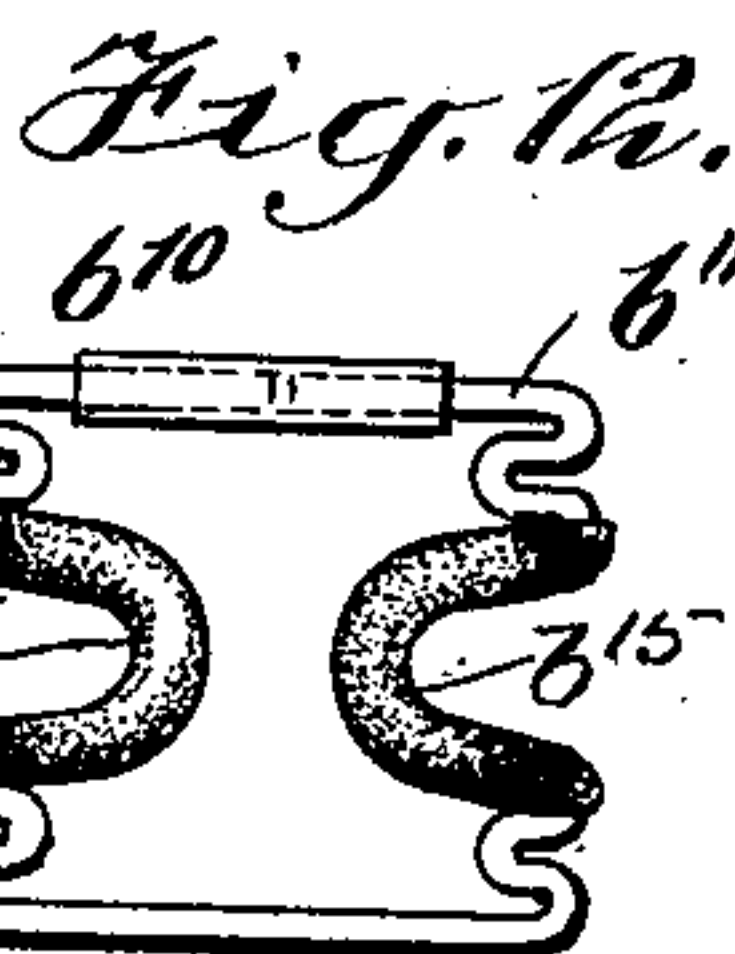
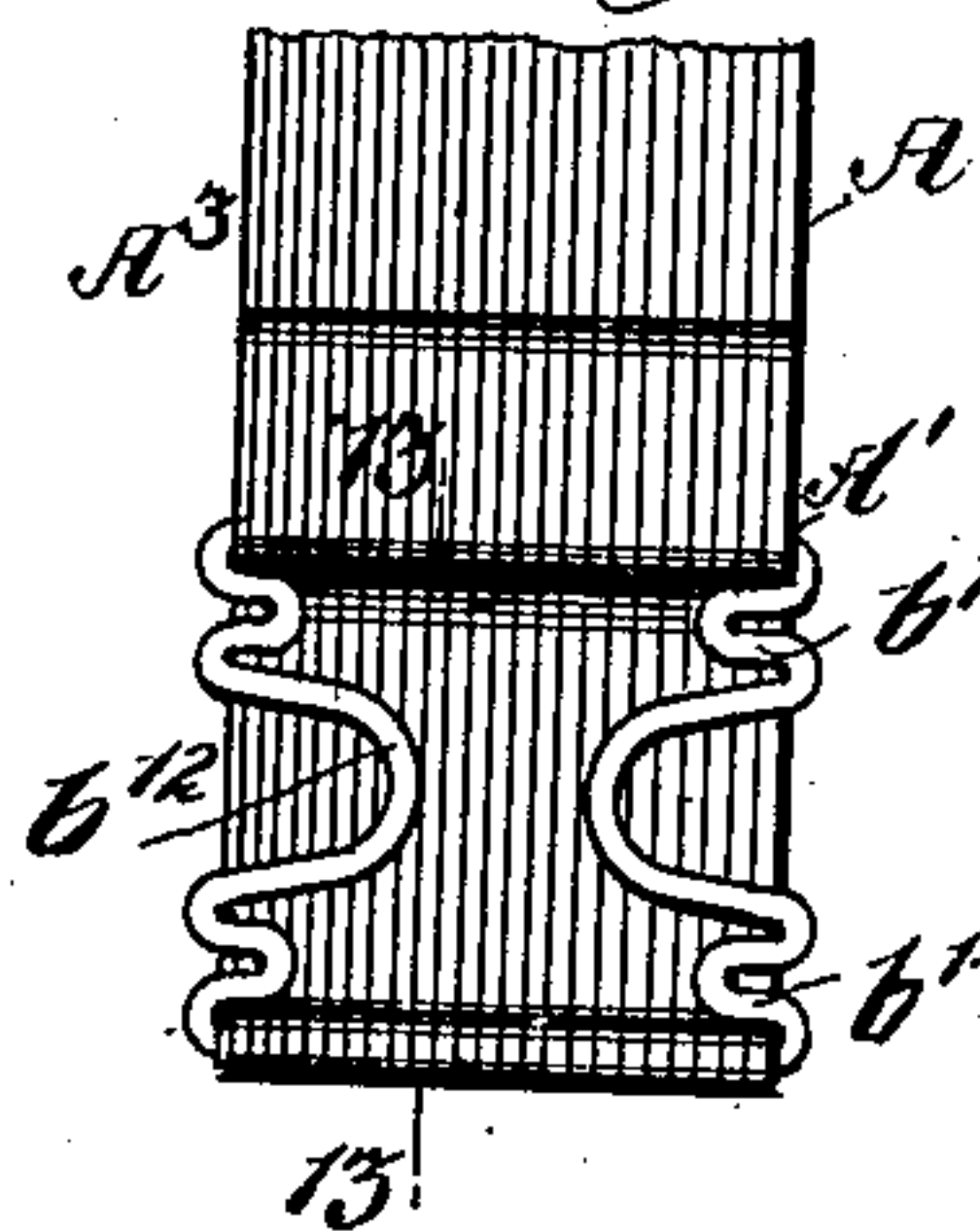
