

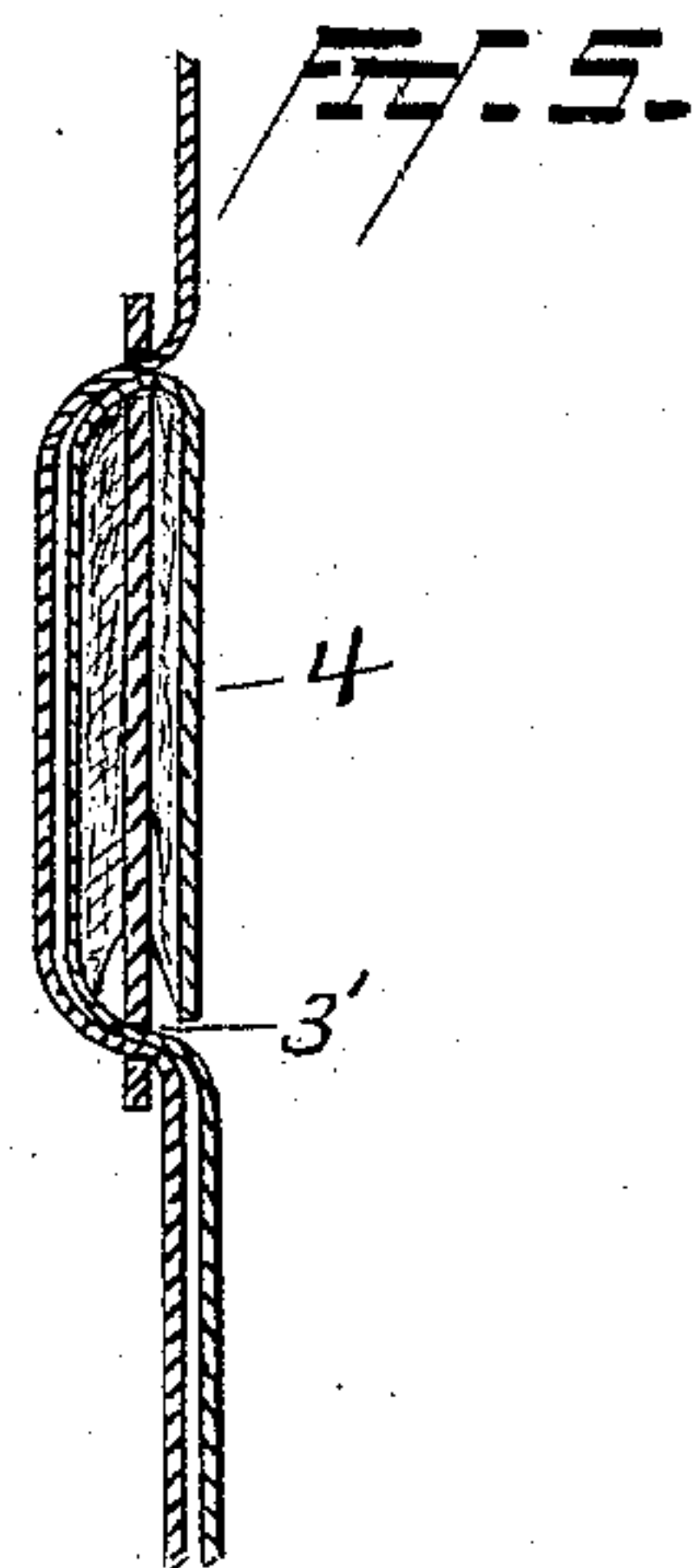
