

No. 621,179.

Patented Mar. 14, 1899.

L. TAYLOR.

BELT FASTENING.

(Application filed Jan. 27, 1898.)

(No Model.)

Fig. 1.

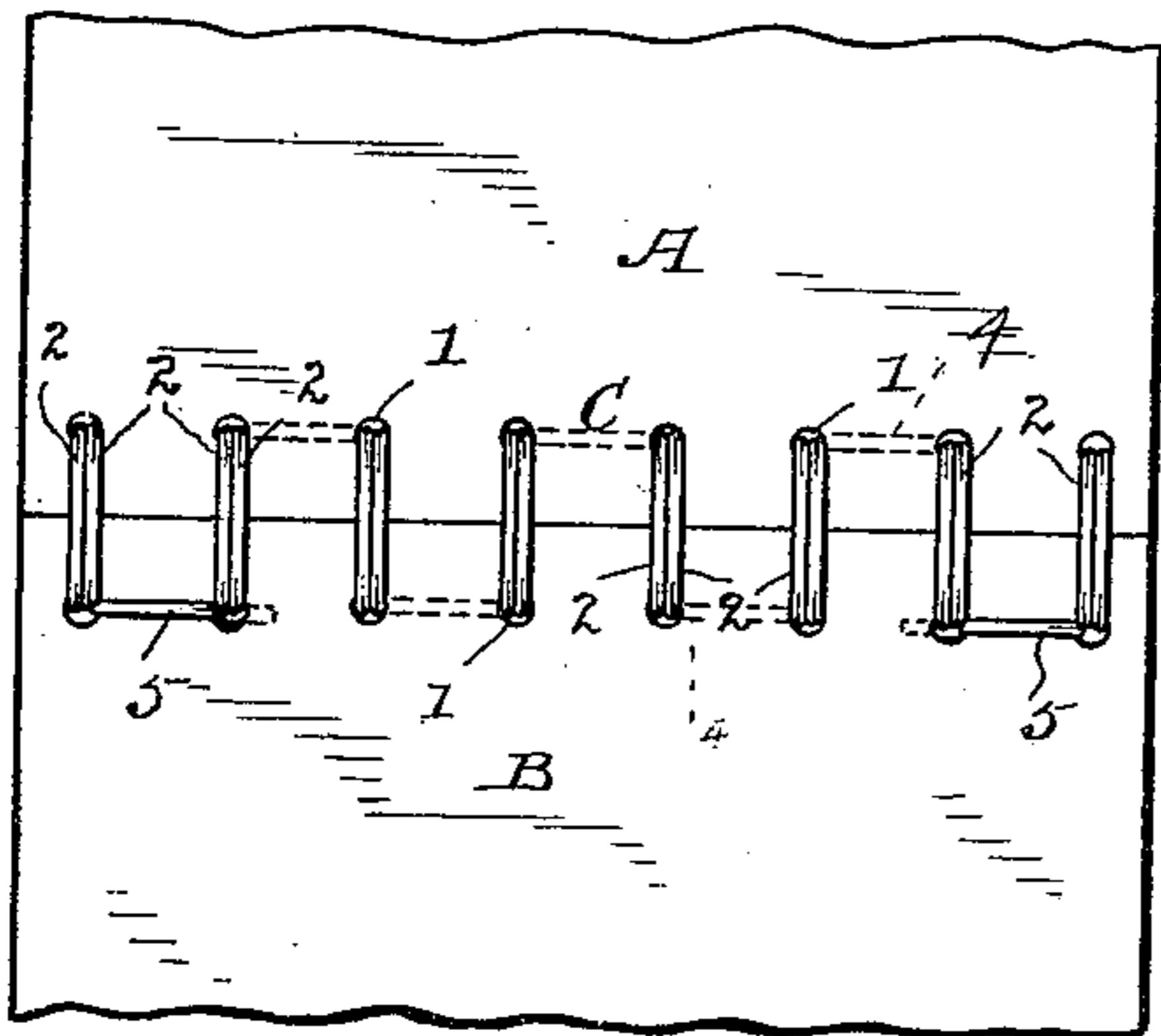


Fig. 2.