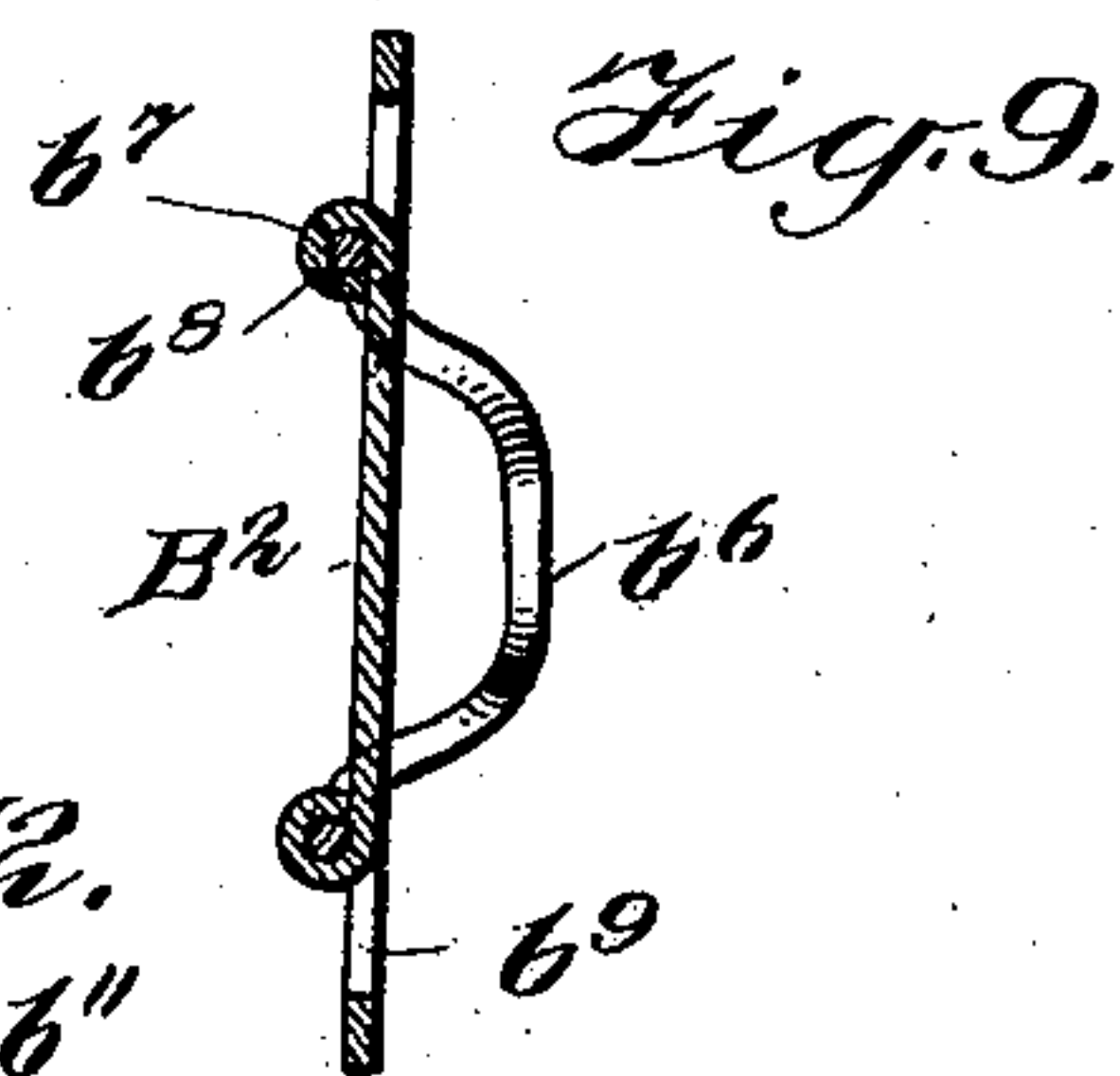
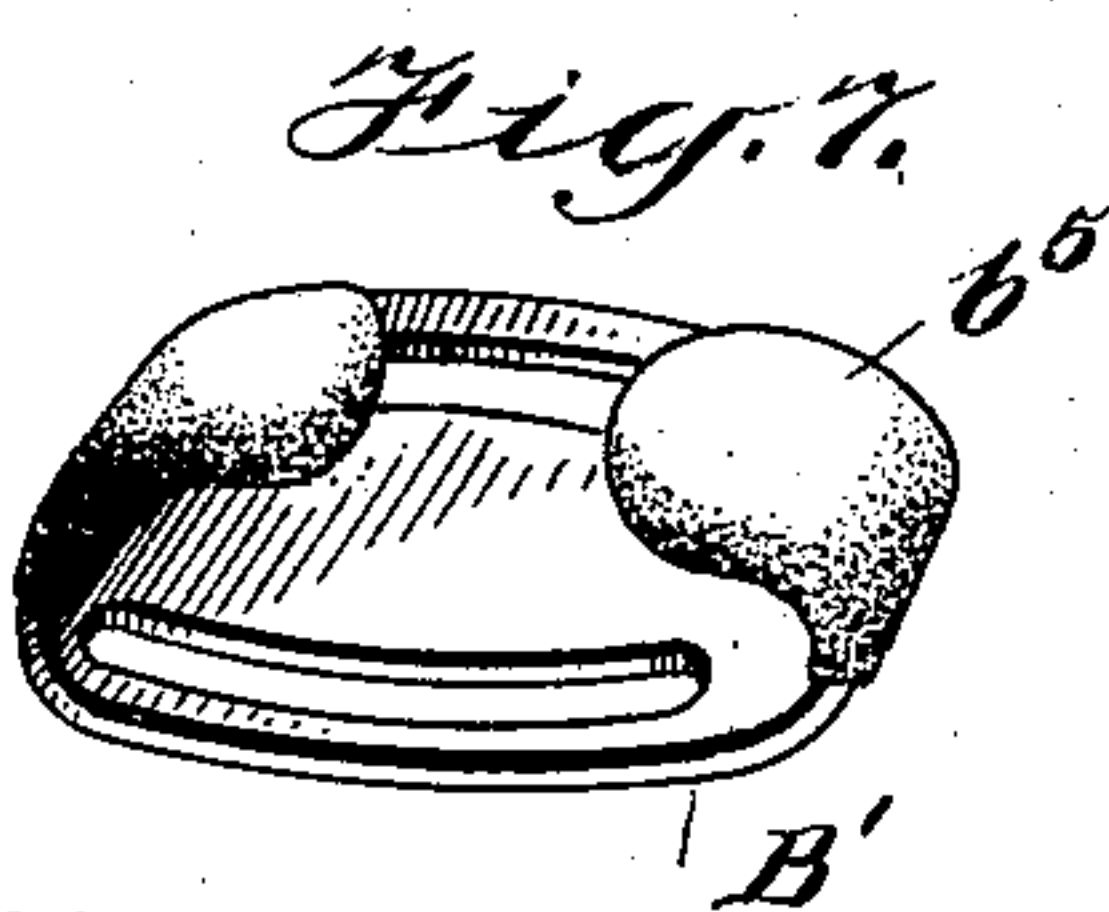
