

No. 730,832

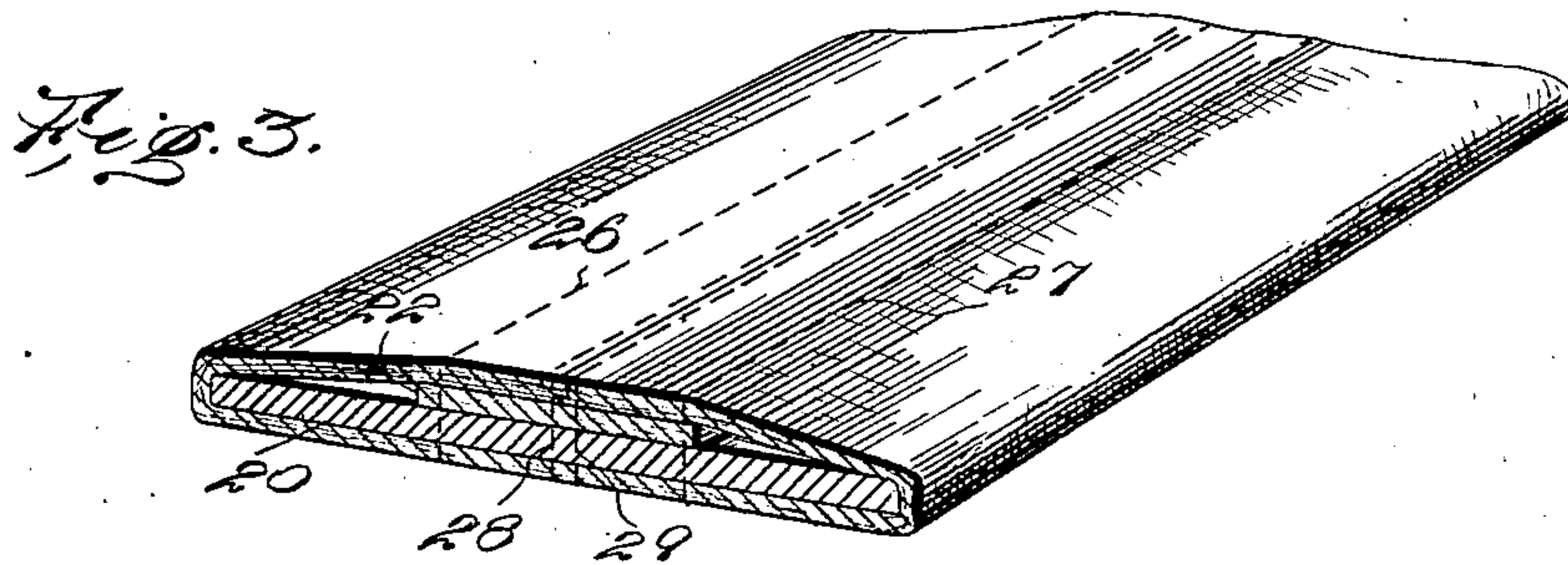
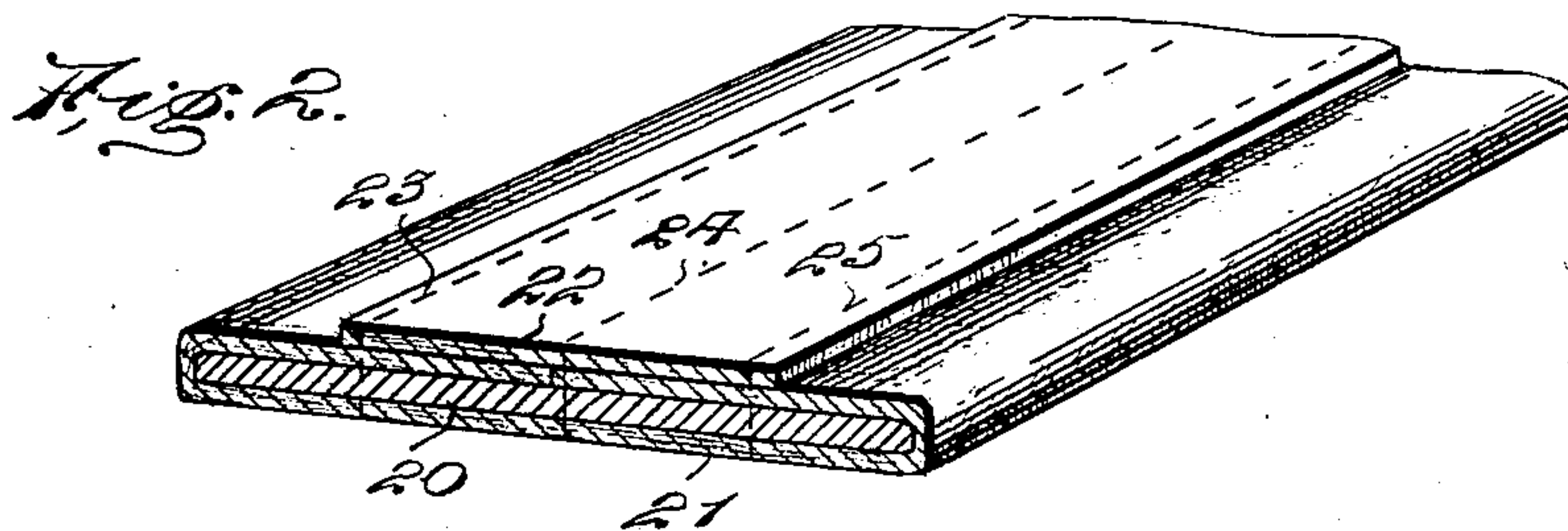