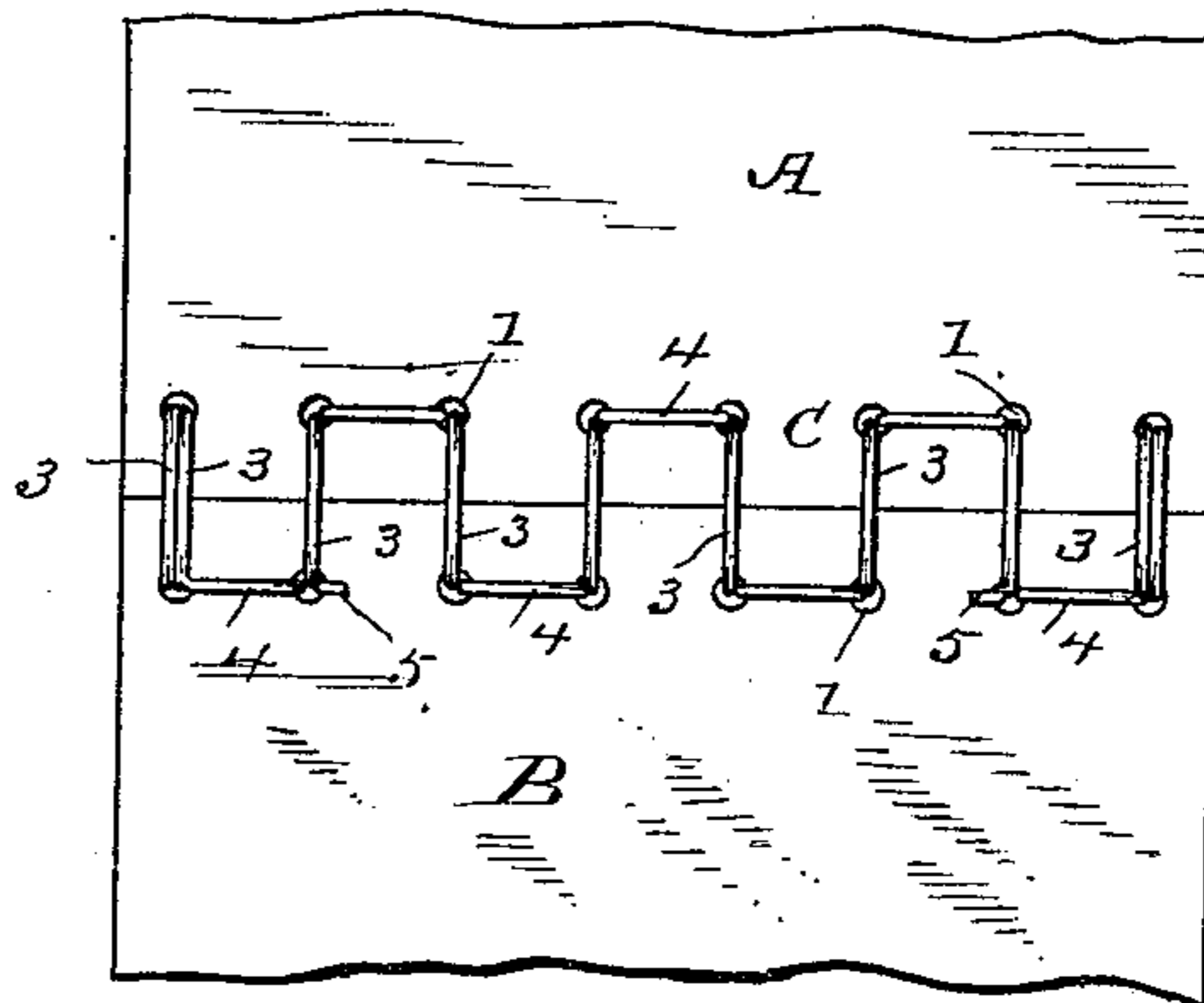


Fig. 3.