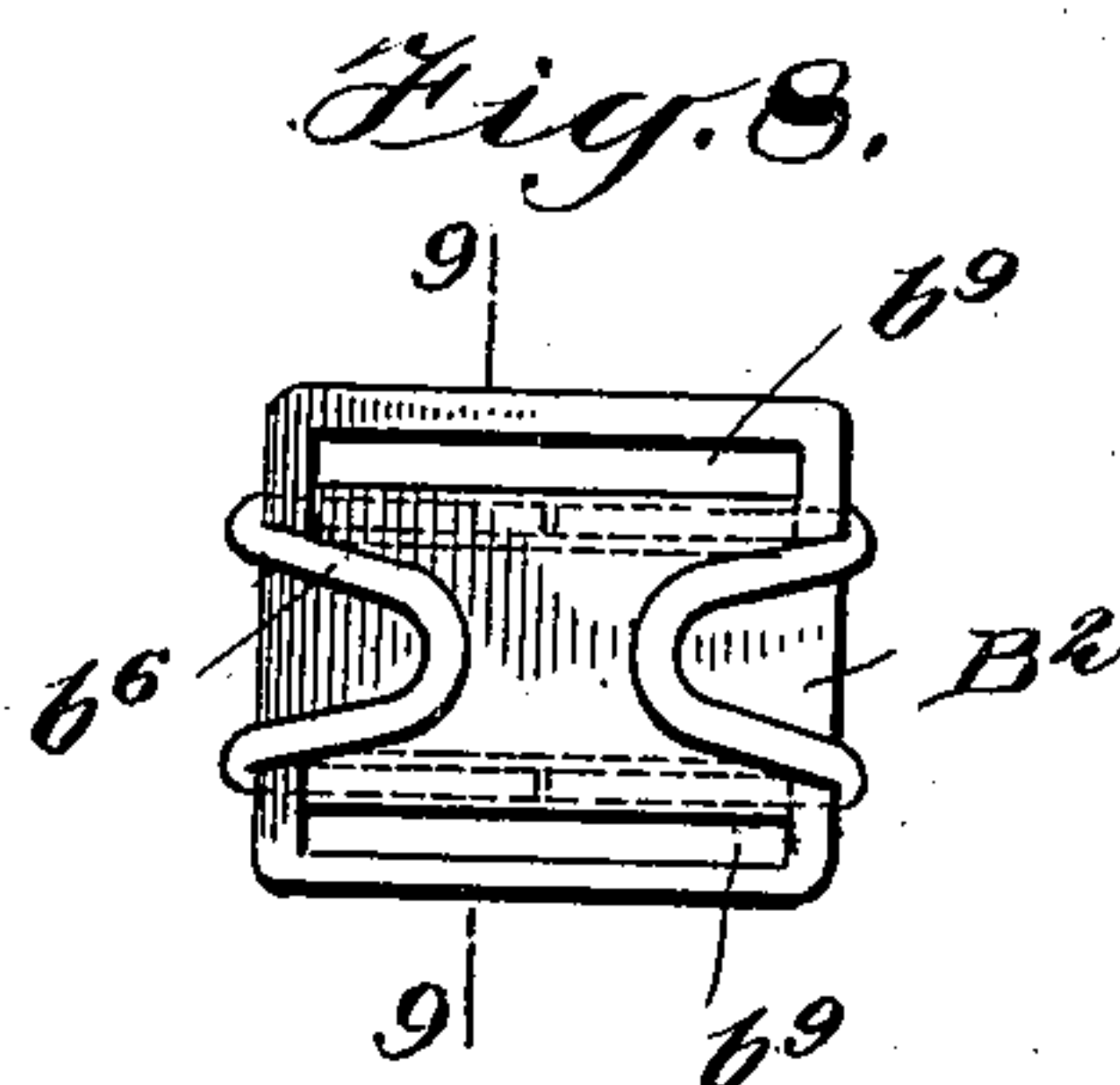
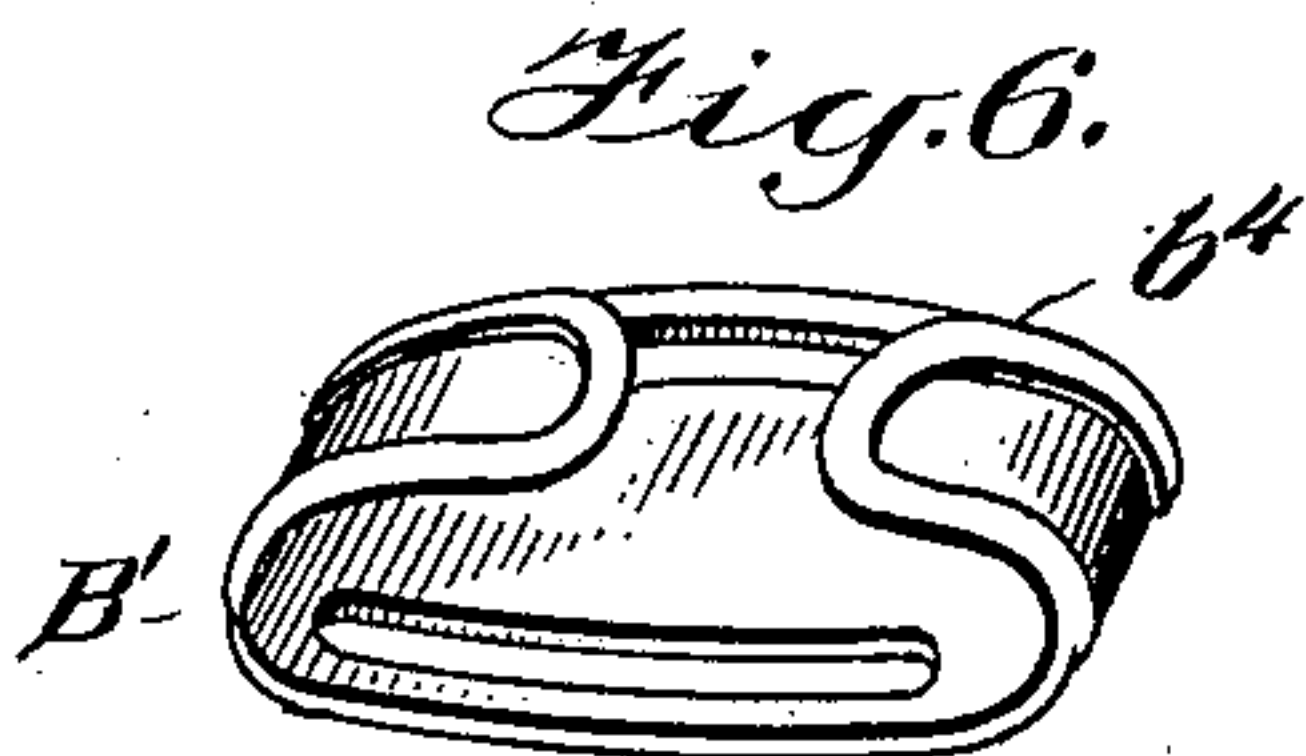