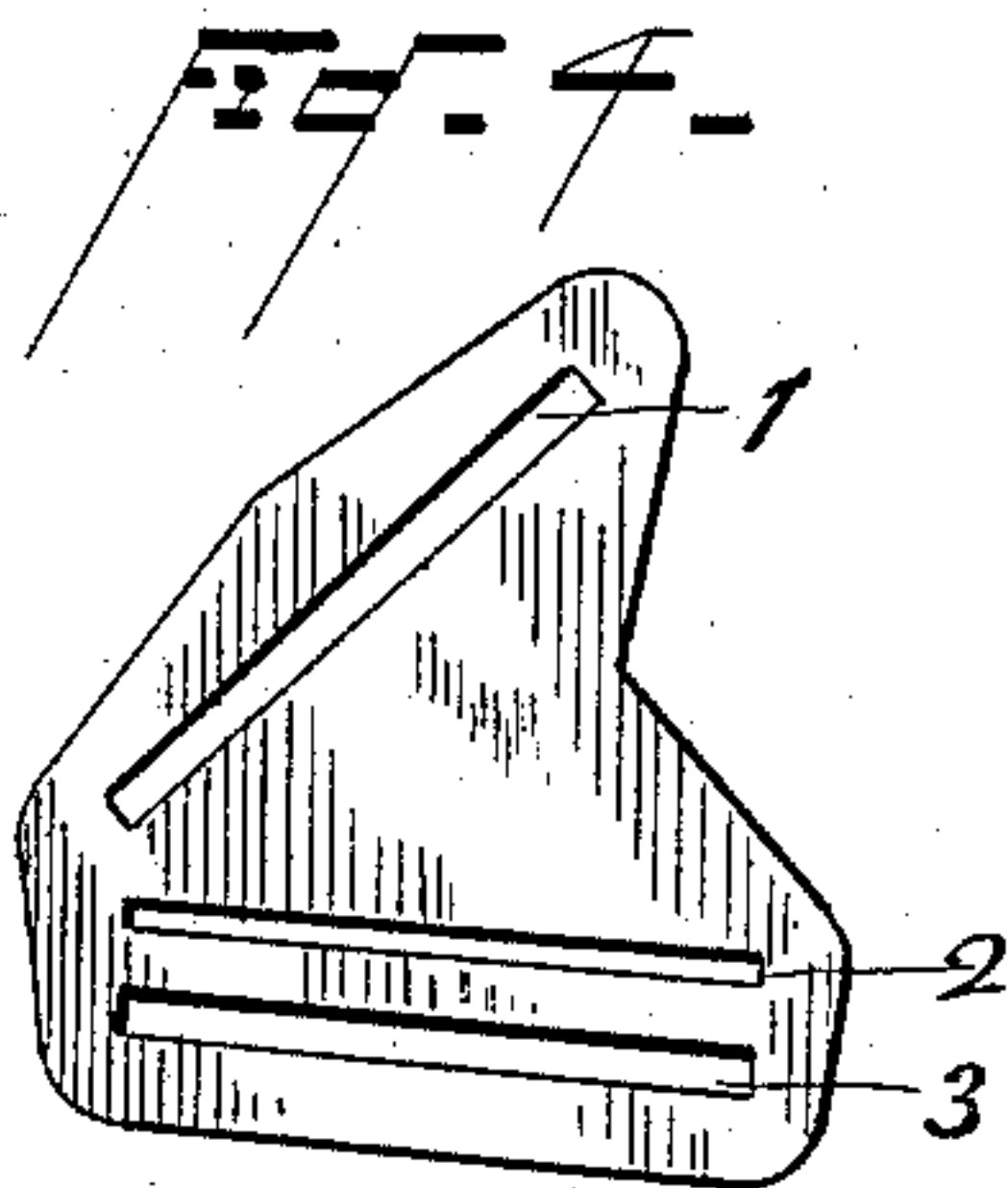
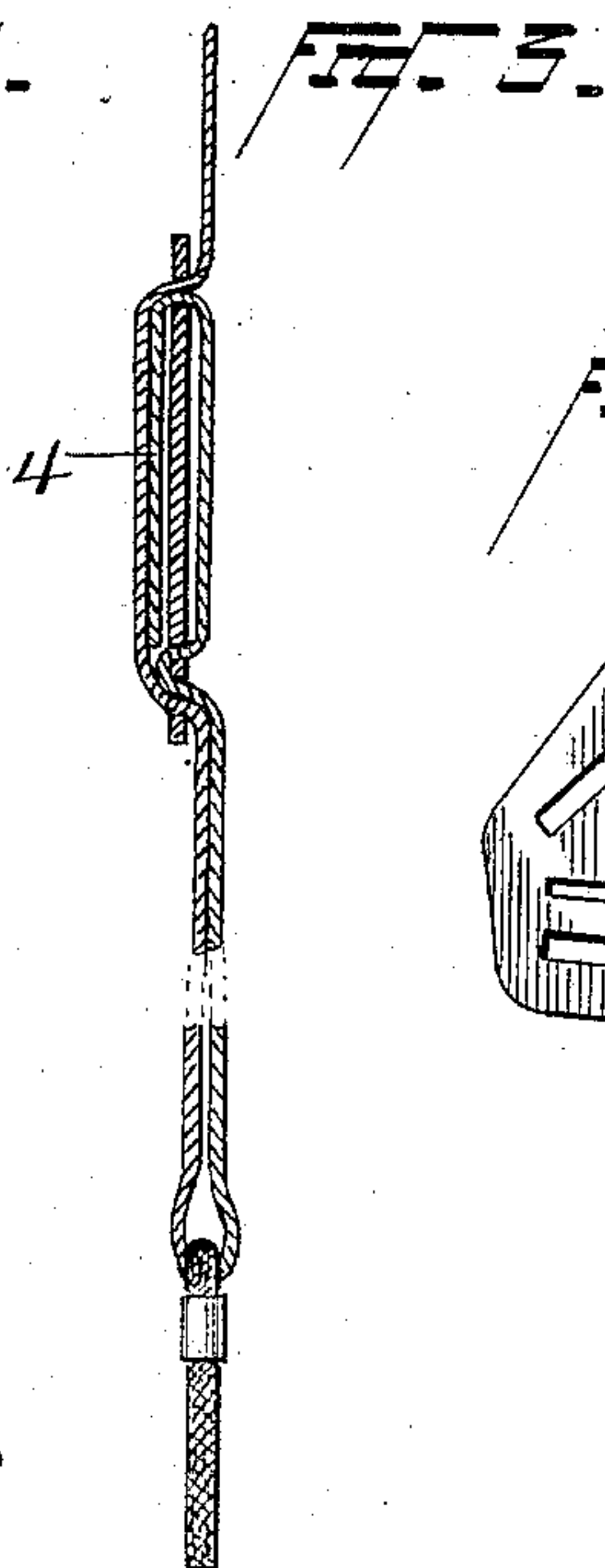