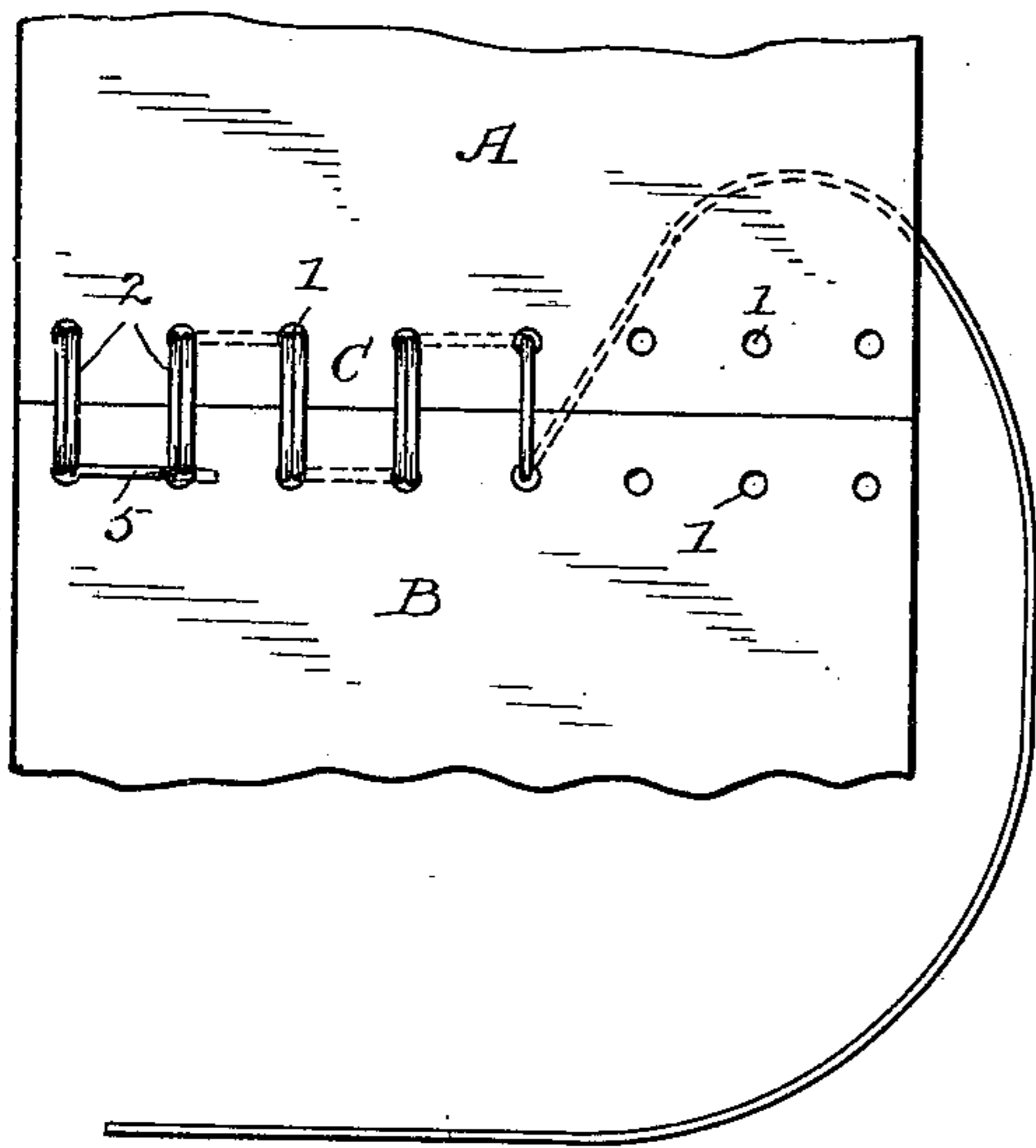
