

(No Model.)

W. TYLER.
BELL CORD ATTACHMENT.

No. 437,062.

Patented Sept. 23, 1890.

Fig 1

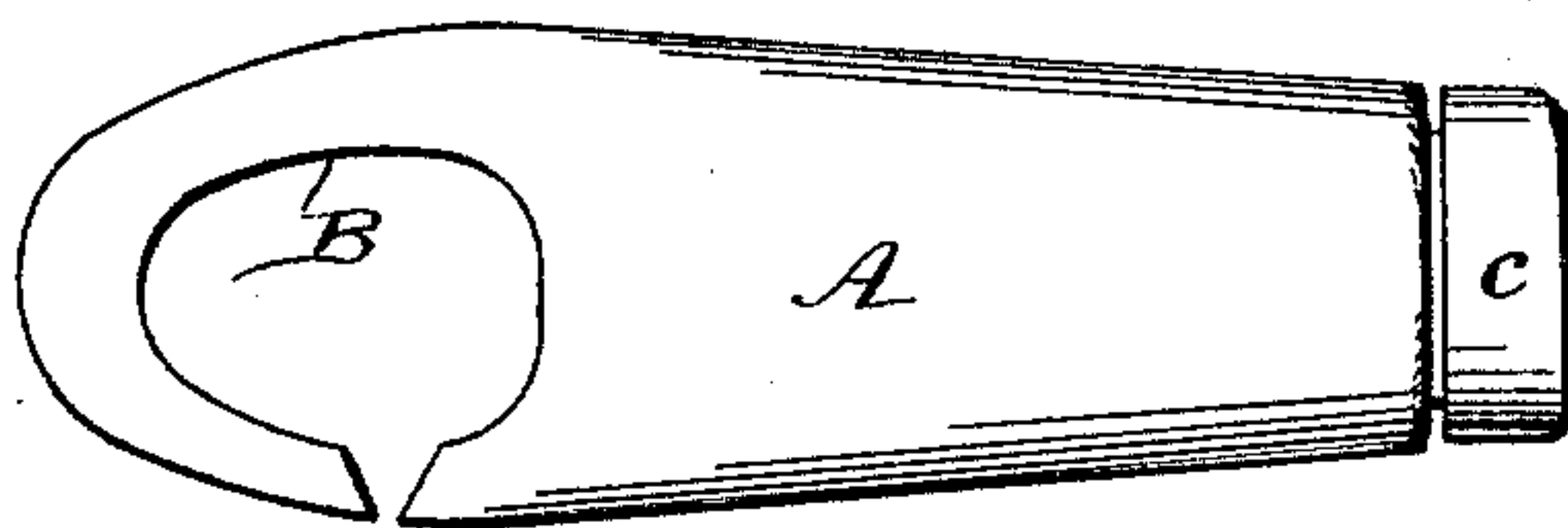