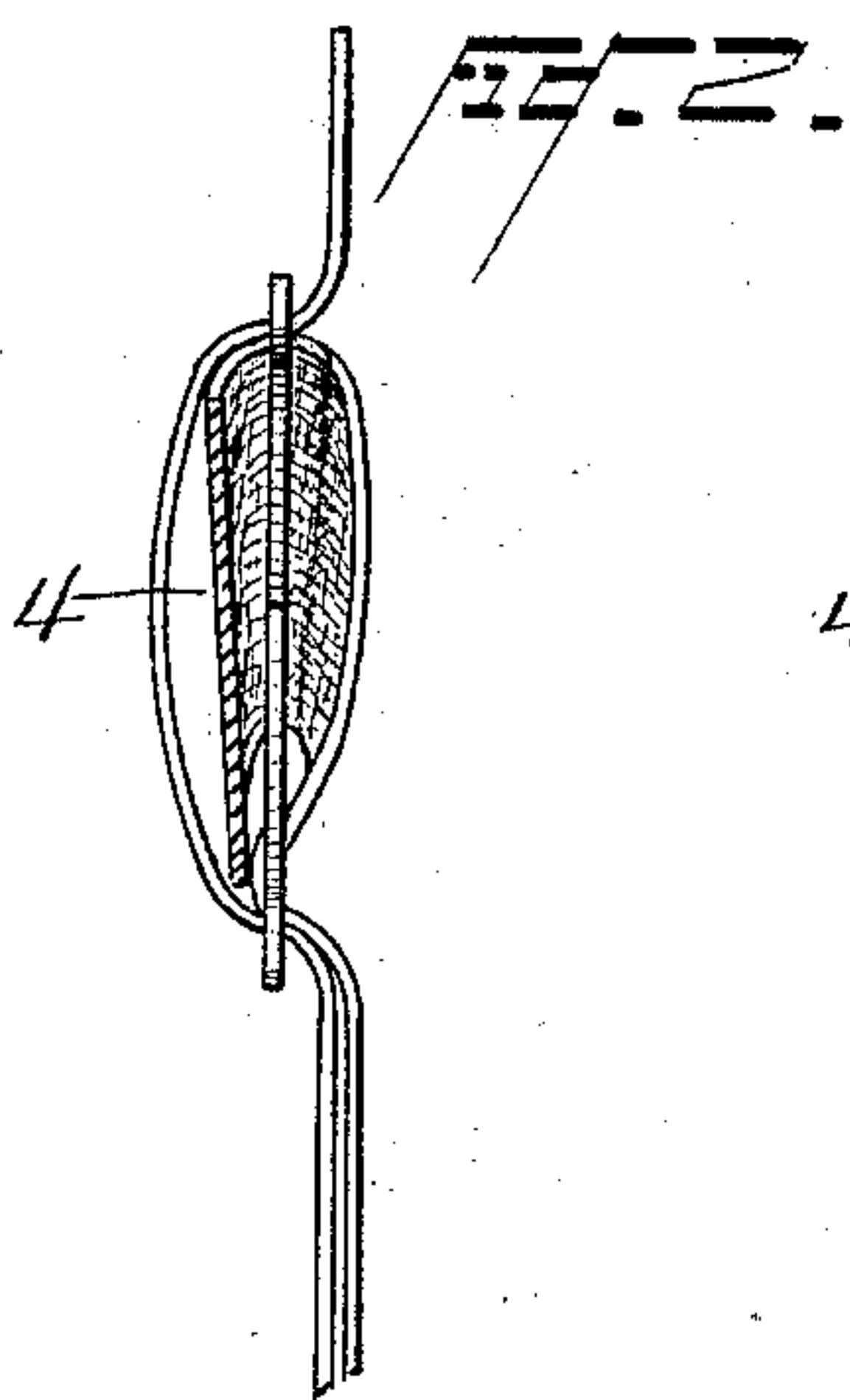
