

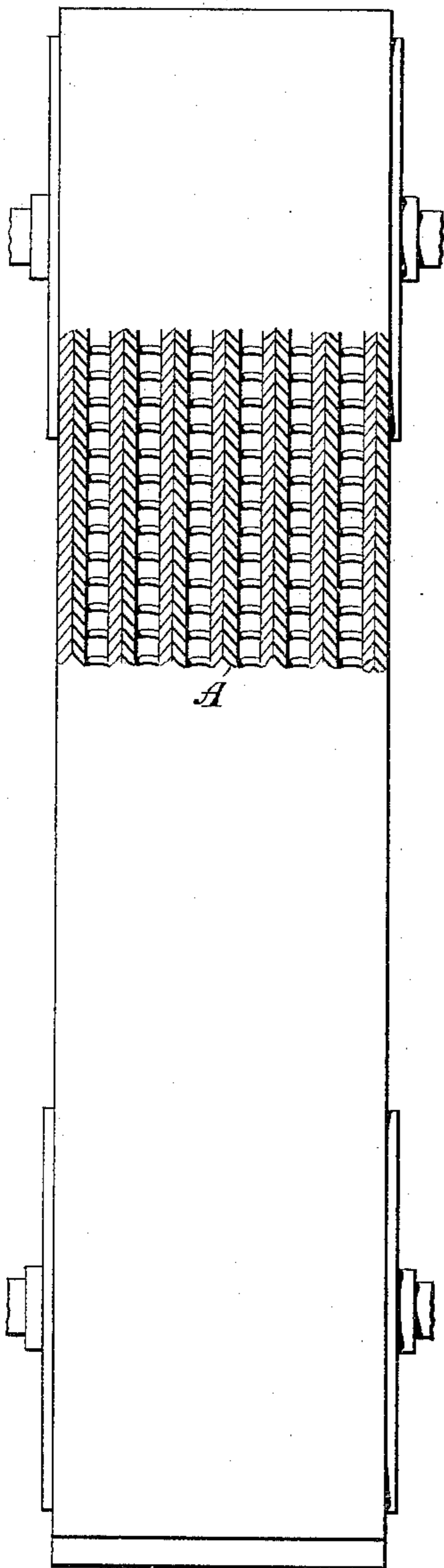
(Model.)

W. C. EDGE.  
BELTING FOR MACHINERY.

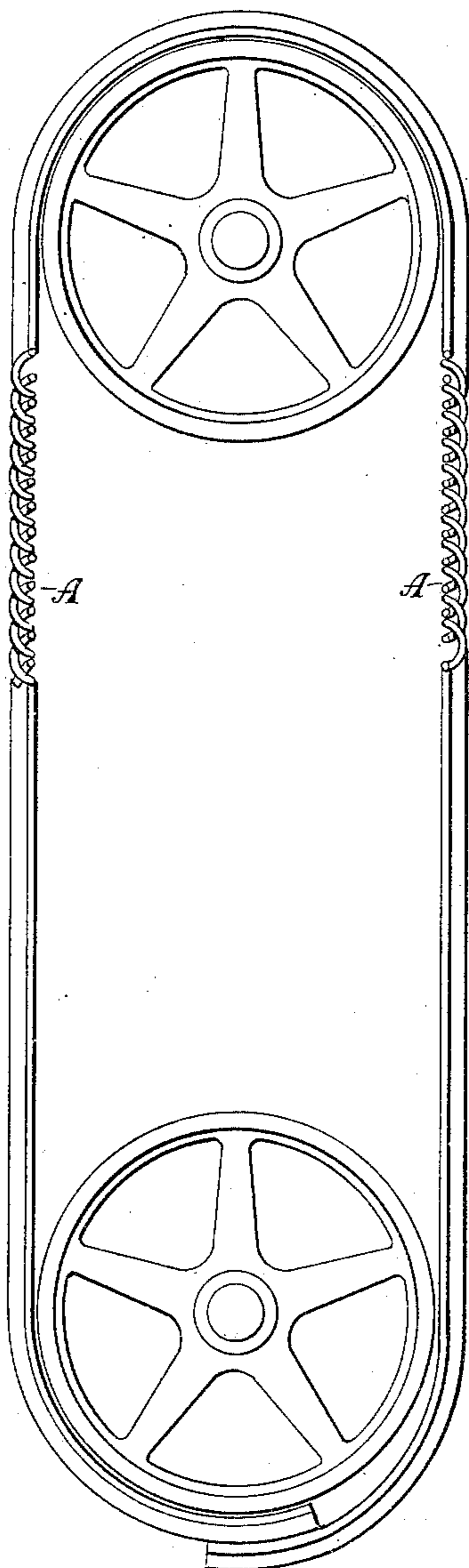
No. 401,779.

Patented Apr. 23, 1889.