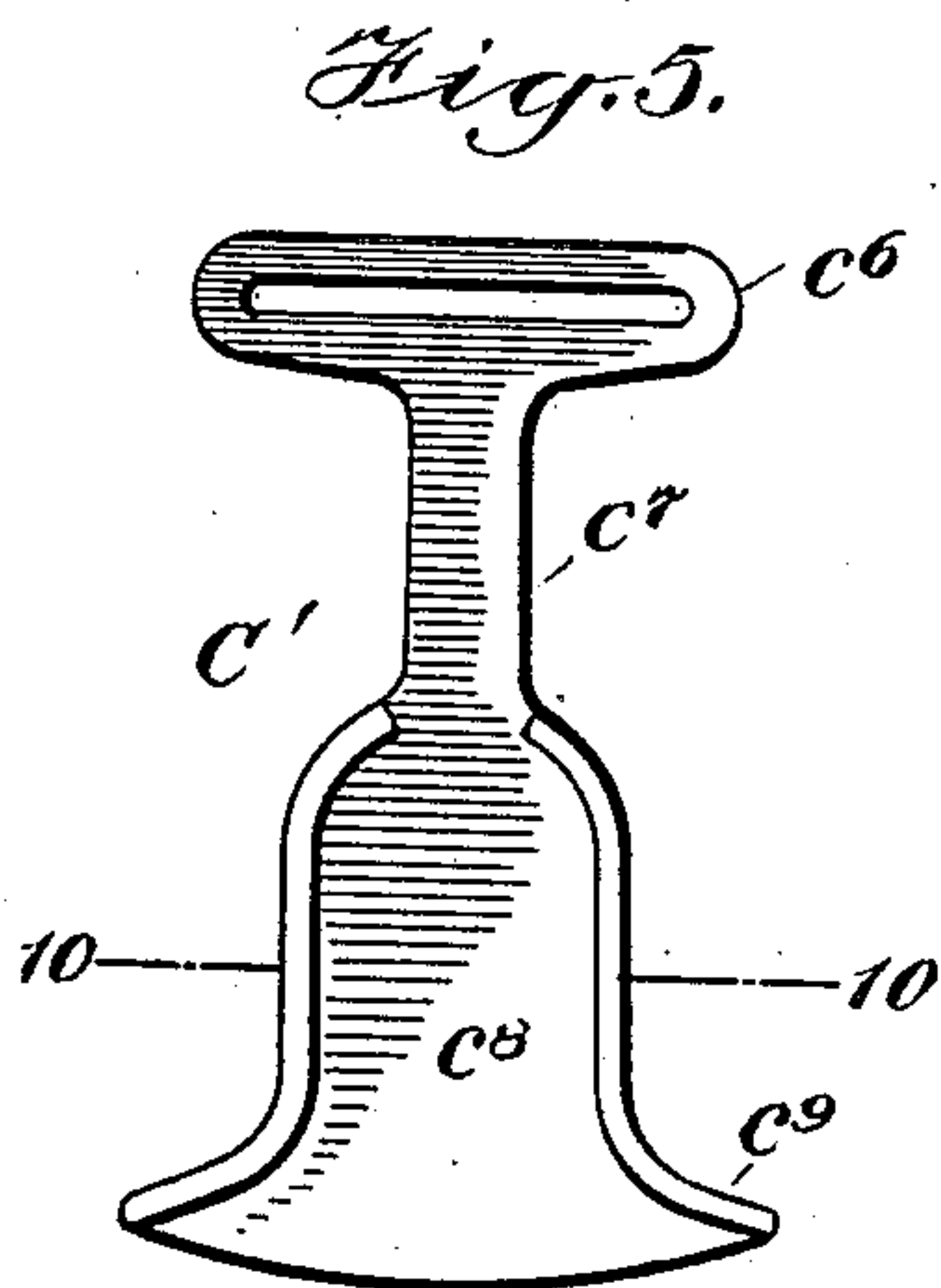