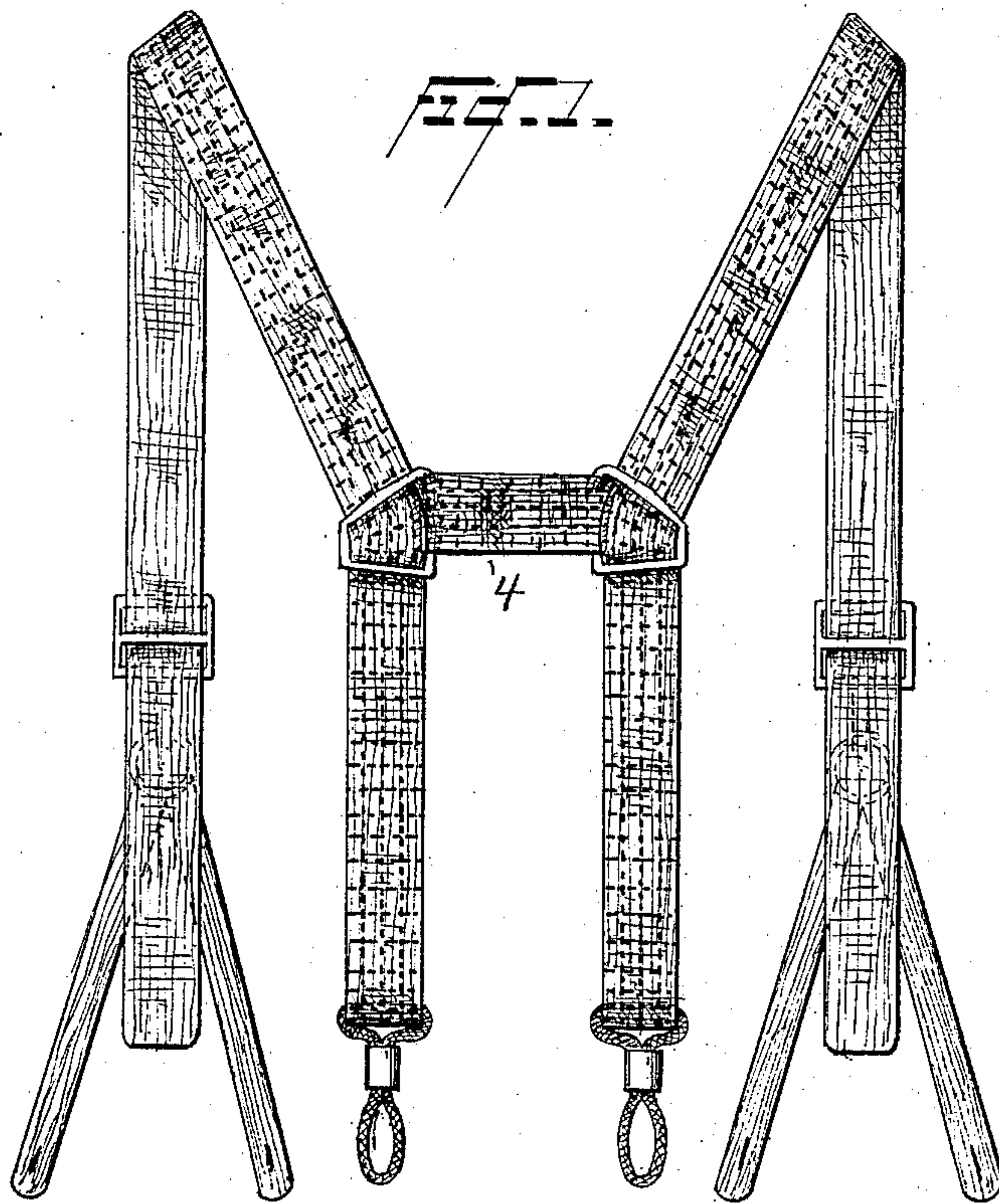
(No Model.)