Fig 2

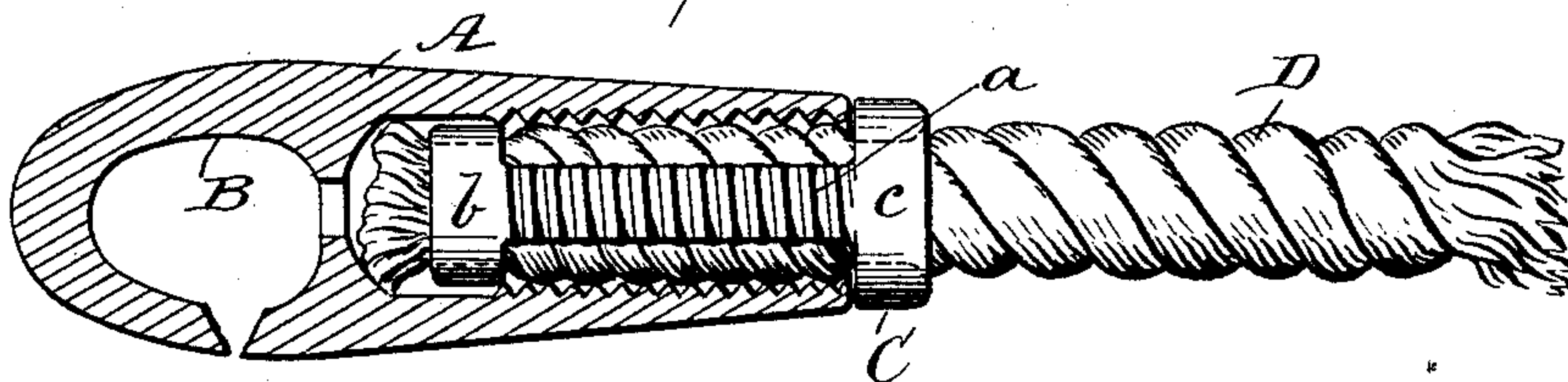


Fig 3

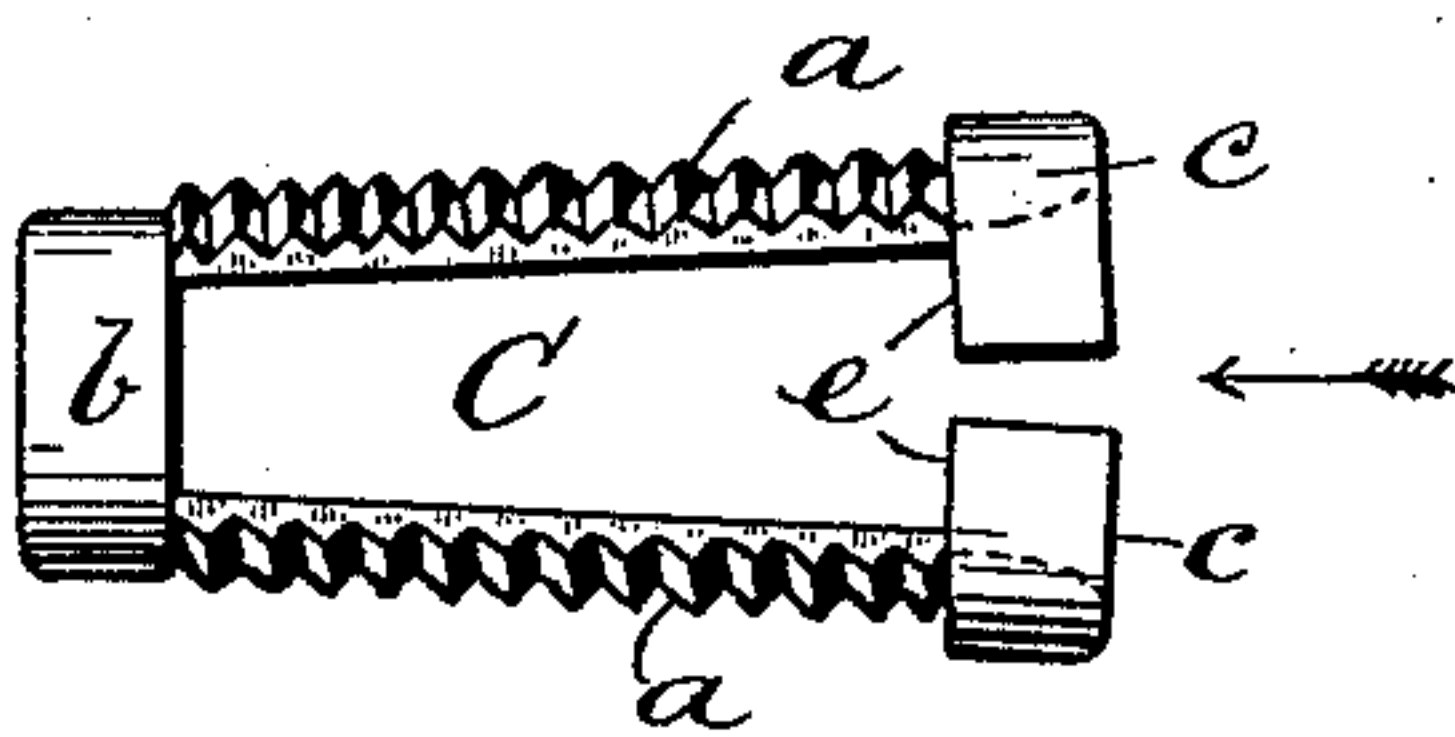
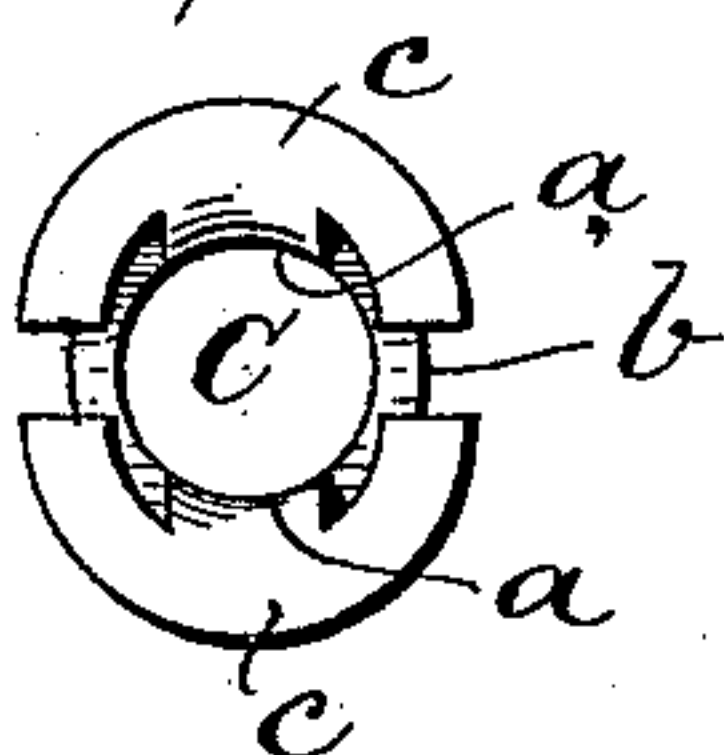


