

(No Model.)

J. F. BROWN.  
BELTING.

No. 577,375.

Patented Feb. 16, 1897.

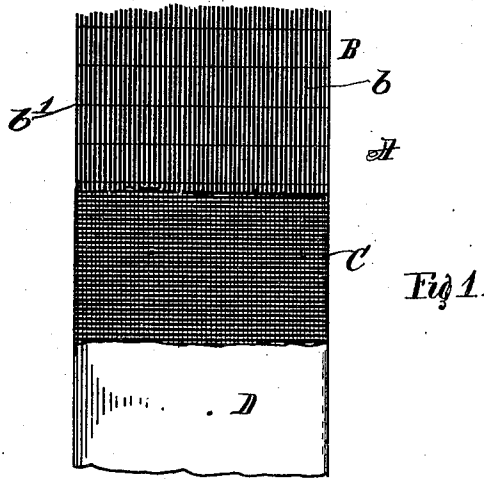


Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.

Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES FREEMAN BROWN, OF NEEDHAM, MASSACHUSETTS.

## BELTING.

SPECIFICATION forming part of Letters Patent No. 577,375, dated February 16, 1897.

Application filed April 25, 1896. Serial No. 589,104. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES FREEMAN BROWN, of Needham, in the county of Norfolk, State of Massachusetts, have invented certain Improvements in Belting, of which the following is a specification.

This invention relates to improvements in a belting for which I have applied for Letters Patent of the United States, filed May 25, 1895, Serial No. 550,674.

The objects of the improvements are to both cheapen the expense of making this particular belting just pointed out and to lighten its weight.

The accompanying drawings, together with the following description, illustrate the nature of my invention.

Figure 1 is a plan view of my invention. Fig. 2 is an edge view of Fig. 1. Fig. 3 is a transverse section of my materials in the present invention, showing that such may be folded for the purpose hereinafter pointed out. Fig. 4 is a view similar to Fig. 3, showing the folds complete.

A represents my belting, the nature of which will appear in detail in the following subject-matter.

B denotes one of the textile fabrics, and C is the other textile fabric or material. The former is in nature as follows: *b* represents warp-threads or longitudinal cords, and *b'* woof-threads or transverse cords. In this material or fabric the association of these woof-threads with the warp-threads is simply for the purpose of keeping the warp-threads or longitudinal cords in their relative positions, and the use of these woof-threads is as limited as possible, so as to attain as much as possible a straightness of the longitudinal cords without curves or crimps caused by the association of the transverse cords with the longitudinal cords in the ordinary manner of weaving. The latter fabric is in nature similar to that of an ordinary woven fabric or material, having no particular arrangement of the respective woof and warp threads from that of other fabrics or materials employed for the purpose of making a belt or belting so long as it has a close relation of woof-threads or transverse cords. The use of this material is simply to prevent a longitudinal

rip or tear, which is attained through the woof-threads. As to the warp-threads in this material, they have no function whatever except to control the relation of the woof-threads, and in this respect the warp-threads are in number too many for this special purpose. Consequently warp-threads in excess of those which are necessary have no function to perform, as heretofore suggested, because the longitudinal cords or warp-threads of the first material, heretofore described, prevent the warp-threads in the second material, which I am now discussing, performing any function in a longitudinal direction as a preventive of stretch of the belt, owing to the warp-threads of the second material having such a large excess number of curves or crimps due to their engagement with the woof-threads, the essential feature of this second material. Further, when the two materials are associated together and treated with rubber or any other suitable substance or compound or folded together and stitched they become so united as to effect a whole or entirety. Consequently the warp-threads in the second material have no function in this special direction after the two materials are treated as just described, which I do to effect a belt or belting.

In the commencement of this application reference is made to a previous application for the purpose of ascertaining the virtue of the materials comprising that invention, and for convenience I will state that the material B in this application and that just pointed out are for the purpose of preventing longitudinal stretch, and the material C in this and the other application is to prevent longitudinal ripping or tearing of the belt or belting, and both together to attain a belt or belting capable of but slight stretch, if any at all, and great durability and strength. *Vide* such application.

Having described the nature of my invention, I claim—

A belt or belting made of two materials, or textile fabrics, one consisting of warp-threads or longitudinal cords, having associated therewith, woof-threads or transverse cords as few as possible simply for the purpose of keeping the warp-threads or longitudinal cords in their

relative position, and the other material or  
textile fabric being such as is in common use  
and adapted for belt-making; associated to-  
gether and treated with rubber or any other  
5 suitable substance, compound, or material,  
and folded, and stitched together, as and for  
the purpose described.

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

JAMES FREEMAN BROWN.

Witnesses:

THOMAS W. HOBDAY,  
GEORGE M. WEED.