

C. W. STURMBERG.  
Wire-Belting.

No. 197,681.

Patented Nov. 27, 1877.

Fig. 1.

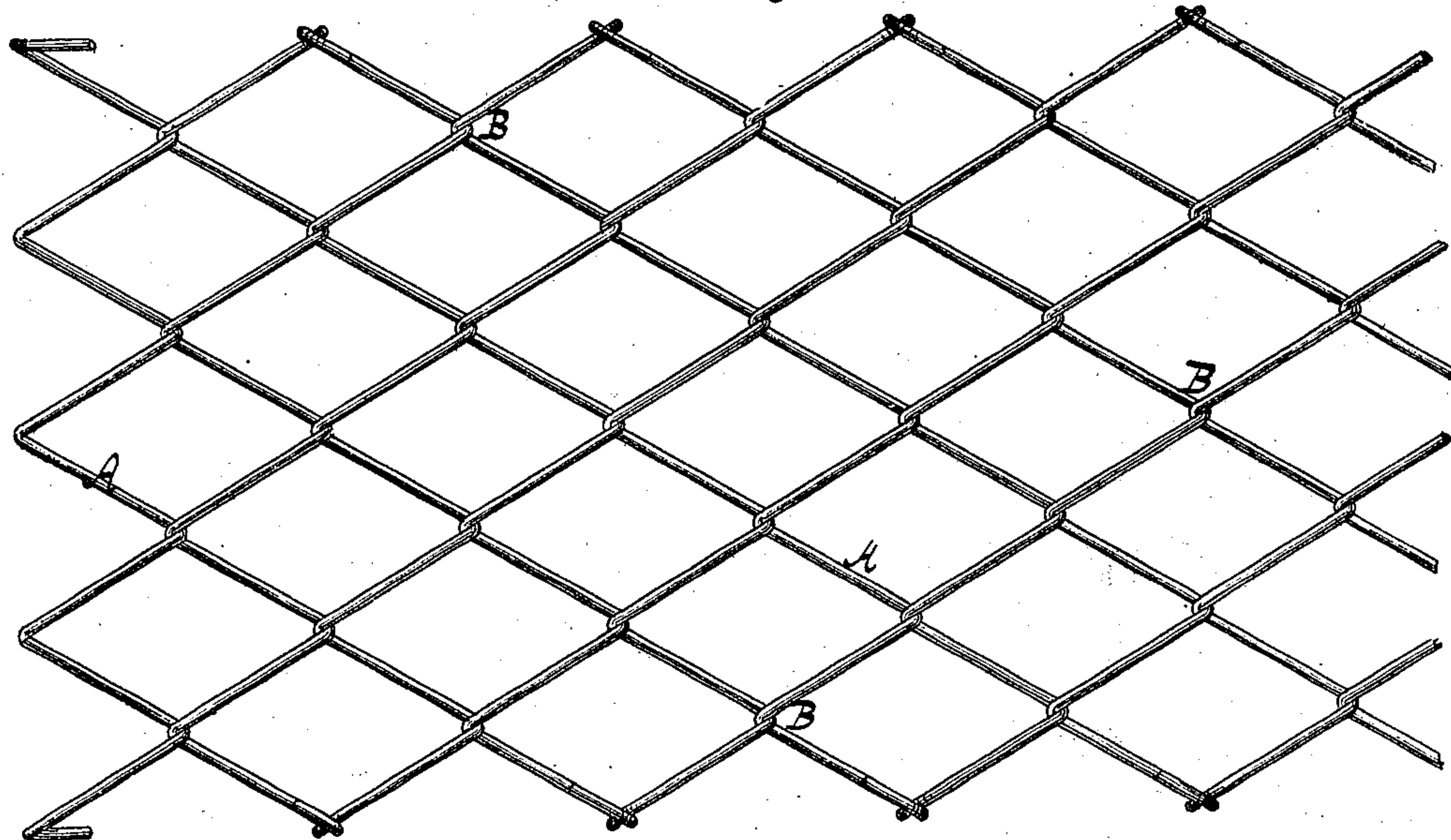
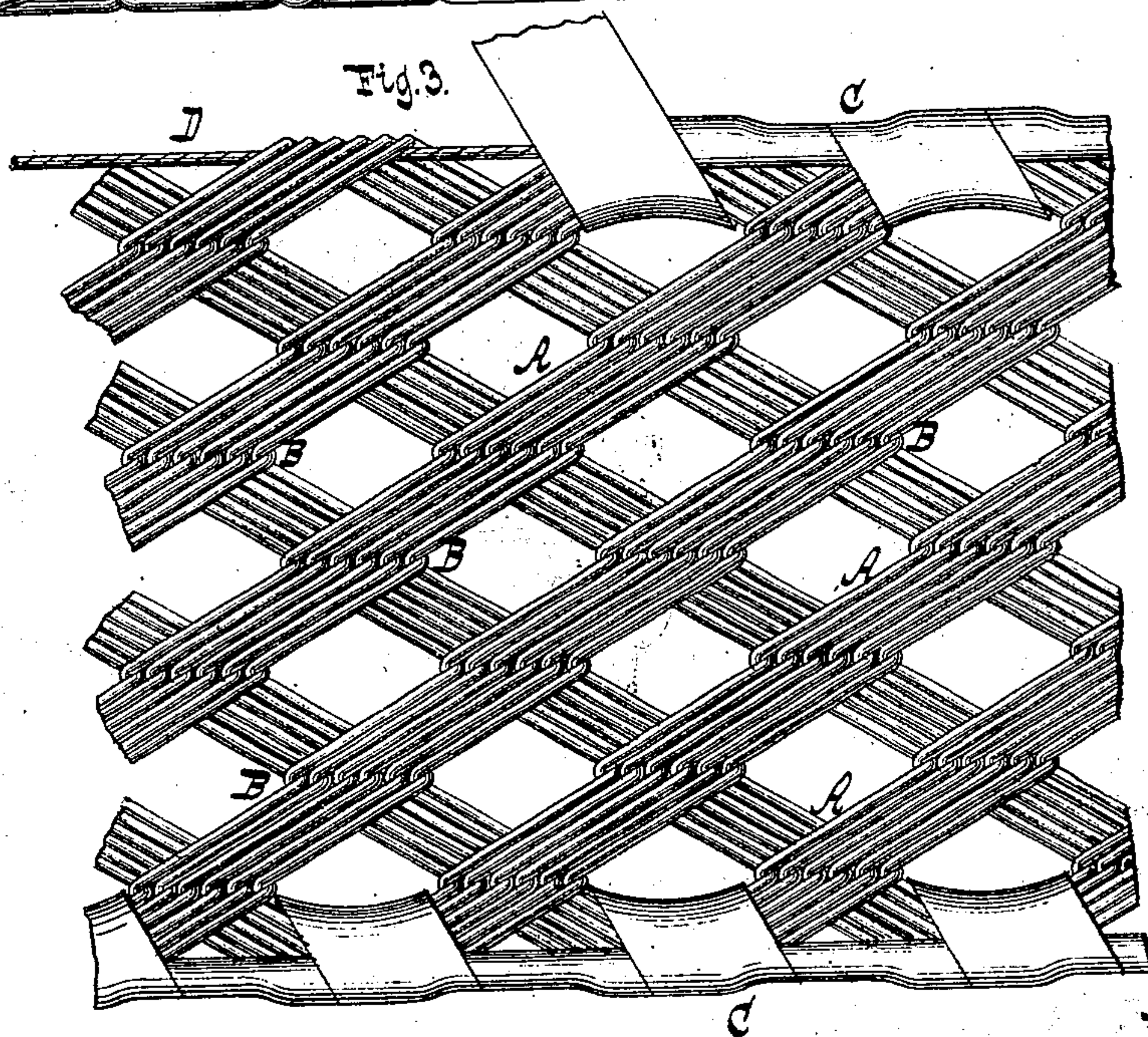


