

(No Model.)

2 Sheets—Sheet 1.

J. K. TULLIS.

BELTING.

No. 290,147.

Patented Dec. 11, 1883.

Fig. 1.

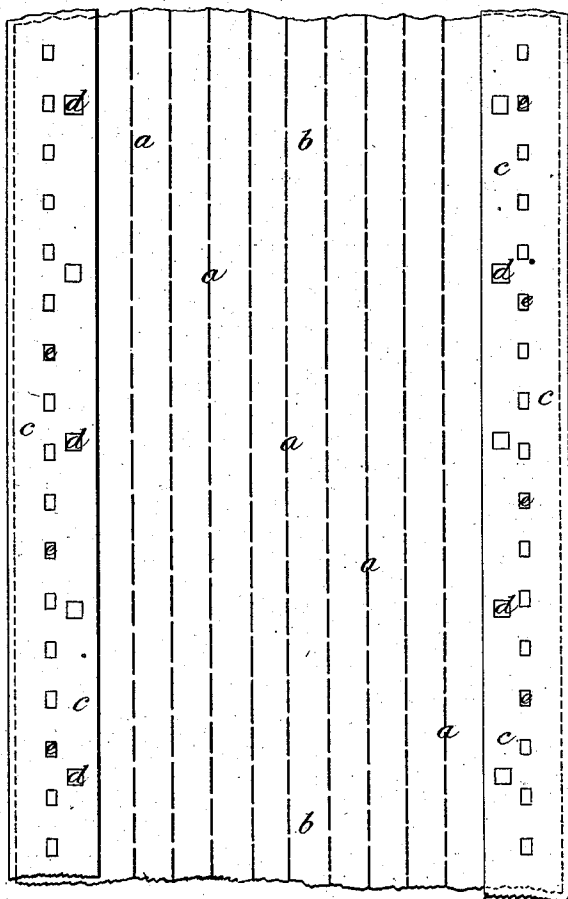


Fig. 2.

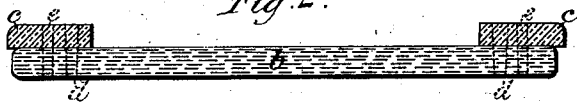
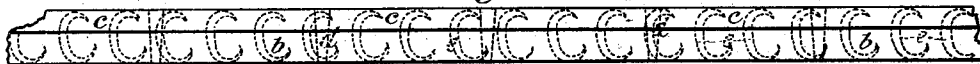


Fig. 3.



Witnesses:

E. J. Dick
Walter Blandford

Inventor:

John K. Tullis
By Marshall Bailey
att'y

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Fig. 4.

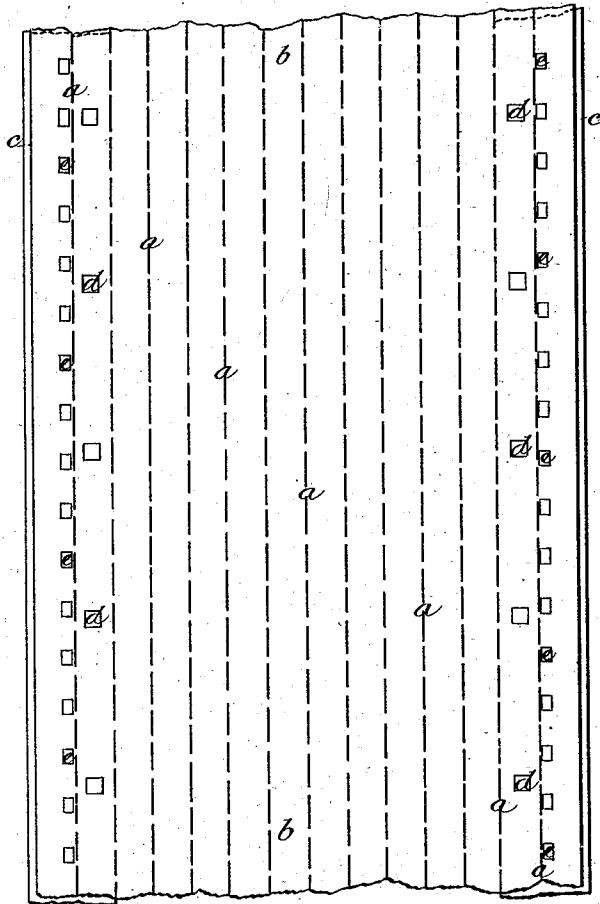


Fig. 5.

