witnesses  
Chas. Claggett  
M. Bender.

Inventor  
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By his Attorney  
Charles A. Stephens

# UNITED STATES PATENT OFFICE.

CHARLES F. SMITH, OF PATERSON, NEW JERSEY.

## CLOTHES-LINE FASTENER.

SPECIFICATION forming part of Letters Patent No. 749,235, dated January 12, 1904.

Application filed March 9, 1903. Serial No. 146,834. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. SMITH, a citizen of the United States, and a resident of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Clothes-Line Fasteners, of which the following is a specification.

The present invention relates to clothes-line fasteners, and has for its more prominent objects simplicity and inexpensiveness, as well as high efficiency and durability.

With the above and other purposes in view the invention consists of a novel line-fastening device embodied in a single piece, preferably in the form of a malleable-metal casting, having provision for the ready and secure attachment of one of the line ends, as well as means whereby the other line end can by a single turn around the body of the fastener and the passage of a bight between said loop and the body of said fastener result in a connection that will securely retain said last-mentioned line end and maintain such engagement more positively as tension is exerted on the line. There is also integral provision for hanging the excess portion of the line in a manner so that it will be generally out of the way, yet convenient for further adjustment.

There are other important features and details connected with the novel fastener which are explained in the subsequent extended description.

In the accompanying drawings, forming part of this specification, Figure 1 is an outline view illustrating a pulley-line equipped with my invention. Fig. 2 is a side view showing, on an enlarged scale, the novel fastener and illustrating the manner in which the line ends are engaged therewith. Fig. 3 is a somewhat similar view of the fastener without the line ends, and Fig. 4 is an inverted plan view of said fastener.

Similar reference characters refer to corresponding parts throughout the several figures of the drawings where they occur.

The fastener is comprised of a single piece, preferably in the form of a malleable-metal casting, and includes the horizontal body por-

tion A, with upper horizontally-extended end bosses B' C', having horizontal openings or channels *b c* therethrough, as indicated by dotted lines in Fig. 3, which openings or channels are in longitudinal alinement, as can be readily understood. The body portion A comprises the enlarged and approximately-rounded section *a*, having the lower tapered rib *a'* merging with the under side of the boss C. The other section, *a''*, of said body portion is reduced at its opposite sides to render it of relatively thinner character and has its outer upwardly-rounded end *a'''* merging, with the boss B, at the under side of the latter. It will be observed that the boss C at its inner end is provided with oppositely-diverging bevels *c'*, increasing in area from the top of the boss to the base thereof. The section *a* of the body portion is externally knurled or roughened.

In practice in connecting the ends of a line—as, for instance, a pulley-line—the latter is led around its pulleys, and one end, D, of the line having been passed through the channel *b* in the boss B from the outer end thereof is secured at the inner end of said boss by being formed into a knot *d*. To tighten and fasten the line, the other end, D', is brought horizontally through the boss C, then looped by a downward turn around the body-section *a*, as indicated by *d'* in Fig. 2, and is next brought upwardly in the form of a bight *d''* between the loop *d'* and the contiguous bevel-face *c'* of the boss C. It will be understood that in drawing up the bight *d''* tension will be exerted on the line end D' to render the line taut and that such condition will be positively maintained by reason of the loop *d'* positively clamping said bight against the bevel-face of the boss. Any liability of slipping on the part of the loop *d'*, which would obviously result in the loosening of the line, will be resisted by the knurled or roughened surface of the section *a*.

The thinner portion *a''* serves to materially reduce the weight of the device, while still preserving its strength in the direction in which the strain is experienced. The bevel-



faces  $c'$ , oppositely extending, as described, permit the bight to be clamped irrespective of the direction in which the loop  $d'$  is turned.

A hook E, integrally depending from the portion  $a^2$  and having its opened side toward the outer end of the casting, provides for the convenient hanging of any excess of the line D' beyond the point of its engagement.

By longitudinally extending the body A and arranging the bosses B C in offset relation thereto and both at one side thereof ample clearance is afforded for securely locating the engaging knot  $d'$  of the line end D between the lugs in a position where it is not likely to be disturbed; but the remaining space is such as to conveniently permit the formation of the loop  $d'$  and bight  $d^2$  of the other line end without liability of interference or crowding by the knot.

It will be observed that the position of the reduced body part  $a^2$  is such that the loop and bight of the rope can be formed easily thereon, as the rope will slip smoothly in contact with such part and without any tendency of the wear of the rope as might be occasioned were these operations conducted in immediate relation to the knurled part of the body portion. The tapering or sloping junction of the part  $a'$  with the knurled part of the body portion permits the loop  $d'$ , with the bight passed therethrough, after both have been formed in a slightly loose condition upon the part  $a^2$ , to be slid upon the knurled part and the line then positively fastened by tightly drawing the loop.

By referring to Fig. 4 it will be seen that the hook E is of such limited dimensions in cross-section that it does not laterally project beyond the vertical planes occupied by the sides of the part  $a^2$ . This reduces the liability of the line undesirably catching upon the hook during the operation of forming the loop and bight, as aforesaid.

From the foregoing it will be appreciated that the novel line-fastener is not only simple, durable, and comparatively inexpensive, but that it can be readily utilized to effect the quick and convenient fastening of the line.

I do not wish to be understood as limiting myself to the particular construction and arrangement of parts shown and described, but reserve the right to all such modifications as may be fairly considered within the scope of my invention.

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

1. A clothes-line fastener presenting integrally, a longitudinally-extended body portion comprising knurled and smooth parts, and bosses B, C, in offset relation with respect to said body portion and both at the same side thereof, said bosses being located at the ends respectively of said body portion and provided with mutually-alined, longitudinally-disposed perforations.

2. A clothes-line fastener presenting integrally, a longitudinally-extended body portion comprising knurled and smooth parts, and bosses B, C, in offset relation with respect to said body portion and both at the same side thereof, said bosses being located at the ends respectively of said body portion and provided with mutually-alined longitudinally-disposed perforations, one of the bosses having at its inner end, an outwardly-beveled face.

3. A clothes-line fastener presenting integrally a longitudinally-extended body portion having in offset relation the bosses B, C, both at one side and provided with mutually-alined longitudinally-disposed openings, one part of the body portion being knurled contiguous to the inner end of the adjacent boss, while the other part of the body portion being of reduced thickness and having a tapering junction with the knurled part, and having a smooth surface extending to the other boss.

4. A clothes-line fastener presenting integrally a longitudinally-extended body portion having in offset relation the bosses B, C, both at one side and provided with mutually-alined longitudinally-disposed openings, one of the bosses having at its inner end outwardly-diverging faces, one part of the body portion being knurled contiguous to said faces, and the other part of the body portion being of reduced thickness and having a smooth surface extending to the other boss, and a hook depending from the reduced body portion within the planes of the sides thereof.

Signed at New York, in the county of New York and State of New York, this 20th day of January, 1903.

CHAS. F. SMITH.

Witnesses:

F. O. McCLEARY,  
M. BENDER.