

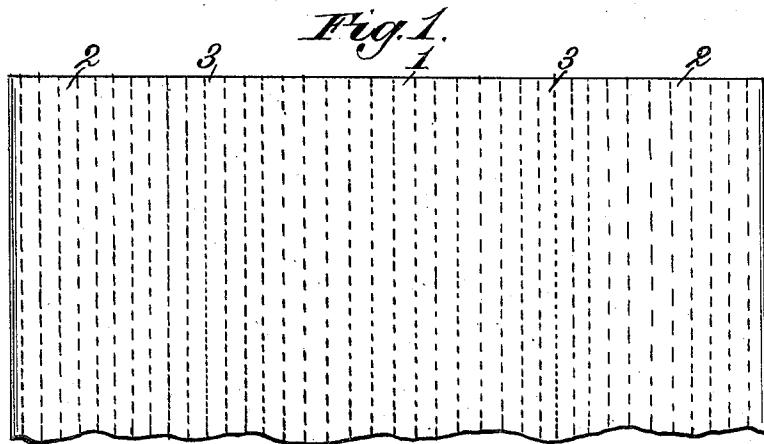
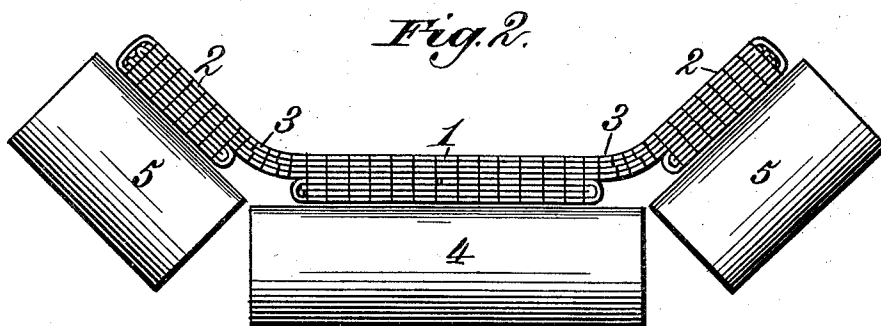
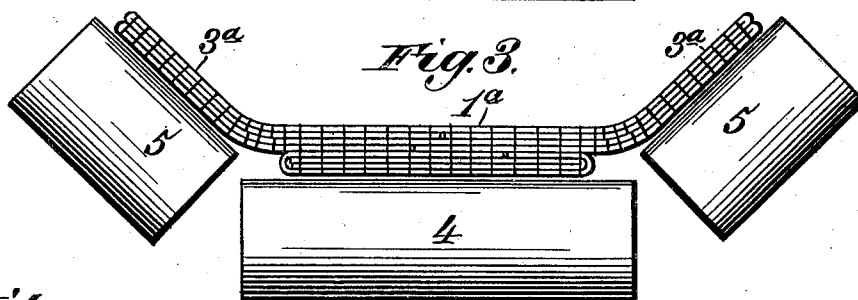
No. 722,040.

PATENTED MAR. 3, 1903.

G. C. PLUMMER.
CONVEYER BELT.

APPLICATION FILED NOV. 24, 1902.

NO MODEL.



Witnesses.
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UNITED STATES PATENT OFFICE.

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CONVEYER-BELT.

SPECIFICATION forming part of Letters Patent No. 722,040, dated March 3, 1903.

Application filed November 24, 1902. Serial No. 132,677. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. PLUMMER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Conveyer-Belts, of which the following is a specification.

My invention is designed for the production of a novel form of stitched-canvas conveyer-belt which is so constructed that the sides thereof will be capable of readily bending to assume a trough shape when passing around the ordinary guide-rollers used in connection with this class of belts.

15 The invention consists of a stitched-canvas conveyer-belt having a central body and sides, the said sides constituting guards and connected to said body by thin flexible webs, which are integral therewith.

20 The invention also consists of a stitched-canvas conveyer-belt having a firm and stable central body and flexible webs integral with but thinner than said body and projecting from the side edges thereof.

25 The invention also consists in certain features and details of construction, which will be hereinafter more fully described and claimed.

30 In the drawings forming part of this specification, Figure 1 is a plan or face view of a conveyer-belt constructed in accordance with my invention. Fig. 2 is a transverse section of the same shown in connection with the guide-rollers around which the belt passes, and Fig. 3 is a similar section showing a modified construction.