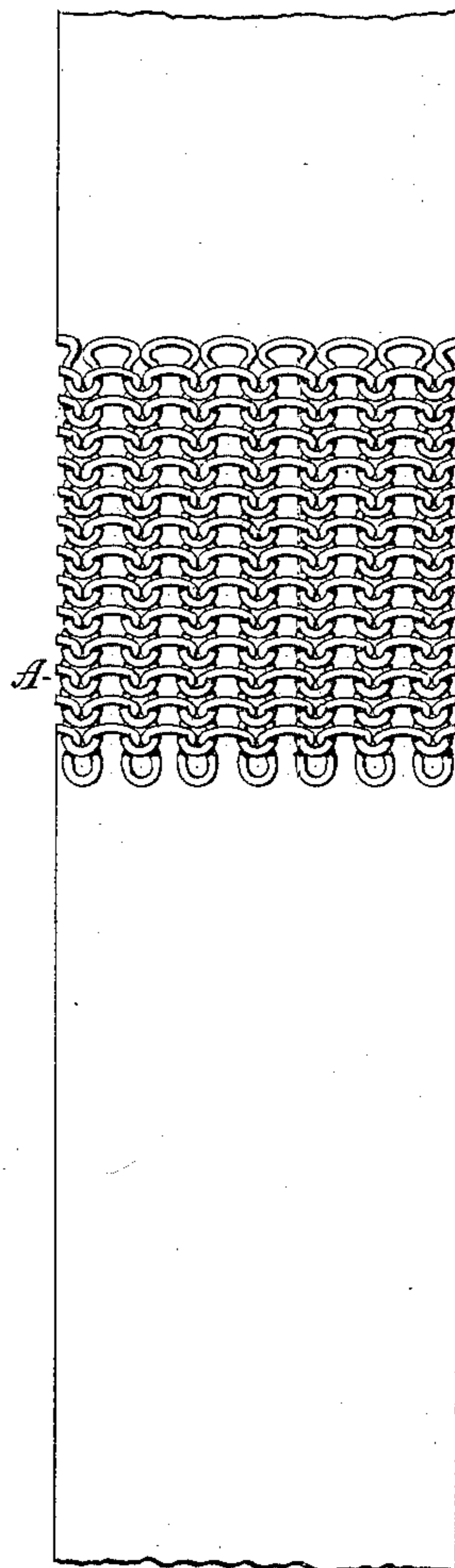
*Fig. 2.*



*Fig. 1.*



*Fig. 3.*



WITNESSES:

*Gustave Dietrich.*  
*J. F. Bourne.*

INVENTOR.

*Wm. C. Edge*

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# UNITED STATES PATENT OFFICE.

WILLIAM C. EDGE, OF NEWARK, NEW JERSEY.

## BELTING FOR MACHINERY.

SPECIFICATION forming part of Letters Patent No. 401,779, dated April 23, 1889.

Application filed January 21, 1889. Serial No. 296,979. (Model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. EDGE, a resident of Newark, Essex county, New Jersey, have invented certain new and useful Improvements in Belting for Machinery, of which the following is a specification, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 represents a sectional view of part of a belt of my invention. Fig. 2 is a face view, and Fig. 3 a reverse view, of the same.

The object of this invention is to furnish a substitute for the leather belts now usually employed in the transmission of power in machinery. I have found that a belt made of knitted-wire fabric is in every way as a transmitting medium as useful as one made of leather, it being at the same time much less expensive to produce and more durable than a leather belt.

The invention consists, therefore, of a knitted-wire belt, as hereinafter described.

In the drawings, the letter A represents the wire fabric of which the belt is composed. This wire fabric is of the kind described in Patents No. 127,227, of May 28, 1872, and No. 242,616, of June 7, 1881, and when used as belting is by preference applied with the unribbed side next to the pulleys, because that is the smooth side. Fig. 2 is intended to represent the ribbed side, and Fig. 3 the unribbed side, of this belting.

The knit-wire belting here described can be used without butt-seams, lap-seams being fully as useful with this construction. In other words, a piece of fabric of proper width and about the proper length is laid around the pulleys and the ends of the fabric overlapped and then tied together by wire or string, thereby producing a complete oper-

ative belt. Experiments and practical tests have satisfied me that this wire-knit belt is very durable and very strong, and that a comparatively thin belt will do the work for which very heavy leather was previously required.

It will be understood that I do not claim, broadly, a knitted-wire fabric, the same having been made by me and used for manufacturing articles of jewelry and other purposes; nor do I claim, broadly, a metallic belt for driving machinery, as I am aware that numerous attempts have heretofore been made to produce a practical belt made wholly or in part of wire. Owing to the peculiar and exacting nature of the service required of a drive-belt, the attempts to make such belts of wire have resulted in complicated structures, it being found extremely difficult to produce a belt made wholly of metal which shall possess all the characteristics necessary in practical use.

A belt constructed as herein described is light, strong, flexible, not likely to stretch or sag, and takes a good grip on the pulleys. The smooth or flush surface, being turned inward, makes a good contact with the surface of the pulleys, while the ribs on the opposite side give strength without interfering with the flexibility of the belt.

I therefore claim as my invention—

As an improved article of manufacture, a driving-belt for machinery, the same consisting of a strip of knitted wire having a practically smooth or flush side for contact with the pulleys, and ribs on the reverse side, substantially as described.

WILLIAM C. EDGE.

Witnesses:

HARRY M. TURK,  
THEO. F. BOURNE.