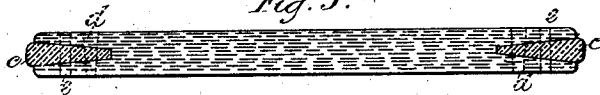


Fig. 6.



Witnesses:

C. K. Rick
J. M. Blandford

b Inventor.

John K. Tullis
By Marshall C. Cole

UNITED STATES PATENT OFFICE.

JOHN KEIL TULLIS, OF GLASGOW, COUNTY OF LANARK, SCOTLAND.

BELTING.

SPECIFICATION forming part of Letters Patent No. 290,147, dated December 11, 1883.

Application filed August 18, 1883. (No model.) Patented in England June 9, 1883, No. 2,876.

To all whom it may concern:

Be it known that I, JOHN KEIL TULLIS, of Glasgow, in the county of Lanark, North Britain, have invented Improvements in the Manufacture of Belting, for which I have received Letters Patent of the United Kingdom of Great Britain and Ireland, No. 2,876, dated June 9, 1883, and that I am about to apply for Letters Patent for the said invention in the Republic of France and Empires of Germany and Austria. The following is a specification of the same.

My said invention relates to improvements in the manufacture of belting, and has reference to belting made of canvas or cotton, and woven belting generally; also to belting known by the following designations: "cotton-canvas belting," "solid cotton woven belting," "camel-hair belting," "linen, hemp, and jute belting," made either in several plies or of one thick ply, "gutta-percha belting," belting made of india-rubber or india-rubber and cloth, "felted belting," and belting made of paper.

My invention has for its object to prevent the sides or edges of belting of the kinds hereinbefore described from being worn or destroyed by the action upon the said edges of the shifting-fork by which the aforesaid belts are moved from and to the fast and loose pulleys, respectively, which they are caused to run upon. This object is effected by attaching to each edge of such belts a strip of leather, which may either be sewed down upon the outer face of the said belts or between the layers of woven or felted material or paper of which the said belts are composed, and in either case projecting sufficiently far beyond the edges of the woven or felted material or paper, so that the leather itself forms a shield to the said edges, and thereby prevents the fork from coming into contact therewith. The strips of leather at the edges of the said belt may be sewed thereto by copper or other wire, or by other suitable mode at attachment.

In the drawings, Figures 1, 2, and 3 represent, respectively, in plan, transverse section, and in side elevation a portion of belting constructed according to and constituting a part of my present invention. Figs. 4, 5, and 6

represent, respectively, corresponding views of a modified form of the same.

The belting, with a view to enhancing its durability, is sewed, as represented at *a*, with copper, brass, steel, or aluminium bronze wire, or with wire of any other suitable metal, and the said belting may be wholly sewed with such wire or with such wire in rows, between which the sewing of cotton or other textile or spun material is or may be interposed.

The belting, instead of being sewed together with copper or other wire, may be held together by screwed metal studs passed through the layers of the material forming the belting and riveted over on each side.

I now proceed to describe my improvement, which, as above said, has for its object to prevent the sides or edges of belting, of the kinds hereinbefore described, from being worn or destroyed by the action upon the said edges of the shifting-fork by which the aforesaid belts are moved off from and onto the fast and loose pulleys, respectively, upon which they are caused to run. This object is effected, as represented on the accompanying drawings, by attaching to each edge of the belt *b*, a strip, *c*, of leather, which may either be sewed down upon or otherwise suitably secured to the outer face of the said belt *b*, as represented more particularly at Figs. 1, 2, and 3; or it may be inserted into either edge of such belt, as represented more particularly at Figs. 4, 5, and 6, wherein it is secured by sewing or by any other suitable means. In either of these cases, the leather strips *c* project out from or over the edges of the belting, so that the leather forms a shield to the said edges, and thereby prevents the fork from coming into contact with the said belting.

The strips *c*, of leather, although shown on the accompanying drawings as secured to or into the edges of the belting by the wooden pegs *d* and copper studs *e*, the latter of which are bent over at their ends for the purpose of being secured therein, may be sewed there-to or thereinto with copper or other metallic wire, or by any other suitable mode of attachment.

I claim—

1. The combination, with the body of the

belting, of separate leather strips applied to the longitudinal edges of the belting, so as to project laterally beyond the same, substantially as and for the purposes hereinbefore set forth.

2. The combination, with the belting, of separate strips of leather inserted and secured in the longitudinal edges of the belting, so as to project laterally beyond the same, substantially as and for the purposes hereinbefore set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN KEIL TULLIS.

Witnesses:

ST. JOHN VINCENT DAY,
JOHN MADDER BUDHOPE,
Both of 115 St. Vincent Street, Glasgow.