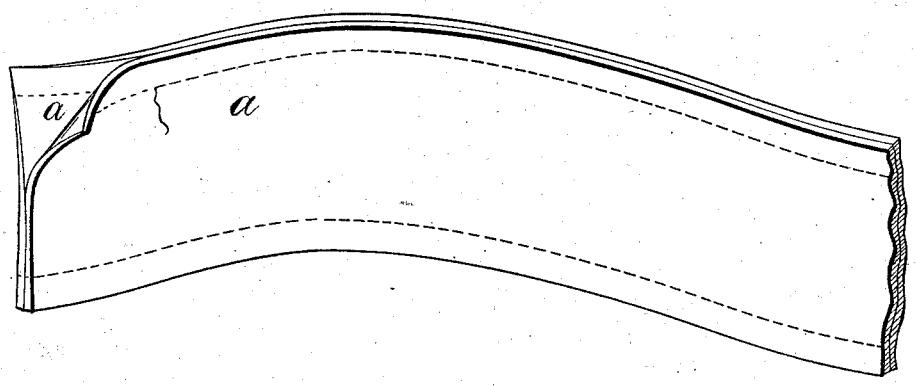
F. H. & J. E. UNDERWOOD & G. F. UHLER.

Leather-Belting.

No. 219,607. Patented Sept. 16, 1879.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN LEATHER BELTING.

Specification forming part of Letters Patent No. **219,607**, dated September 16, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that we, FRANK H. UNDERWOOD, JAMES E. UNDERWOOD, and G. FRANK UHLER, of Tolland, in the county of Tolland and State of Connecticut, have invented certain new and useful Improvements pertaining to Leather Belting, of which the following is a specification, reference being had to the accompanying drawing, which shows a piece of belting constructed according to our invention, with the flesh-split started apart at the corner.

The object of this invention is the production of a flat belt of leather for communicating power from pulley to pulley, much cheapened in cost to the consumer, and much improved in quality as compared with the ordinary belt composed of the entire thickness of the hide.

For many commercial purposes leather—beef-hides—may be, and is, split into two layers, that layer bearing the common outer surface being known as the "grain-split," and the inner layer as the "flesh-split," the latter of which has little commercial value as compared with the whole hide or with the grain-split. For instance, hides of grown beef creatures are thus split, and the grain-split used for the manufacture of sewing-machine belts, patent-leather, &c.

The present market value of the whole hide is about thirty cents per pound, while the value of the flesh-split is about one-fourth as much.

By the aid and exercise of this our present invention we are able to convert these comparatively worthless flesh-splits into a power-belt intrinsically worth as much, or even more, than if the belt had been made of a hide of integral and entire thickness.

Our method is to take two of these flesh-splits, (denoted in the drawing by the letters *a a*,) and cement and sew, or cement and rivet, them together with the grain sides—that is, the sides originally nearest the outer surface—brought together face to face, or the flesh sides—that is, the sides originally nearest the original inner surface—brought together face to face, or the grain sides and the flesh sides brought together face to face, in either way making a belt of superior strength and durability.

We prefer sewing the splits together for the sake of pliability, and prefer a sunken stitch, or one not rising above the surface of the leather, to prevent wear of the thread.

We also prefer putting the grain sides face to face, because it brings the flesh sides to the surfaces. They are denser and stronger than the grain sides, wear longer on the pulleys, and hug them closer.

When the sides are thus brought like and like together, the belt runs truer than a belt of one entire and integral thickness, and better than if a grain side faced a flesh side.

Actual trial shows that a belt thus made of two of these flesh-splits is stronger and more elastic than an integral belt of the ordinary sort of equal thickness.

We claim as our invention—

1. As a new article of manufacture, a power-belt composed of flesh-splits united together, substantially as shown and described.

2. As an improved article of manufacture, a power-belt composed of flesh-splits united together with like sides faced against each other, substantially as shown and described.

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