

J. THOMSON.
Belting.

No. 217,963.

Patented July 29, 1879.

Fig. 1.

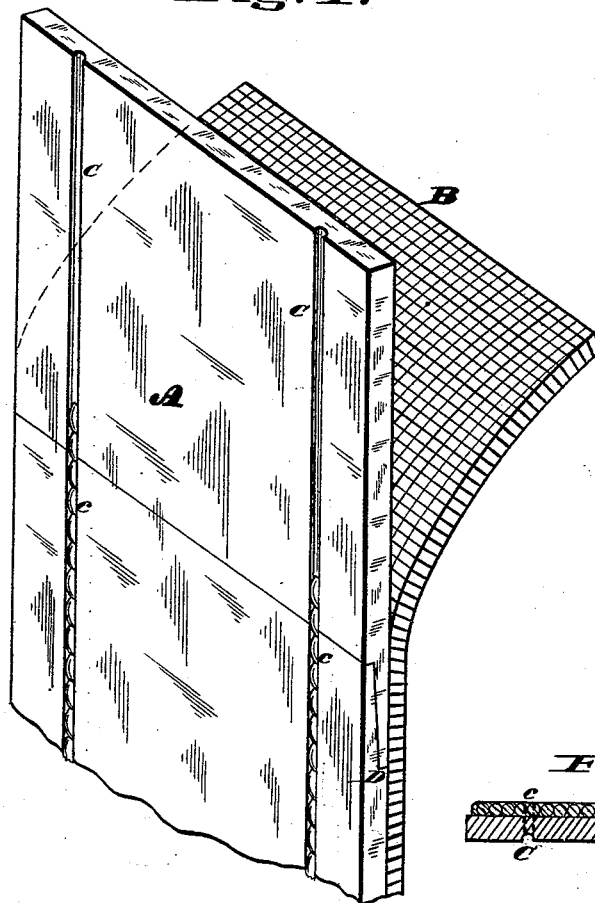
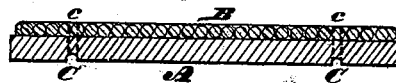


Fig. 2.



Attest

John E. Jones

Frank Millard Jr.

Inventor

James Thomson

By Wood & Boyd

His Attys

UNITED STATES PATENT OFFICE.

JAMES THOMSON, OF CINCINNATI, OHIO.

IMPROVEMENT IN BELTING.

Specification forming part of Letters Patent No. **217,963**, dated July 29, 1879; application filed June 19, 1879.

To all whom it may concern:

Be it known that I, JAMES THOMSON, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Belting, of which the following is a specification.

My invention relates to an improved belt for transmitting power from one pulley to another.

It consists in a new method of combining a cotton belt with a leather belt.

Figure 1 is a representation, in perspective, of my improvement. Fig. 2 is a cross-section of the same.

A represents a section of a leather belt, and B a section of a cotton belt. C C represent channels cut in the surface of the leather. c c represent stitches for holding the cotton and leather firmly together. D represents a lap-splice for uniting two pieces of leather, which are first cemented and held under pressure in the ordinary manner of uniting leather by means of cement.

The object of my invention is to provide a durable belt, and to prevent stretching and rapid wear of the material, which I accomplish by preventing any portion of the fabric or stitch from coming in frictional contact with the pulley.

This I accomplish as follows: The leather is prepared as in the usual manner for leather belting. A cotton belt, about one-eighth of an inch narrower than the leather, is united to the leather by applying cement to the two

surfaces and holding under pressure till set. The leather has two grooves, c c, cut in the outer surface, as shown in Fig. 1. These grooves must be of sufficient depth to bury the stitches c c below the surface of the belt. After the cement is sufficiently set the leather and cotton are firmly stitched together.

It is important that no part of the cotton belting come in contact with the machinery, as it rapidly frays or wears out. It is also material to prevent the stitches from frictional contact with the pulley, as they would rapidly wear and destroy the mechanical union of the two, as cement alone will not perform this function for any considerable length of time.

The cotton or fabric belt must be woven with two selvage edges, otherwise it will fray or rapidly wear out.

A belt made as herein described I have found, by experience, to have much greater durability and strength than any other hitherto used.

What I claim is—

An improved belt, composed of an inner or wearing surface, A, of leather and an outer surface of cotton fabric, B, united by cement and stitches sunken in grooves in the surface A, all substantially as shown and described.

In testimony whereof I have hereunto set my hand this 16th day of June, A. D. 1879.

JAMES THOMSON.

Witnesses:

JOHN E. JONES,
FRANK MILLWARD, Jr.