

(No Model.)

J. F. BROWN.  
BELTING.

No. 577,377.

Patented Feb. 16, 1897.

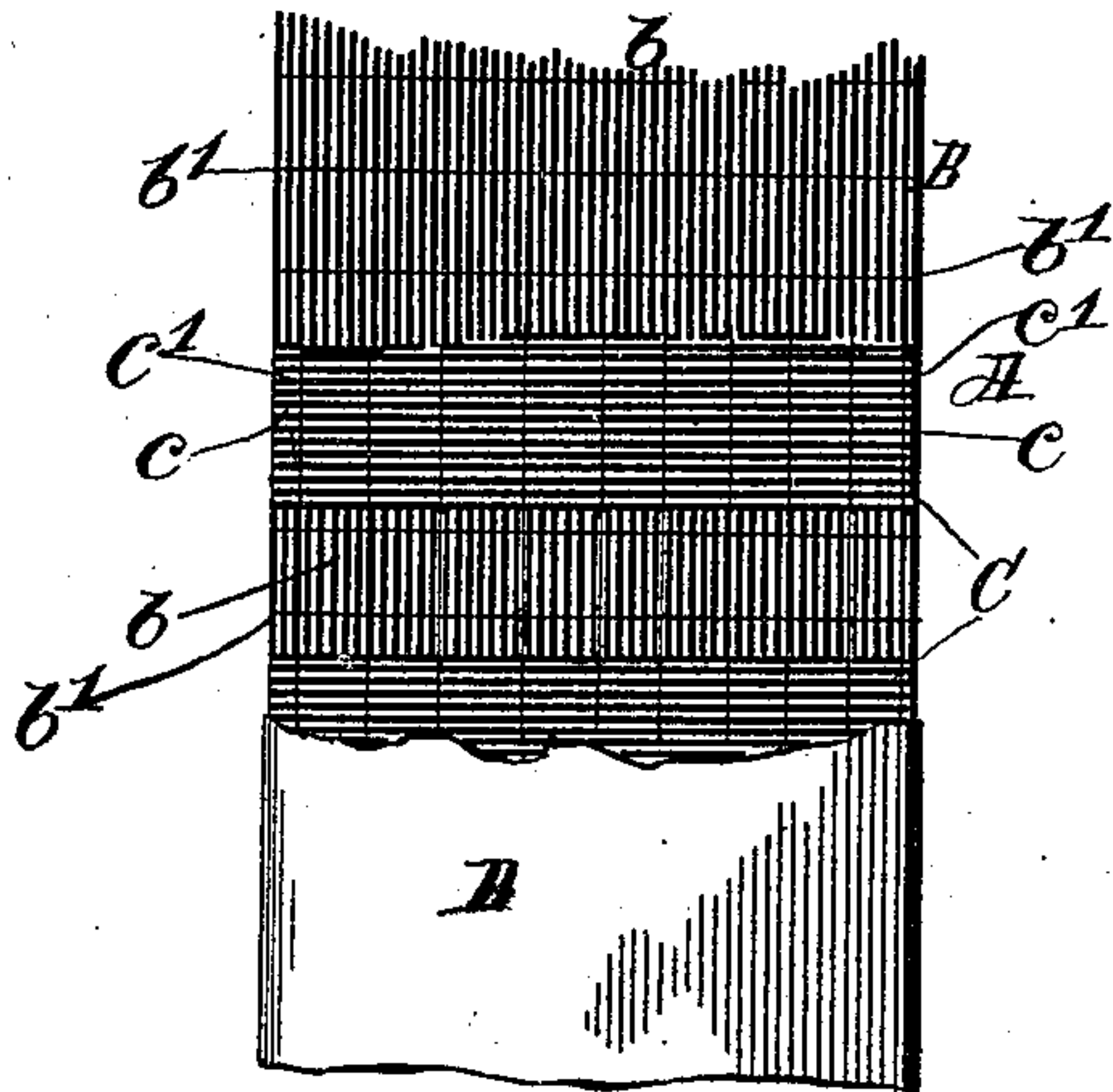


Fig. 1.



Fig. 2.



Fig. 3.