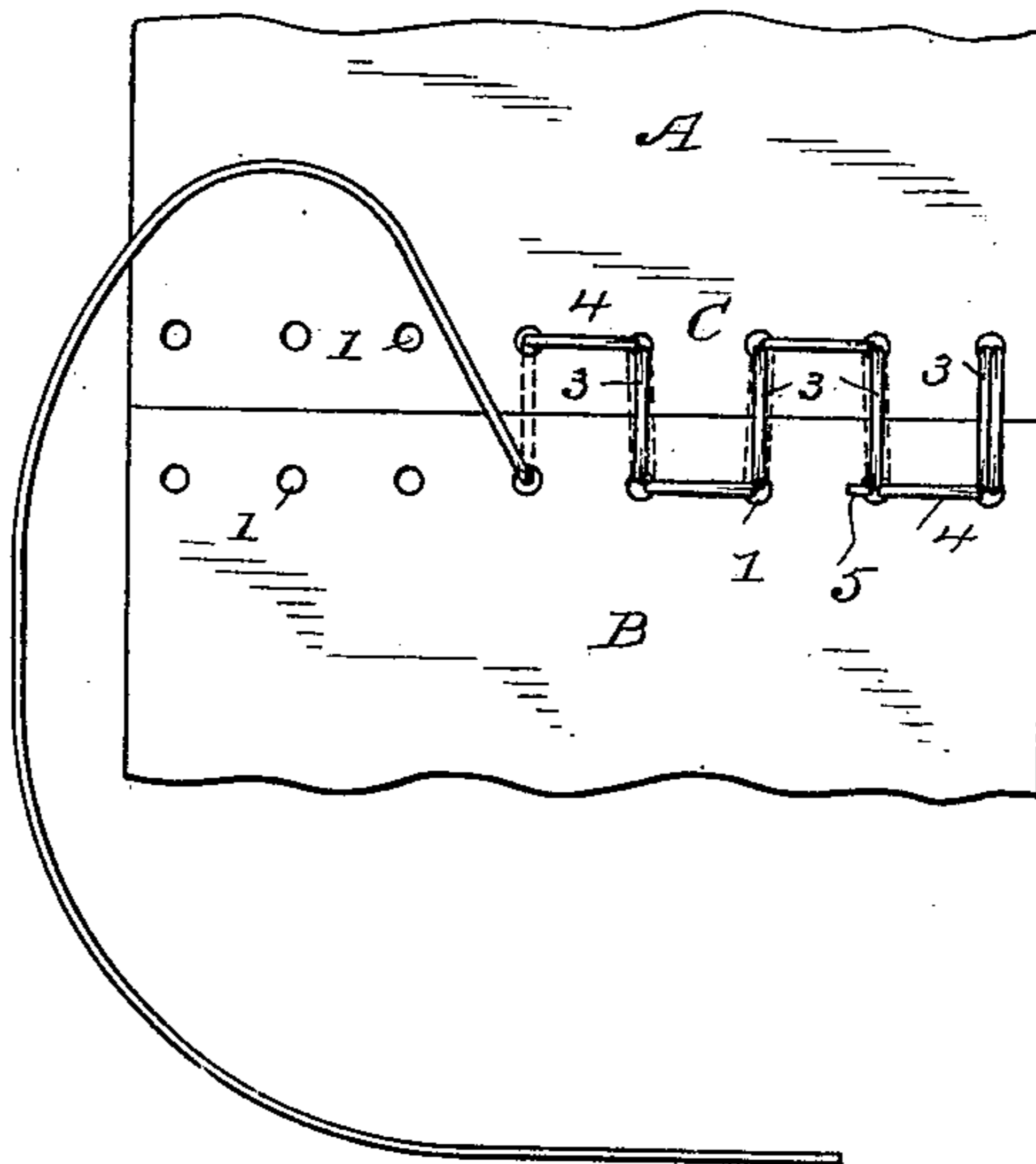


