A. SPADONE.
Belting.

No. 208,432. Patented Sept. 24, 1878.

Fig. 1.

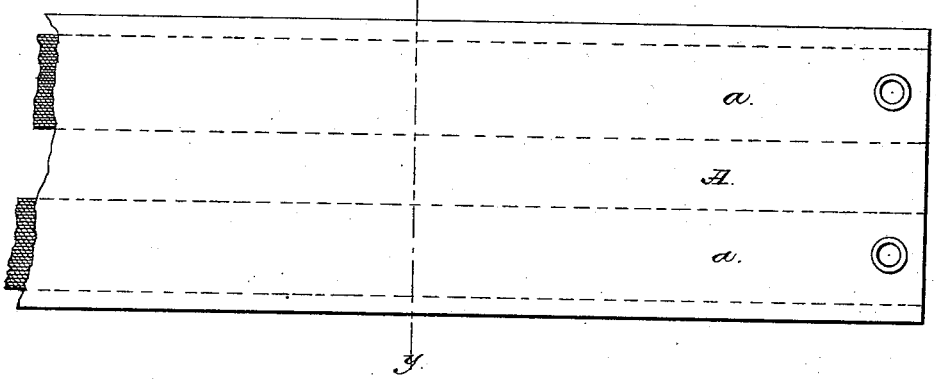
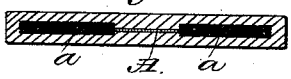


Fig. 2.



Attest:
Geo. H. Graham
A. H. Wellington

Inventor:
Amadeo Spadone
by Chas. W. Forbes

UNITED STATES PATENT OFFICE.

AMADEE SPADONE, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN BELTINGS.

Specification forming part of Letters Patent No. **208,432**, dated September 24, 1878; application filed December 22, 1877.

To all whom it may concern:

Be it known that I, AMADEE SPADONE, of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Belting; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a plan view, partly in section; Fig. 2, a cross-section of the same on the line *y y*.

The object of this invention is to increase the strength, improve the operation, and prevent the stretching of belting when subjected to tensional strain, and which causes serious inconvenience in the use of fabrics for this purpose, and particularly in the construction of endless belts, wherein no provision is made for shortening the same.

This invention is especially adapted to belting composed of rubber-coated cloth, which is folded or made up in two or more plies.

The invention consists in providing such belt with covered metallic strips, (preferably of tempered steel,) arranged longitudinally between the plies, and caused to adhere to the rubber coating of the adjacent surfaces, as hereinafter described and claimed. These strips are constructed of such width and thickness, and arranged at such distances apart, as to withstand a breaking strain without stretching, and to preserve the pliability of the belt both longitudinally and transversely.

The strips are covered with a wrapped or braided fabric, and arranged between the plies of the belt, and parallel with each other, as shown in Fig. 1, and the whole compressed between hot plates, which causes the covering to firmly adhere to the inner rubber-coated surfaces of the adjacent plies, and which prevents a lateral displacement of the strip, and owing to this preserved parallelism, a tendency of the belt to crowd laterally while in operation is obviated. In the employment of tempered steel the strips may be made of extreme lightness and high degree of flexibility, which will allow the belt to yield laterally, and press equally upon a curved surface either in the direction of its length or transversely upon a pulley constructed with a convex face, and the elasticity of such material insures the recovery of the belt to its original form.

It is found necessary to temper the steel strips to a degree of hardness that will permit the same to be subjected to the hot plate, as described, without drawing the temper of the steel below the degree necessary to maintain its essential qualities.

The construction shown in Fig. 1 is also attended with advantages in respect to joining or lacing the ends of the belt together, the metal strips being perforated near the ends, as shown, and through which metal hooks or lacing may be passed, and when the latter expedient is adopted, eyelets may be inserted in the perforations to prevent cutting or wear.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A belt composed of a rubber-coated fabric, folded or constructed with two or more plies, and provided with metallic strips, (preferably of tempered steel,) covered with a wrapped or braided fabric, and caused to adhere to the inner rubber coating of the adjacent surfaces, substantially as described.

AMADEE SPADONE.

Witnesses:

L. W. SLOAT,

CHAS. W. FORBES.