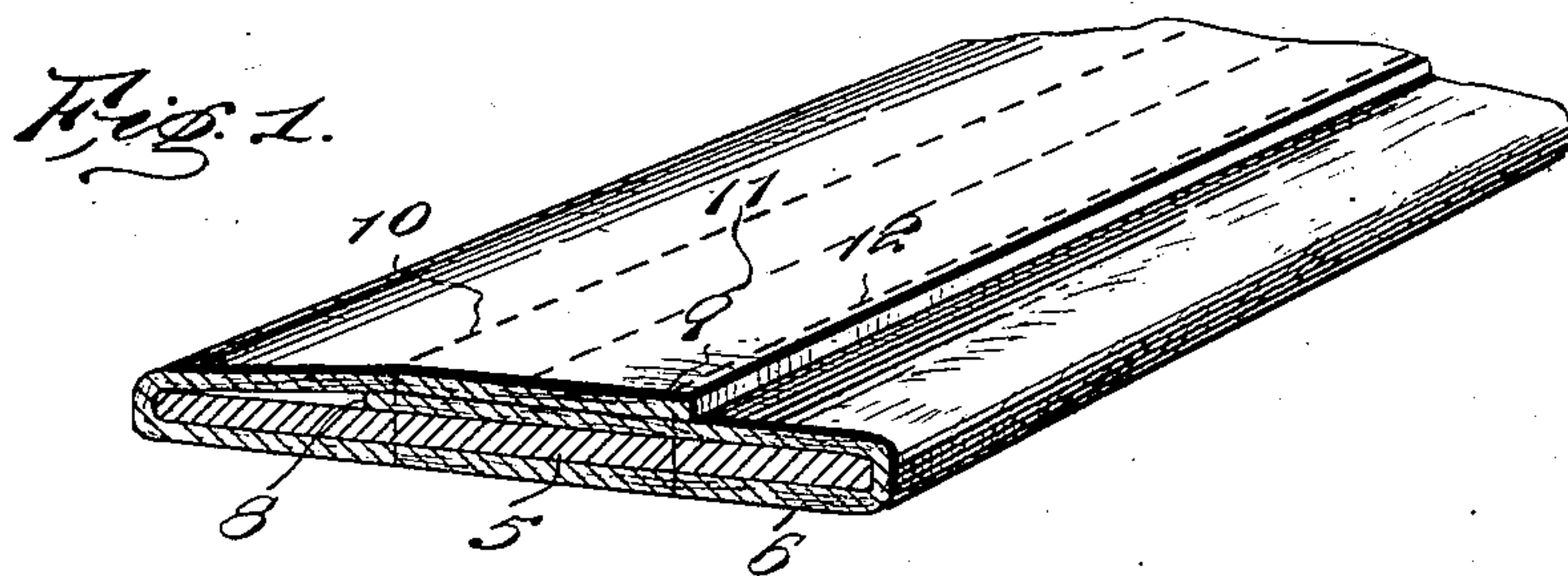
PATENTED JUNE 9, 1903.