35 Like reference-numerals indicate like parts in the several views.

40 My improved belt consists of a central body 1, the sides 2, which when bent upwardly constitute guards, and the webs 3, which connect said sides with said body. The belt is constructed of canvas, the body 1 being made up of a series of plies connected together in the usual manner of constructing canvas belts
45 by longitudinal parallel rows of stitching, which extend through all the plies. These rows of stitching are arranged somewhat closely together, so as to impart a certain

amount of firmness and stability to the body. 50

The sides 2 are formed in a similar manner to the body 1—that is to say, they are made up of a series of layers or plies of canvas secured together by longitudinal parallel rows of stitching extending through all of said layers or plies. The rows of stitching in said sides are also arranged somewhat closely together, so as to impart firmness and stability thereto. The webs 3, which connect the body 1 and the sides 2, are thinner than either of said parts, the same being produced by fewer plies of canvas than are employed in the construction of said body and of said sides. The plies of canvas of which the webs 3 are made, however, are connected together by longitudinal rows of stitching; but on account of the fact that said webs are thinner than the other parts of the belt they are more flexible, and consequently render the belt capable of readily bending to accommodate itself to the shape of the guide-rollers around which it passes. The guide-rollers referred to are represented by the numerals 4 and 5. Said webs are rendered still more flexible than they otherwise would be by reason of the fact that some of the longitudinal rows of stitching 6 extend through the outer two or more plies of canvas only. 75

Although the longitudinal rows of stitching by which the different plies of canvas of which the body 1 and sides 2 are made tend to impart a certain degree of stability and firmness thereto, I prefer to saturate these parts with a drying stiffening composition of oils, gums, and the like which render the parts treated thereby more firm and less flexible. I also propose to saturate the webs 3, which connect the body 1 and the sides 2, with a non-drying composition of oils, gums, and the like. The result of this treatment of the different parts of the belt is to render the body 1 and the sides 2 more unyielding and capable of resisting a greater amount of wear, while the webs 3 remain flexible throughout the life of the belt. The belt when completed will have a firm wear-resisting body capable of withstanding the wear and abrasion caused by the weight of the load sustained thereby, 80 85 90 95

whereas the flexible webs will enable the belt to bend longitudinally without danger of breaking or cracking the same.

If desired, the sides 2 may be dispensed with altogether, in which event the flexible webs will extend from the body to the extreme side edges of the belt. This construction of belt is illustrated in Fig. 3 of the drawings, wherein 1^a represents the central body and 3^a the flexible webs. The body 1^a is similar in all respects to the body 1, the same being constructed of a series of layers or plies of canvas connected by longitudinal rows of stitching extending through all the plies and saturated with a drying stiffening composition of oils, gums, and the like. The webs 3^a are also of similar construction to the webs 3, the same being integral with but thinner than the body 1^a and made up of a plurality of layers or plies of canvas connected together by longitudinal rows of stitching and saturated with a non-drying composition of oils, gums, and the like. As with the webs 3, some of the rows of stitching in the webs 3^a extend through the outer two or more plies of canvas only.

Linseed-oil and turpentine may be employed as the drying stiffening composition and olive or castor oil as the non-drying composition. Common resin or other suitable gum may also be used as one of the ingredients of both the drying and non-drying compositions.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A stitched-canvas conveyer-belt, having a body, and flexible webs projecting from the side edges thereof, the said webs being integral with but thinner than said body.

2. A conveyer-belt having a body, and flexible webs projecting from the side edges thereof, the said belt being made of a series of layers or plies of canvas connected by longitudinal rows of stitching, and said webs being thinner than said body but integral therewith, some of the rows of stitching in said webs extending through the outer two or more plies thereof, only.

3. A stitched-canvas conveyer-belt having a central body, and sides connected to said body by integral flexible webs which are thinner than said body.

4. A conveyer-belt having a body and sides, with webs connecting said body and sides, the said belt being made with a series of layers or plies of canvas connected together by longitudinal rows of stitching, and said webs being thinner than said sides and body but integral therewith, some of the rows of stitching in said webs extending through the outer two or more plies thereof, only.

5. A stitched-canvas conveyer-belt having a central body saturated with a drying, stiffening composition, and flexible webs projecting from the side edges thereof, the said webs being integral with, but thinner than said body, and saturated with a non-drying composition.

6. A conveyer-belt having a central body, and flexible webs projecting from the side edges thereof, the said belt being made of a series of layers or plies of canvas connected by longitudinal rows of stitching, the body being saturated with a drying, stiffening composition, and the webs being thinner than said body but integral therewith, and saturated with a non-drying composition, some of the rows of stitching in said webs extending through the outer two or more plies thereof, only.

7. A stitched-canvas conveyer-belt having a central body, and sides connected to said body by integral flexible webs which are thinner than said body, the said body being saturated with a stiffening, drying composition, and said webs being saturated with a non-drying composition.

8. A conveyer-belt having a body and sides, with webs connecting said body and sides, the said belt being made of a series of layers or plies of canvas connected together by longitudinal rows of stitching, and said webs being thinner than said sides and body but integral therewith, the said body and the said sides being saturated with a stiffening, drying composition, and the said webs being saturated with a non-drying composition.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE C. PLUMMER.

Witnesses:

J. B. JARDELLA,
H. J. ROTH.