Fig. 4.



WITNESSES

H. F. Lamb
S. P. Healy

INVENTOR

Lincoln Taylor
By *A. M. Wooster*
Atty.

UNITED STATES PATENT OFFICE.

LINCOLN TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE STAR MANUFACTURING COMPANY, OF GREENWICH, CONNECTICUT.

BELT-FASTENING.

SPECIFICATION forming part of Letters Patent No. 621,179, dated March 14, 1899.

Application filed January 27, 1898. Serial No. 668,169. (No model.)

To all whom it may concern:

Be it known that I, LINCOLN TAYLOR, a citizen of the United States, residing at Stamford, county of Fairfield, State of Connecticut, have invented a new and useful Belt-Fastening, of which the following is a specification.

My invention relates to the class of belt-fastenings in which the abutting ends of a belt are secured together by a wire lacing, and has for its object to provide a fastening of this class, adapted for all kinds of belts, which shall extend continuously from edge to edge of the belt without the lacing crossing itself at any point and without any second or backward lacing, which shall be flexible and strong, shall hold the edges of the belt firmly in contact with each other and prevent the outer side of the joint from opening in use by means of sets of longitudinal strands, each set consisting of two longitudinal strands on the pulley side of the belt and one longitudinal strand on the outer side of the belt, and shall by means of alternating transverse strands on the outer side of the belt prevent the lacing from tearing out of the belt in use. In order to accomplish these results, I have devised the novel belt-fastening which I will now describe, referring by letters and numbers to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 are views, respectively, of the pulley and outer sides of a belt the ends of which are secured together by my novel fastening, and Figs. 3 and 4 are corresponding views illustrating the manner in which the fastening is made.

A and B denote the ends of a belt, each of which is provided with lacing-holes 1, and C a lacing by which the ends are secured together.

Although my novel belt-fastening contemplates that there shall be no backward lacing or second series of strands, it is immaterial whether the lacing commences at the middle of the belt and extends in both directions to the edges of the belt or at either edge thereof and extends to the opposite edge, or through which end of the belt the lacing is first passed.

The longitudinal strands on the pulley side of the belt are designated by 2, the longitudinal

strands on the outer side of the belt by 3, and the transverse strands on the outer side of the belt by 4. For convenience in description I shall term each pair of longitudinal strands on the pulley side of the belt and the single longitudinal strand on the outer side of the belt, which is formed simultaneously therewith, a "set" of longitudinal strands.

In starting to lace a belt the operator would usually start at the center of the belt and lace in opposite directions; but for convenience in description let us suppose that he starts at the left, as seen in Fig. 1, which illustrates the pulley side of the belt. The operator may first pass the lacing downward through the first hole at the left in end B, leaving, preferably, a fastening end, as 5. The lacing is then passed straight across and upward through the first hole at the left in end A, forming a longitudinal strand 3 on the outer side of the belt. (See Fig. 2.) The lacing is then passed straight across and downward a second time through the first hole at the left in end B, forming a longitudinal strand 2 on the pulley side of the belt. (See Fig. 1.) The lacing is then passed straight across and upward a second time through the first hole at the left in end A, forming a second longitudinal strand 3 on the outer side of the belt, (see Fig. 2,) and then passed straight across and downward a third time through the first hole at the left in end B, forming a second longitudinal strand 2 on the pulley side of the belt. (See Fig. 1.) It will be noted in Fig. 2 that the duplication of longitudinal strands 3 on the outer side of the belt, the formation of which has just been described, takes place at the edges only of the belt. I preferably, though not necessarily, start and finish the lacing in such a manner as to leave this additional longitudinal strand 3 on the outer side at each edge of the belt. The fastening end 5 is secured in place and serves to fasten the lacing securely by being passed downward through the second hole in end B, as clearly shown in Fig. 1, the extreme end of fastening end 5 being turned outward and pressed downward upon the outer side of the belt, as clearly shown in Fig. 2. After forming the longitudinal