P. C. DODGE.

SUSPENDERS.

No. 387,054.

Patented July 31, 1888.



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UNITED STATES PATENT OFFICE.

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SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 387,054, dated July 31, 1888.

Application filed June 20, 1887. Renewed May 15, 1888. Serial No. 273,995. (No model.)

To all whom it may concern:

Be it known that I, PRENTISS C. DODGE, a citizen of the United States, residing at Burlington, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Suspenders; 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.

The object of the invention is to make a pair of suspenders with a back-band or strap out of a single length of the material employed. For this purpose a single piece of ordinary webbing, such as is customarily used in the manufacture of suspenders, is suitable. Such a piece is combined with two slotted metallic plates, in the manner hereinafter described, to produce a pair of suspenders with a back-band or strap. This strap is also made adjustable in length, and the rear or back portions of the suspender, which are most liable to be strained, broken, or ripped in the use of suspenders of the more usual construction, are made double, and therefore exceptionally strong and durable.

The invention consists in the means used to effect these objects, which will be hereinafter specified, and particularly pointed out.

In the accompanying drawings, Figure 1 represents the improved suspenders. Fig. 2 represents a side view of one of the slotted plates, with the webbing in place, but loosened to better exhibit its relations to the plate, the back-strap 4 being shown in section. Fig. 3 represents a vertical section through the parts indicated in Fig. 2 when drawn tightly, as in use. Fig. 4 represents a slotted plate, and Fig. 5 represents a modification in vertical section.

The plates used with my improved suspenders are made of brass or other metal, or of any other suitable material, and are preferably of a triangular, or approximately triangular, shape and of a size to allow to be formed therein slots whose length shall equal the width of the webbing or other material used for the body of the suspenders. The triangular shape of the plate is not essential, however. The slots, three in number for each plate, are arranged substantially as indicated in the drawings.