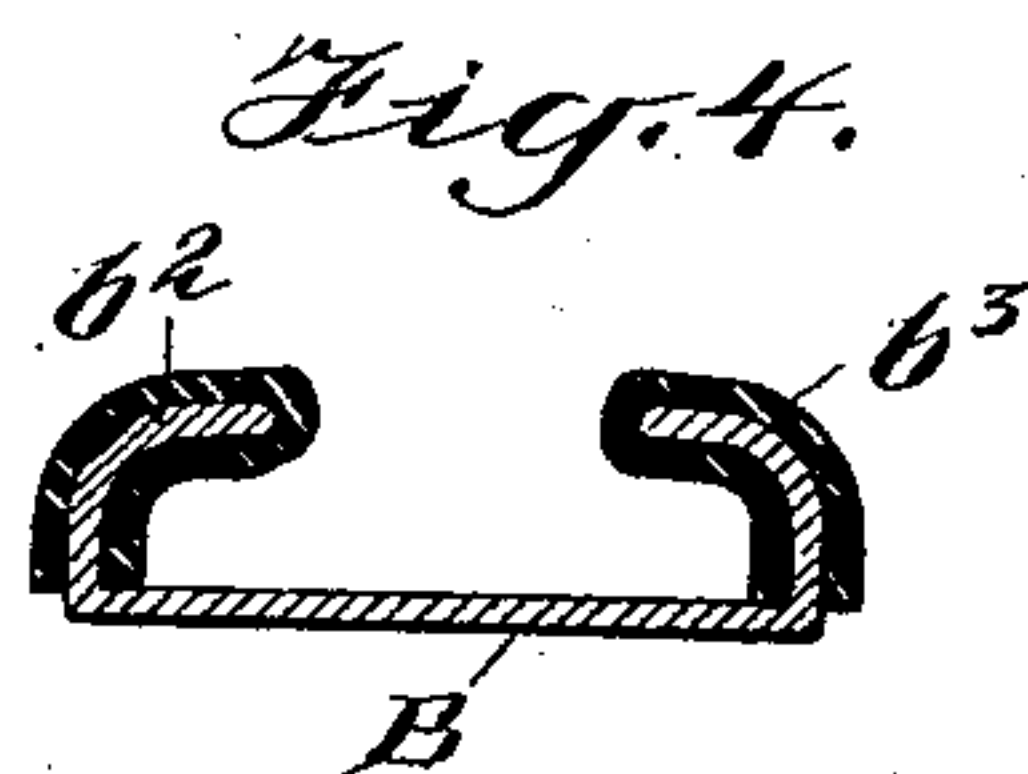
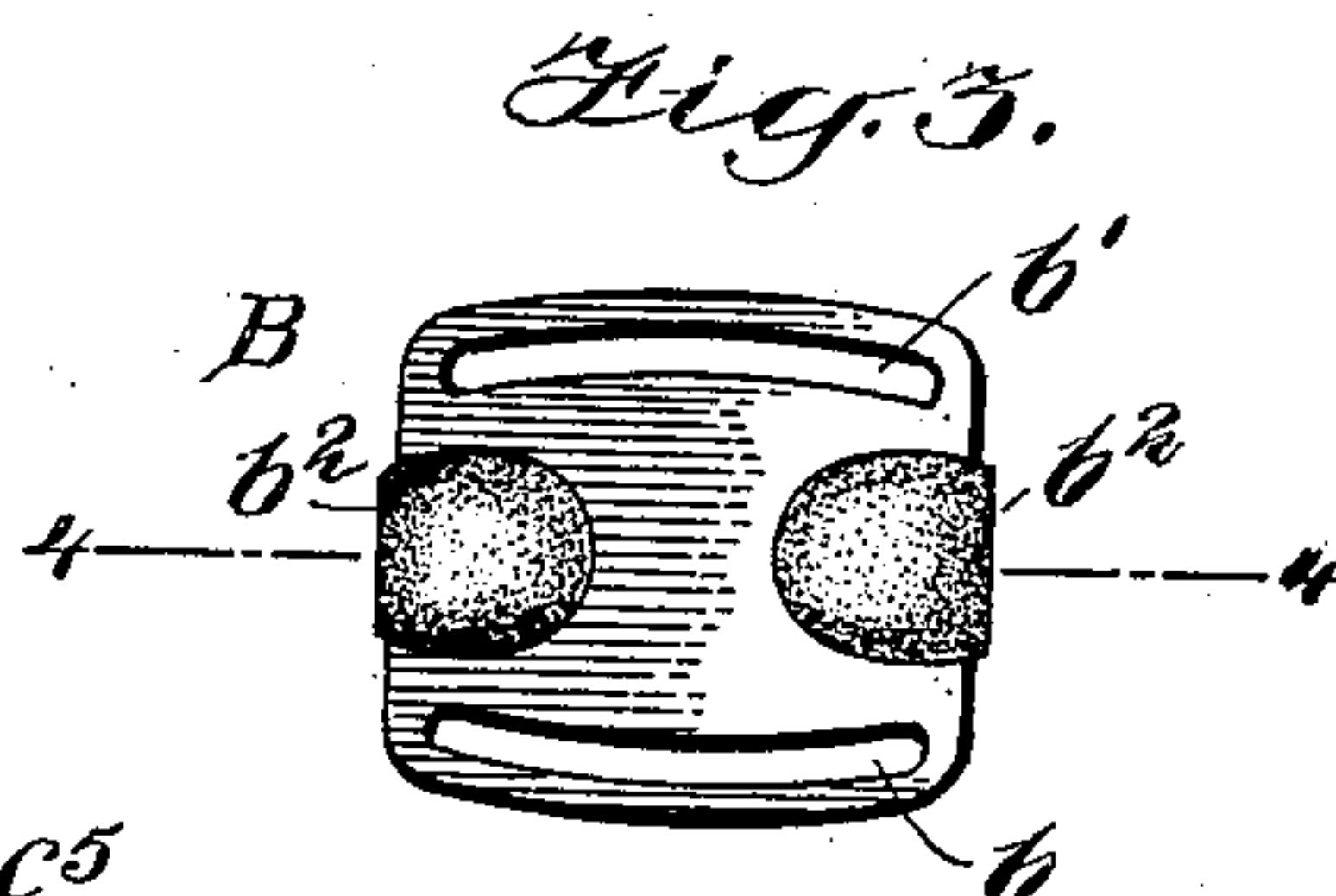