strands just described the lacing is passed
 inward transversely from the first hole in end
 B to the second hole in end B and then up-
 ward through said second hole in end B, form-
 5 ing a transverse strand 4 on the outer side of
 end B. (See Fig. 2.) The lacing is then
 passed straight across and downward through
 the second hole in end A, forming a longi-
 tudinal strand 2 on the pulley side of the belt.
 10 (See Fig. 1.) The lacing is then passed straight
 across and upward a second time through the
 second hole in end B, forming a longitudinal
 strand 3 on the outer side of the belt, and
 then straight across and downward a second
 15 time through the second hole in end A, form-
 ing a second longitudinal strand 2 on the pul-
 ley side of the belt. The lacing is then passed
 inward again transversely from the second
 hole in end A to the third hole in end A and
 20 then upward through said third hole in end A,
 forming a transverse strand 4 on the outer
 side of end A. (See Fig. 2.) The lacing is
 then passed straight across and downward
 through the third hole in end B, forming a
 25 longitudinal strand 2 on the pulley side of the
 belt. (See Fig. 1.) The lacing is then passed
 straight across and upward a second time
 through the third hole in end A, forming a
 longitudinal strand 3 on the outer side of the
 30 belt, (see Fig. 2,) and then straight across and
 down a second time through the third hole in
 end B, forming a second longitudinal strand
 2 on the pulley side of the belt. The lacing
 is then passed inward again transversely from
 35 the third hole in end B to the fourth hole in
 end B and then upward through said fourth
 hole in end B, forming another transverse
 strand 4 on the outer side of end B, (see Fig.
 2,) this process of lacing being repeated until
 40 the edge of the belt is reached. At each edge
 of the belt, as already stated, I preferably
 form an additional longitudinal strand 3.
 The end of the lacing is cut off so as to leave
 a fastening end 5, which is passed inward
 45 transversely from the last hole in end B and
 downward through the next to the last hole
 in end B, the extreme end being pressed down

upon the outer side of the belt, as clearly
 shown in Figs. 2 and 4. It will be noticed
 that the lacing is straight forward from the
 start, there being no crossing of the lacing nor
 backward lacing. The strands are formed in
 the following order: After each transverse
 strand I form a set of longitudinal strands—
 that is, two parallel longitudinal strands are
 55 formed on the pulley side of the belt and si-
 multaneously therewith a single longitudinal
 strand on the outer side of the belt, after
 which a transverse strand is formed on the
 opposite end of the belt from that on which
 60 the former transverse strand was formed, and
 so on to the edge of the belt, the transverse
 strand formed immediately after each set of
 longitudinal strands alternating with—that
 is, being on the opposite end of the belt from—
 65 the transverse strand formed immediately
 before said set of longitudinal strands.

Having thus described my invention, I
 claim—

A belt-fastening consisting of a single la- 70
 cing-strand extending continuously from one
 edge of the belt to the other, said strand pass-
 ing through the lacing-holes in the ends of
 the belt twice so as to form two-strand, lon-
 gitudinally-disposed stitches on the pulley 75
 side of the belt and single-strand longitudi-
 nally-disposed stitches on the outer side of the
 belt, and laterally-disposed, single-strand
 stitches on the outer side of the belt connect-
 ing said lacing-holes in alternate pairs on 80
 either side of the meeting line of the belt
 ends, whereby the lacing-strand is extended
 continuously from one edge of the belt to the
 other without backward lacing, and whereby
 the said stitches are so disposed as that the 85
 lacing-strands do not cross one another in the
 formation of the stitches.

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

LINCOLN TAYLOR.

Witnesses:

CHARLES H. WILLIAMS,
 WORTHEY STEWART.