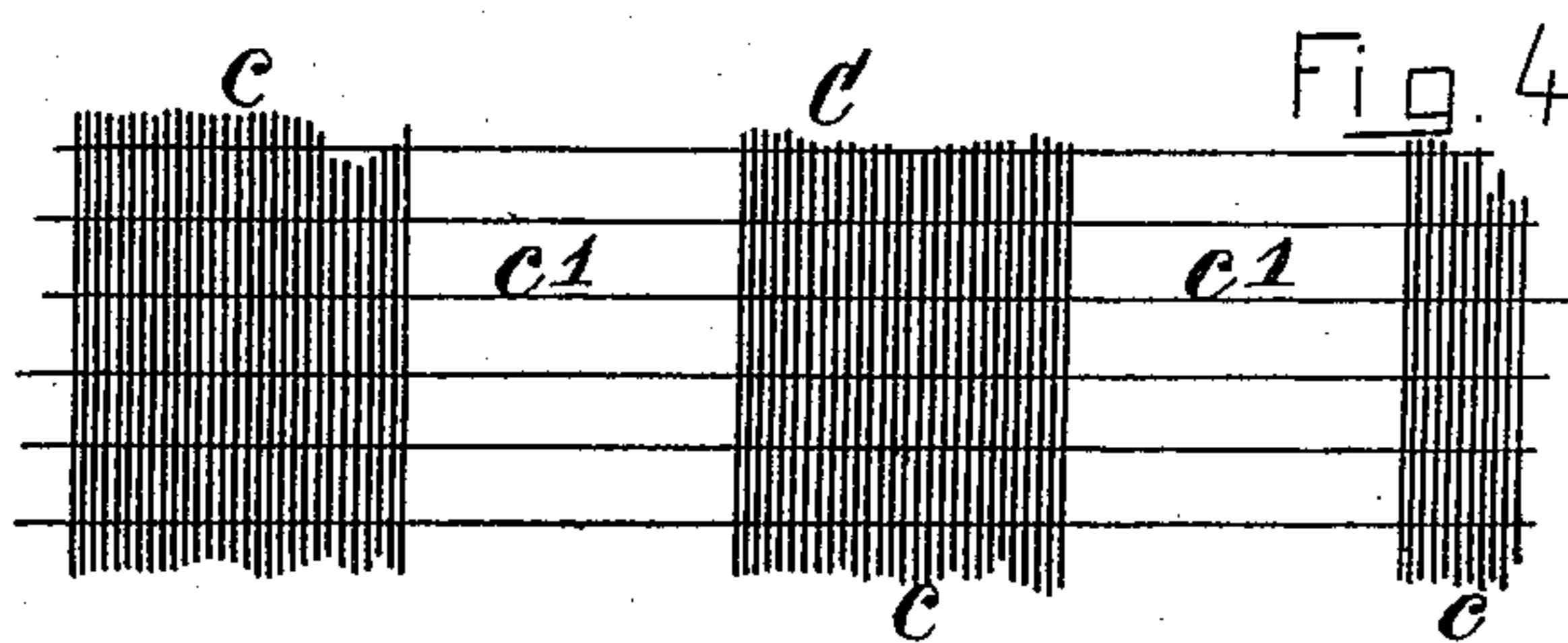


Fig. 4.



Fig. 5.

WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES FREEMAN BROWN, OF NEEDHAM, MASSACHUSETTS.

## BELTING.

SPECIFICATION forming part of Letters Patent No. 577,377, dated February 16, 1897.

Original application filed May 25, 1895, Serial No. 550,674. Divided and this application filed June 8, 1896. Serial No. 594,743. (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; and the objects of these improvements are to both cheapen the expense of making this particular belting just pointed out and to lighten its weight, but the former is the most essential point; and this invention consists in dispensing with woof-threads or transverse cords used in a material hereinafter pointed out.

In the accompanying drawings, 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 the materials which involve my present invention, showing that such may be folded for the purpose hereinafter pointed out. Fig. 4 is a plan of the textile fabric or material, illustrating the nature of my invention. Fig. 5 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 position, and the use of these woof-threads is as few 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 as follows: *c* represents woof-threads or transverse cords, and *c'* warp-threads or longitudinal cords. In this material or fabric the association of these warp-threads or longitudinal cords with the woof-threads or transverse cords is simply for the purpose of keep-

ing the woof-threads or transverse cords in their relative position, for should there be a number of these warp-threads greater than the number used for the purpose mentioned they would have no function to perform, as clearly specified in my previous application, to which reference is made. This material C is employed solely for the purpose of preventing a longitudinal tear or ripping of the belting, caused by connecting the two ends of the belt together, either by lacing or by any other means, and by an excessive strain upon the belt designed and made without this material C.

Fig. 4 illustrates this textile fabric or material C as having portions without the woof-threads or transverse cords and parts with such cords or threads alternately. The essence of this peculiar arrangement is to cheapen the expense in the manufacture of this peculiar belting, for by saving or not using the transverse cords, as indicated by the drawings, they go to make another belt. The alternative arrangement of these cords or threads is such that when the belt is cut for a shorter distance than that to which it was formerly applied the thread or cord portions will generally be in service. These two materials I place together and treat with rubber or any other suitable substance, compound, or material (represented by D) or stitch together and fold as to effect an entirety or whole. Any strength can be attained by folding these materials, as represented by the views 3 and 5.

Having described the nature of my invention, I claim—

1. 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 consisting in its length of woof-thread portions and blank woof-thread spaces alternatively, the woof-threads having associated therewith warp-threads or longitudinal cords as few as possible simply for the purpose of keeping the woof-threads or transverse cords in their relative position; associated together and treated

with rubber or any other suitable substance, compound, or material, and stitched together and folded, as and for the purpose described.

2. In a belt or belting 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 consisting in its length of woof-thread portions and blank woof-thread spaces alternatively, the woof-threads

having associated therewith warp-threads or longitudinal cords as few as possible simply for the purpose of keeping the woof-threads or transverse cords in their relative position, as 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.