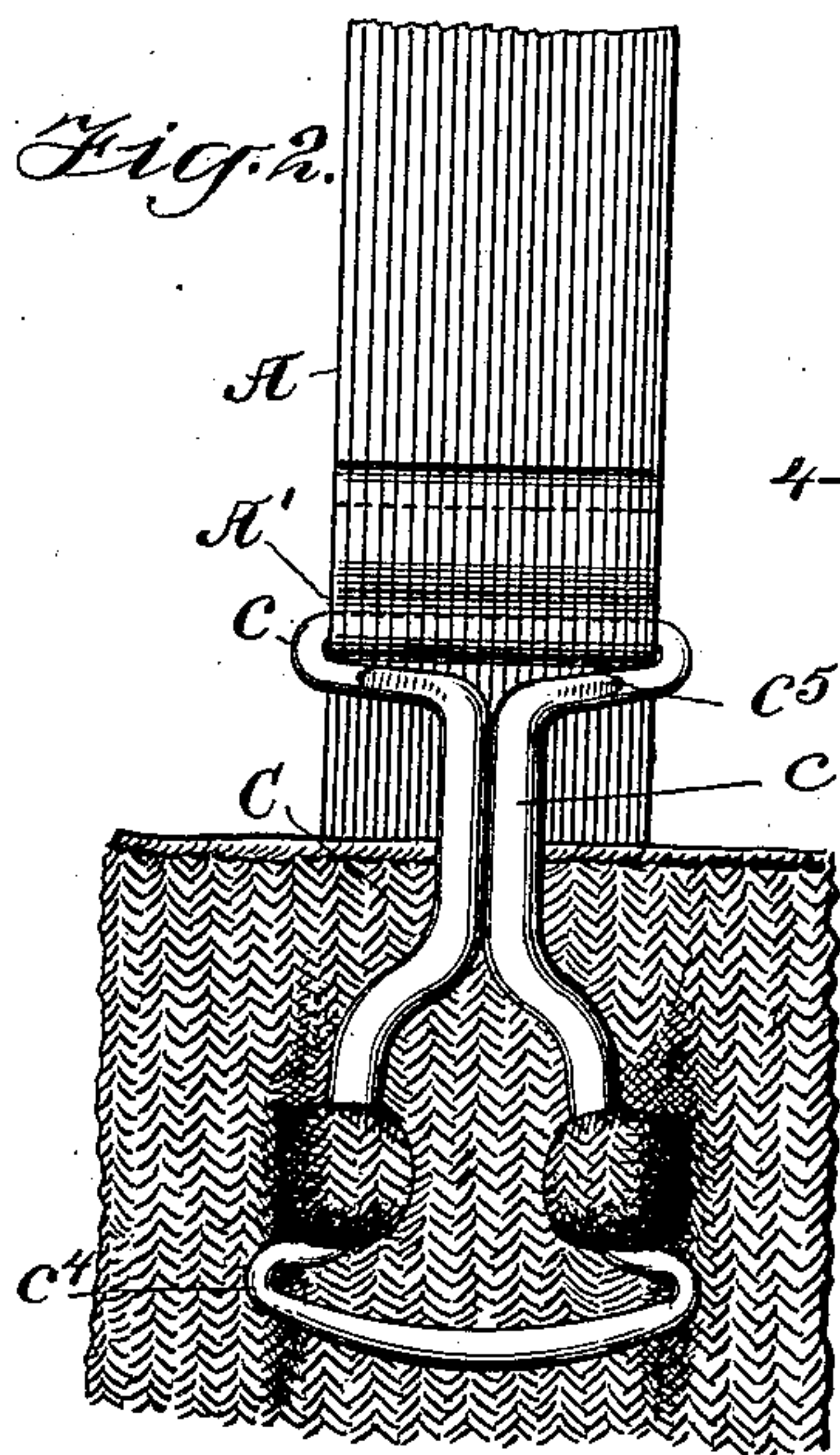
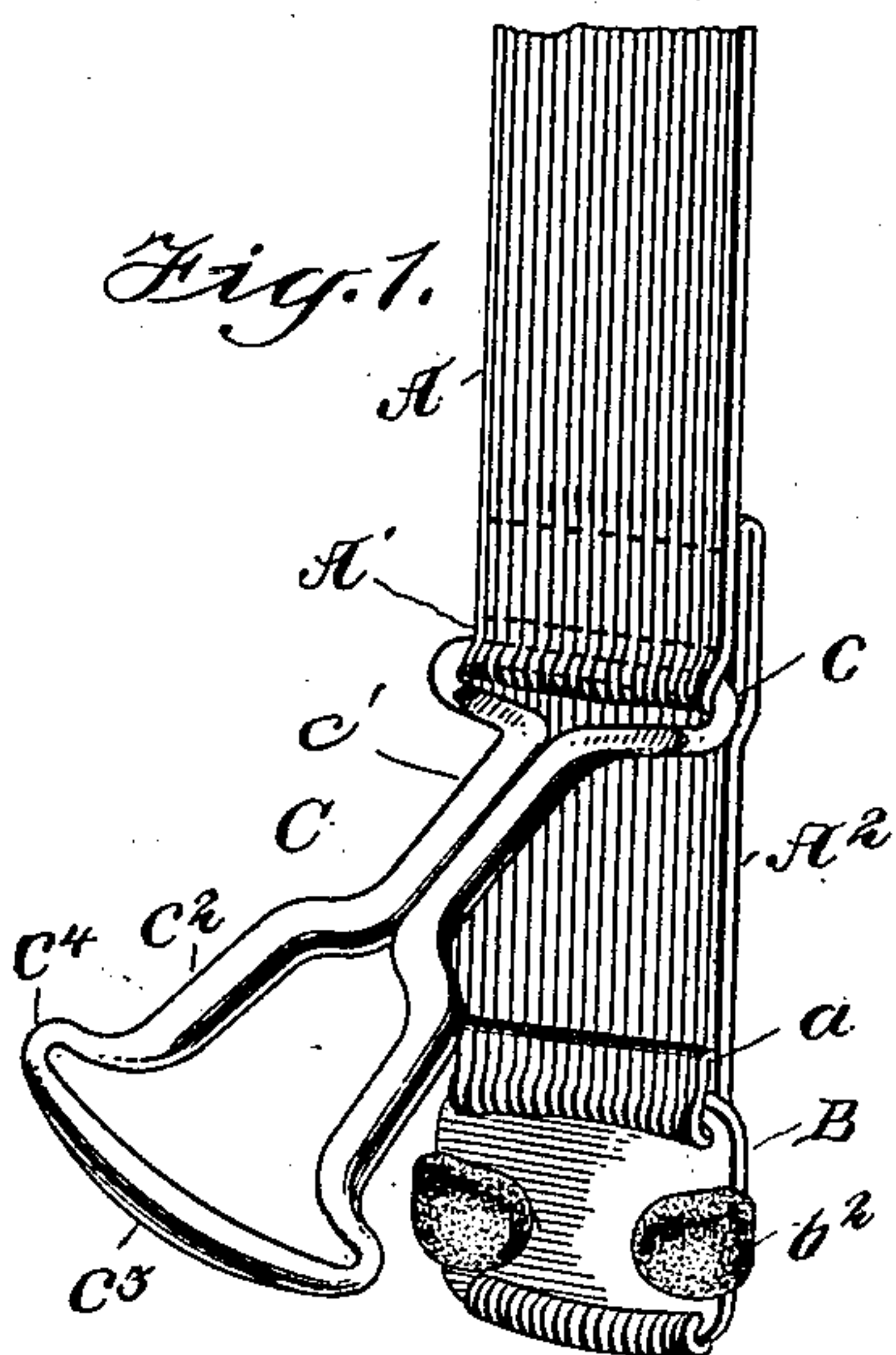