L. LOEB.

WATERPROOF PROTECTED LEATHER BELT.

APPLICATION FILED OCT. 18, 1902.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## WATERPROOF PROTECTED LEATHER BELT.

SPECIFICATION forming part of Letters Patent No. 730,832, dated June 9, 1903.

Application filed October 18, 1902. Serial No. 127,865. (No model.)

*To all whom it may concern:*

Be it known that I, LEO LOEB, a citizen of the United States, residing at New York, in the county of New York, State of New York, have invented certain new and useful Improvements in Waterproof Protected Leather Belts; 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.

This invention relates to power-transmitting belts, and more particularly to that class formed of leather, the object of the invention being to provide a structure and a method for manufacturing the same which will result in a waterproof structure in which the leather core or central sheet of the belt will be protected against moisture, whether the moisture be present in atmosphere or whether the belt in its operation be passed through a bath.

I am aware that it is common in the formation of so-called "rubber belts" to apply a coating of rubber to a fabric and then to vulcanize the rubber and also that it has been proposed to attach layers of canvas to the opposite faces of a leather belt; but I believe it to be new to provide a leather belt with a fabric jacket which is glued to the leather, then stitched, and finally impregnated with a waterproof filler in oil as a vehicle.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a sectional perspective view showing one form of a composite waterproof jacketed belt embodying the present invention. Fig. 2 is a view similar to Fig. 1 and showing a second embodiment of the invention. Fig. 3 is a view similar to Fig. 1, showing a third embodiment of the invention.

Referring now to the drawings, and more particularly to Fig. 1 thereof, there is shown a portion of a belt consisting of a flat sheet 5, formed of leather, this leather portion 5 being the belt proper, which is to be protected against moisture by means of the waterproof jacket. The jacket consists of the sheet 6 of duck or other suitable fabric, which is wrapped

transversely around the portion 5, there being a single layer of the fabric on the inner side of the belt, as illustrated, while the side portions of the fabric are overlapped mutually against the opposite or outer face of the belt. The underlying side edge portion 8 of the fabric extends substantially three-fourths of the way across the belt in one direction, while the overlying side edge portion 9 extends substantially the same distance in the opposite direction. In adjusting the jacket to the belt proper a coating of waterproof cement is applied to both the portions 5 and 6 upon their contacting faces, and beginning with the underlying side edge portion 8 the jacket is drawn firmly around the belt proper and the side edge portion 9 is adjusted upon the portion 8, after which the article is subjected to proper pressure to insure intimate contact of the mutually adjacent surfaces and adhesion of the parts. The belt, with its jacket, is then thoroughly dried, after which lines of stitching 10, 11, and 12 are passed through the belt and its jacket, one line of stitching extending longitudinally of the center of the belt, while the remaining lines of stitching pass longitudinally of the belt through the latter and its jacket directly adjacent to the side edges of the jacket, it being noted that each line of stitching passes through three thicknesses of the jacket and through the belt proper. After the jacket has been applied, glued, and stitched in the manner above described the jacket is subjected to a bath of a suitable waterproof filler, such as mineral pigment in oil as a vehicle, this oil compound entering the pores of the fabric and of the stitching and entering the holes in the fabric formed by the stitching, so that ingress of moisture through the jacket is absolutely prevented, while the flexibility of the belt as a whole is not materially altered.

In Fig. 2 of the drawings is shown a belt proper at 20, around which is transversely wrapped a sheet 21 of duck or other suitable fabric, which is fitted snugly against the inner and outer faces and the side edges of the portion 20 and is glued in place in the same manner as above described in connection with Fig. 1. In the construction shown in Fig. 2



the side edges of the jacket abut instead of being overlapped, the abutting edges being at the outer side of the belt, and against the outer faces of the side edge portions of the jacket is disposed a strip 22 of fabric, which is glued against the sheet 21 and covers substantially two-thirds of the width of the fabric 21. Three lines of stitching 23, 24, and 25 are passed through the strip 22, one line being adjacent to each side edge of said strip, while the other line is centrally thereof, the three lines of stitching being parallel. After the three sections have been glued together and then stitched these fabric sections are impregnated with a suitable waterproof filler in oil.

In Fig. 3 of the drawings is shown a construction similar to that shown in Fig. 2, the supplemental fabric strip, however, being disposed directly against the central leather sheet, so that the side edge portions of the major fabric section are overlapped and abutted thereon. In this arrangement two outer lines of stitching 26 and 27 are passed through the fabric section adjacent to the side edges of the supplemental section, and two other lines of stitching 28 and 29 are passed through the fabric section adjacent to the side edges of the major section, the several lines of stitching including also the leather central sheet or belt proper. The jacket in this form also

is glued prior to the stitching, the glue being applied to both sides of the supplemental strip, and the jacket is impregnated with a compound similar to those above described.

It will be understood that in practice other modifications may be made and that any suitable materials and proportions may be used without departing from the spirit of the invention.

What is claimed is—

1. A leather belt having an inclosing fabric jacket, means for securing the jacket to the belt, and a waterproofing material covering and impregnating the jacket and covering the means for securing the jacket to the belt and filling the joint-spaces between the securing means and the jacket and the securing means, as and for the purpose set forth.

2. A leather belt having an inclosing fabric jacket, cement and stitching for securing the jacket to the belt, and a waterproofing material covering and impregnating the jacket and the stitching and filling the spaces between the stitches and the jacket, as and for the purpose set forth.

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

LEO LOEB.

Witnesses:

JOS. H. BLACKWOOD,  
GEO. H. CHANDLEE.