Two of them, marked 2 and 3, are made parallel to each other and preferably near the edge of the plate and in manner to leave a narrow bar or strip of metal between them. The third, marked 1, is arranged angularly with respect to the direction of the other two and preferably at an angle of forty-five degrees. These exterior slots are made sufficiently wide to allow two thicknesses of the webbing to pass through each, as shown. The slot 2 need not be so wide, as it receives but one thickness of the suspender-strap.

In forming suspenders a single piece of the suspender material is used and connected with the slotted plates in the following manner: An end of the webbing is inserted in slot 1 and drawn through it and then passed back through the farther slot, 3, and drawn out to a distance of several inches. It may now receive a button-loop of any approved variety. The strap or webbing is drawn through the loop if it has been applied and passed again through slot 3 in a direction opposite to its first passage and then down through slot 2 and under the central part of the plate and up through slot 1. By the angular arrangement of this slot the direction of the strap is changed by bending it back on itself over the edge of the slot, and this change of direction is given to that portion which constitutes the back-band 4, which continues a short distance to the other plate, to which it is applied in manner similar to that described, but in reverse order. Thus a continuation of the back-band is first passed through slot 1 of the second plate and then bent back upon itself over the edge of the slot and passed under the central part of the plate up through slot 2 and down through slot 3 to a second button-loop, whence it returns through slots 3, 2, and 1, and is continued to form the front strap of the suspenders.

It will be obvious that the plates may be applied to the suspender-strap from each end. Thus each end may be drawn through a slot, 1, in a separate plate, being introduced from that side which will be next the person of the wearer when in use. The plates are then moved on the strap until near its middle, but sufficiently far apart to provide for a back-band of the required length. Each end is next passed under the central portion of its plate

up through slot 2, down through slot 3 to the button-loop, then back to slot 3 and through the same, and then down through slot 1. The parts being drawn snugly together and a front button-hole strap of any desired pattern applied, the pair of suspenders is completed.

A plate with two slots might be used as follows, (see Fig. 5:) Referring to the last above-described manner of inserting the strap ends, they could each be inserted in slot 1 from the under side and passed over the central portion of the plate, down through slot 3' to the button-hole loop, back up through 3', and down through 1, and such construction and arrangement would be within my invention. By this construction a pair of suspenders can be provided with a back-strap or cross-piece and made of one piece without a seam. As the strap can be moved through the slots in the plate as desired, it is obvious that the length of the back-band can be readily adjusted, as also the length of the suspenders below the back-band. The length of front part of suspenders in use is made adjustable in any approved manner by means of the front button-hole straps. It will be noticed that below the back-band each suspender is doubled and that the loops are securely attached and that there are no seams. The whole constitutes a very economical, durable, and convenient article, which avoids the evils of ripping and breaking incident to suspenders as heretofore made, and which admits of any desired adjustment of the back strap and of the back ends of the suspenders, which latter, being the part ordinarily the first to fail in practical use, are made doubly strong. Suspenders made according to the present method will last twice as long as the usual construction, and even longer. The invention avoids the

necessity of skilled labor in making, and requires but little extra material, and no more than is necessary to make a strong and durable article.

Shoulder-straps made of one continuous piece of webbing, suspender-straps made double throughout a portion of their length, adjustable back-bands, and slotted plates for use with suspenders were known prior to my invention. Claims herein are limited to the matters hereinafter particularly pointed out, whereby a pair of suspenders with an adjustable back-strap, the rear ends of the suspenders being doubled and adjustable, are formed of a piece of webbing combined in a particular manner with plates, so as to dispense with seams and other connections liable to break, rust, or be otherwise impaired in ordinary use.

Having thus described my invention, what I desire to claim, and secure by Letters Patent, is--

1. In a pair of suspenders, a body and a back-band made of one seamless piece of webbing or like material combined with slotted plates, substantially as specified, whereby the length of the back-band may be adjusted, and buckles and seams are dispensed with.

2. A pair of suspenders having its body portion and an adjustable back-band all made in one seamless piece, the suspenders being also made double below the back-band and combined with plates and with button-loops, substantially as specified.

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

PRENTISS C. DODGE.

Witnesses:

W. P. DILLINGHAM,
C. D. ROBINSON.