No. 742,678.

PATENTED OCT. 27, 1903.

O. KRAUS.
GARMENT SUPPORTER.
APPLICATION FILED JULY 2, 1903.

NO MODEL.



WITNESSES:

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GARMENT-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 742,678, dated October 27, 1903.

Application filed July 2, 1903. Serial No. 164,006. (No model.)

To all whom it may concern:

Be it known that I, OTTO KRAUS, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Garment-Supporters, of which the following is a specification.

The subject of the present invention is a novel garment-supporter having for its more prominent objects great facility for engagement and disengagement of the fabric, avoidance of liability of straining or otherwise injuring the fabric, and simplicity of construction, with due regard to durability.

With the above and other purposes in view the said garment-supporter involves a novel arrangement of suitably-suspended members, one of which has ears extending toward each other, and the other member embodies a shank adapted to be freely passed broadside between the ears to a plane back of the same, the manipulation referred to permitting a laterally-extended head to then assume a position back of the ears for holding the members in connected relation, and thus maintaining the fabric in engagement with the ears, laterally disposed offsets or shoulders carried by the head serving to limit the movement of the latter into position behind the ears. For the purpose of attaining great strength and yet avoiding undue bulk and consequent discomfort to the wearer both members can be so disposed that they will conjointly lie comparatively flat. In one form of the invention the head-carrying member will preferably be of wire shaped to present the upper suspending-bar, depending shank, head, and lower lateral offsets, the wire being flattened at its front and rear sides at those parts constituting the shank and head for permitting such parts to lie comparatively flat, while the upper suspending-bar, lower cross-bar, and contiguous offset portions are left cylindrical in cross-section to avoid cutting or wear of the webbing and fabric, respectively, as will more fully appear hereinafter. I prefer to impart to the ears a yielding capacity, so that the fabric will tend to cling thereto in its engagement therewith. There are other important features connected with the invention which, in addition

to those alluded to, are clearly set forth in the subsequent detailed specification.

In the accompanying drawings, in which I have illustrated the invention adapted for service as a hose-supporter, Figure 1 is a perspective view, and Fig. 2 is a face view, showing the device in a disengaged and engaged condition, respectively, the head-carrying member in both of these views being represented of wire peculiarly flattened. Fig. 3 is a detail view of the ear-carrying plate. Fig. 4 is a transverse section of the said plate, the plane of section being indicated by the broken line 4 4, Fig. 3. Fig. 5 is a view of the head-carrying member, showing a modified form thereof. Figs. 6 and 7 are detail perspective views of the ear-carrying plate and illustrating a modification thereof, the construction being the same in both views, with the exception that Fig. 7 illustrates the rubber ear-coverings. Fig. 8 is a face view of still another form of said ear-carrying member, the construction in this instance embodying a sheet-metal body and wire ears. Fig. 9 is a vertical sectional view of the last-mentioned construction, the plane of section being indicated by the broken line 9 9, Fig. 8. Fig. 10 is a transverse section of the member disclosed in Fig. 5, the plane of section being indicated by the broken line 10 10 in said latter figure. Figs. 11 and 12 are face views disclosing the wire adaptations of the ear-carrying member. Fig. 13 is a detail sectional view of the member, taken in the plane of the line 13 13, Fig. 11, the sectional representation being disposed at a different angle from that occupied by the corresponding part in said Fig. 11.

Referring now more particularly to the construction disclosed in Figs. 1 to 4, inclusive, A designates the suspending-webbing, folded and stitched to present the bight A' and below which the webbing depends, as indicated by A², for connection with the ear-carrying plate B, such depending portion passing back of the plate, forwardly around the lower edge thereof, then threaded through the lower and upper slots b b', and terminating in a fold a, neatly tucked behind the upper portion of the plate and preferably stitched to the portion A², all of which is familiar in

the art. The plate B is integrally provided at its sides with ears b^2 b^2 , preferably with rounded inner ends, the said ears being bent over toward each other, so that their free portions will be substantially parallel with the body of the plate. These ears are incased in caps or coverings b^3 , of rubber or other suitable yielding material, which coverings intimately embrace the ears and extend from their bases to and around their free ends. By contracting the ears in the direction of their bases the secure retention of the coverings on said ears is more assured.

An outwardly-swinging member C comprises an upper cross-bar c , bearing in the bight A' for the pivotal suspension of this member, the latter also embodying a depending contracted shank c' , merging in a lower laterally-extended head c^2 of the configuration shown most clearly in Fig. 1, said head including a lower cross-bar c^3 , somewhat greater in width than the body of the head, so that offsets or shoulders c^4 are presented at the lower corners of the head. The member C is preferably made in a single piece of wire of the proper length and bent so that the end portions are turned horizontally toward each other, (dotted lines, Figs. 1 and 2,) which horizontal end portions may be confined by the customary metal sleeve for properly holding them to present an upper suspending-bar c . The bending operation is conducted to provide the upper converging bends c^5 , extending from the end turns of the suspending-bar, said bends c^5 merging in the depending closely-parallel portions forming the shank, the remainder of the wire being shaped to constitute the head, with the vertical sides substantially parallel to the points where they round into the lateral offsets c^4 , formed in part by the ends of the lower cross-bar. When the member C has been fashioned in the manner described, I subject the same to a compressing or flattening operation designed to provide plane surfaces at the front and rear, such flattening being confined to the shank and upper portion and vertical sides of the head as well as the lower cross-bar, leaving the upper suspending-bar, parts of the bends c^5 , and lateral offsets in their former round condition. It will be desirable to practice the flattening operation, so that the plane surfaces at the top of the member gradually vanish into the outer cylindrical portions of the bends c^5 and correspondingly disappear at the bottom portions of the vertical side bars of the head, in which latter case the lateral offsets will remain round in cross-section, as before stated.