Fig 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

WALLACE TYLER, OF CHICAGO, ILLINOIS, ASSIGNOR TO LILLIAN M. MITCHELL,
OF SAME PLACE.

BELL-CORD ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 437,062, dated September 23, 1890.

Application filed May 22, 1890. Serial No. 352,756. (No model.)

To all whom it may concern:

Be it known that I, WALLACE TYLER, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Bell-
5 Cord Attachment, of which the following is a full, clear, and exact description.

It is desirable in the attachment of the separate portions of a bell-cord coupling that the duplicate pieces of said coupling should be
10 so secured to the ends of the cord as to permit their withdrawal from the coupling-sections in case the train of cars is separated accidentally, and thus prevent a rupture of the strands of the cord.

15 The object of this invention is to provide a simple and convenient means for the speedy attachment of a bell-cord by its ends to coupling-sections, whereby the cord ends will be held sufficiently secure for legitimate use, but
20 which will permit the removal of the cord ends from the coupling in case the cord is subjected to an abnormal strain.

To this end my invention consists in certain features of construction and combination of
25 parts, as will be hereinafter described, and indicated in the claim.

Reference is to be made to the accompanying drawings, forming a portion of this specification, in which similar letters of reference indicate corresponding parts in all of the figures.
30

Figure 1 is a side view of one coupling-section containing the improvement. Fig. 2 is a side view of one coupling-piece, partly in section, showing a rope in coupled connection therewith. Fig. 3 represents a novel and
35 principal feature of the invention detached from the coupling-hook; and Fig. 4 is an end view of the piece shown in Fig. 3, viewed in the direction of the arrow in said figure.

40 The cord-coupling consists of two portions that are of similar form. Hence but one section of the coupling is shown in the drawings.

A shell of metal A is provided, which terminates at one end in a hook B, of the usual
45 form, employed to connect the two sections of an ordinary bell-cord coupling. The shell A is axially apertured a proper depth for the introduction of the rope-clamp C, and is inter-

nally threaded to facilitate the operation of the said clamp.

As represented in Figs. 3 and 4, the rope-clamp C consists of two limbs *a a*, which are threaded on their exterior to engage the threaded shell A. Said limbs are held normally divergent by their connection at opposite points to the ferrule *b*. The free ends *c*
50 of the rope-clamp C are each furnished with a semicircular flange of similar shape, these flanges when compressed together forming a sectional collar or ring. The interior surface
55 of the curved flanges *c* is flared outwardly to facilitate the introduction of the end of the bell-cord D, which should fit the interior of the ferrule *b*, it being of advantage in the connection of the cord with the coupling-section that the
60 end of the cord be forced through the ferrule, as shown in Fig. 2. There are shoulders *e* formed on the projecting ends of the curved flanges *c*, which are essential to effect a proper attachment of the cord to the coupling-section.
65 7c

In making an attachment of the cord D to the coupling section or shell A the rope-clamp C is forced upon the cord end, as shown in Fig. 2, and the clamp inserted within the shell A by rotating the latter as a nut upon
75 the limbs *a a*, where they are integrally joined to the ferrule *b*.

The progressive movement of the rope-clamp within the shell A embeds the limbs *a* into the body of the cord end D, thus flattening it and spreading the fibrous material laterally, as represented in Fig. 2, which will cause the projected material to interlock with the shoulders *e*, and thus retain the cord ends sufficiently stable within the shells A to hold
80 85 the series of connected bell-cord pieces intact under ordinary strains incidental to its legitimate use.

When by accident to a car-train or from other causes the bell-cord is subjected to a
90 strain which might tear it apart and render it unsightly if knotted together where broken, such a contingency is avoided by the slipping separation of one cord end from the coupling-section it is connected to, which separation
95 can be quickly repaired by a reconnection of

the rope or cord end with the rope-clamp and shell, as has been explained.

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

In a bell-cord attachment, the combination, with an internally-threaded shell, of a clamp consisting of two exteriorly-threaded limbs

secured to a ferrule and each provided with a semicircular flange at its free end, substantially as herein shown and described.

WALLACE TYLER.

Witnesses:

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EUGENE W. SMITH.