From the description thus far it will be understood that with the parts of the supporter in an opened condition the fabric can be placed immediately in advance of the ears, and both the fabric and plate B can be elevated to bring the opening or entrance between the ears in apposition with the con-

tracted shank c' of the member C, whereupon the latter can be swung back, so that its shank will pass between the ears and carry the intervening part of the fabric to a position at the rear of said ears. This operation likewise causes portions of the fabric to encompass the ears, as illustrated in Fig. 2, so that upon the release of the parts the normal downward tension to which the fabric is subjected will result in the fabric-covered ears moving downward and in front of the side bars of the head, such downward movement being terminated by the offsets c^4 , which act to prevent the ears from moving unduly below the head. The width of the head and the flattened character of both it and the shank permit both said parts to lie evenly, so that there is no objectionable pressure exerted against the person of the wearer. In addition the widths and thickness of the flattened part of the head are such that said part operates purely to smoothly retain the intermediate portion of the fabric, whereby the ear-encompassing portions of the fabric are held in proper engagement with the ears, which engagement is largely augmented by the clinging character of the yielding surfaces of said ears. The curved lateral offsets c^4 serve as stops to limit the relative movement of the head and ears in one direction, the cylindrical formation of the wire at the points of said offsets, together with the positions occupied by the latter, avoiding any direct pinching of the fabric against the lower edges of the ears with the exception of the contact contiguous to the bases of the same, at which points the fabric is so regularly disposed that no straining or distortion will result.

It will be advantageous in practice to so suspend the members that the ear-carrying plate will normally hang a trifle lower than the normal horizontal plane of the offsets. By this means the coactive contact of the fabric-covered ears with the offsets is insured.

The head-carrying member can be made of sheet metal and still present the essential characteristics of the construction previously described. Fig. 5 illustrates such an arrangement, the member C' being in a single piece of sheet metal and comprising the upper laterally-extended portion c^6 , slotted for the engagement of the webbing-bight, the contracted depending neck c^7 being present, while the lower head c^8 , solid in this instance, has an external configuration providing the lower lateral offsets c^9 . The marginal metal of the head is overturned to provide rounded edges c^{10} , Fig. 10, for both the vertical sides of the head and upper edges of the offsets, said rounded edges c^{10} avoiding angular corners at points where the head might cut through or chafe the fabric.

In Figs. 6 and 7 I have illustrated another form of the ear-carrying member B', principally of sheet metal. In this type the mar-

ginal metal of the ears is overturned to constitute rounded heads b^4 , following the outlines of the ears and serving when the rubber coverings b^5 are in position to prevent cutting through as well as the manifestation through the rubber of any angles. The ear-carrying member may be used without the rubber coverings, as illustrated in Fig. 6.

The ear-carrying member exemplified in Figs. 8 and 9 presents a construction wherein sheet metal is employed for the body B^2 , while the overhanging ears b^6 are of wire. The body is appropriately slitted a short distance from the upper and lower horizontal edges to form extended horizontal tongues b^7 . The ears b^6 are of separate pieces of wire properly bent to include the upper and lower inwardly-extending horizontal bends b^8 , the ears proper being disposed in a plane somewhat in advance of the bends and by reason of their rounded surfaces providing a natural protection against any injury to the fabric. Both ends of each ear are then placed in juxtaposition with the corresponding bends of the companion ear against the body back and the tongues b^7 then turned over rearwardly to firmly clamp said bends and maintain the ears in the desired position. Obviously the displacement of the metal forming the tongues b^7 results in upper and lower horizontal slots b^9 for the connection of the suspending-webbing.

In Figs. 11 to 13, inclusive, the ear-carrying member embodies no sheet metal with the single unimportant exception of the sleeve b^{10} , confining the inward wire bends b^{11} , forming the suspending cross-bar. The form represented in Figs. 11 and 13 embodies a single length of wire shaped to form the forwardly-located ears b^{12} and rear short confining turns b^{13} b^{14} , which coact to maintain the webbing A^3 in engagement with the upper and lower cross-bars of the device. When tubular rubber coverings b^{15} incase the ears proper, the short turns b^{13} b^{14} also serve to retain such coverings in proper position upon the wire forming the ears.

As before intimated, the novel garment-supporter is extremely convenient of manipulation and highly efficient and comfortable in service. It, furthermore, provides extended holding-surfaces.

I do not wish to be understood as limiting myself to the particular construction and arrangements of parts shown and described, but reserve the right to all modifications that may be 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 garment-supporter comprising a member with ears having mutually-converged portions presenting an intervening entrance, and a pivotally-suspended member embodying a shank for easily passing broadside through

the entrance, and a head wider relative to the shank and adapted to assume an engaged position between the ears and behind the converged portion thereof, said head having lower offset provision.

2. A garment-supporter comprising a member with ears having mutually-converged portions presenting an intervening entrance, said ears having yielding fabric-engaging surfaces, and a pivotally-suspended member embodying a shank for easily passing broadside through the entrance, and a head wider relative to the shank and adapted to assume an engaged position between the ears, and behind the converged portions thereof, said head having lower offset provision.

3. A garment-supporter comprising a member with ears contracted at their bases and having mutually-converged portions presenting an intervening entrance, yielding coverings incasing said ears, and a pivotally-suspended member adapted to pass through the entrance and be brought into fabric-holding relation with said ears.

4. A garment-supporter comprising a member with ears having mutually-converged portions presenting an intervening entrance, yielding coverings incasing said ears, and a pivotally-suspended member embodying a shank for easily passing broadside through the entrance, and a head wider relative to the shank and adapted to assume an engaged position between the ears and behind the converged portions thereof, said head having lower lateral offsets.

5. A garment-supporter comprising a member with ears having mutually-converged portions presenting an intervening entrance, and a pivotally-suspended member embodying a shank for easily passing broadside through said entrance, and a head wider relative to the shank and adapted to assume an engaged position between the ears and behind the converged portions thereof, said head having lower lateral offsets, rounded in cross-section, while the body of the head has front and rear flat surfaces.

6. A garment-supporter comprising a member with ears having mutually-converged portions presenting an intervening entrance, and a pivotal member embodying an upper suspending cross-bar, and shank, the latter for easily passing broadside through the entrance and a head wider relative to the shank and adapted to assume an engaged position between the ears and behind the converged portions thereof, said head having lower lateral offsets, the latter and the upper suspending-bar being rounded in cross-section, and the shank and head having front and rear flat surfaces.

7. A garment-supporter comprising a member with ears having mutually-converged portions presenting an intervening entrance, yielding coverings incasing said ears, and a pivotal member embodying an upper sus-

pending cross-bar, shank and a head wider relative to the shank and adapted to assume an engaged position between the ears and behind the converged portions thereof, said
5 head having lower lateral offsets, the latter and the upper suspending-bar being rounded in cross-section, and the shank and head having front and rear flat surfaces.

Signed at New York, in the county of New York and State of New York, this 30th day of 10 June, A. D. 1903.

OTTO KRAUS.

Witnesses:

WILLIAM PAXTON,
HELEN E. MAHER.