Fig. 2.



Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

CARL W. STURMBERG, OF ELBERFELD, PRUSSIA.

## IMPROVEMENT IN WIRE BELTING.

Specification forming part of Letters Patent No. **197,681**, dated November 27, 1877; application filed October 20, 1877.

*To all whom it may concern:*

Be it known that I, CARL WILHELM STURMBERG, of Elberfeld, Prussia, in the Empire of Germany, have invented a new and useful Improvement in Wire Belts, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a plan view of my belt when constructed of a series of single strands. Fig. 2 is a side view thereof. Fig. 3 is a plan view thereof when constructed of a series of grouped strands, and with a border of leather or other material.

Similar letters indicate corresponding parts.

My invention relates to belts for transferring mechanical power; and consists in a series of transverse wire strands, each bent to a zigzag shape, and the whole interlaced, whereby is obtained a flexible and exceedingly strong band or belt, and also in arranging the transverse wire strands in groups or sets, whereby the strength of the belt is largely increased without affecting its flexibility; and either form of belt may be provided with an edge-strengthening wire, and, also, if desired, with an edge-facing of leather or similar material, to increase its friction on the pulleys.

In the drawing, the letter A designates a series of interlaced wire strands composing my belt, each strand being bent to a zigzag shape, and running transversely with respect to the length of the belt. In order to facilitate the interlacing of said strands A, each is bent upon itself in the bights of the zigzag named, or where they are joined together, as at B, the bights of one strand being bent at right angles to those of the other or adjacent strands, and each strand being thus made to resemble a flat coil. After the strands A have been interlaced they are joined together in pairs by looping the ends of each pair together, as shown in Figs. 1 and 2, or in any other suitable manner.

In Figs. 1 and 2 I have shown a series of single strands of the form described; but they can also be arranged in groups or sets, as

shown in Fig. 3, each strand of one group being interlaced with one of the strands of the next or adjacent group, and the object of this arrangement being to increase the strength of the belt.

It is obvious that the number of strands to each of the groups or sets last named may be increased or diminished, according to the purpose for which my belt is to be used. My belt, moreover, can be lengthened or shortened by increasing or diminishing the number of single strands or the number of groups, as the case may be.

The form of belt having single interlaced strands may, if desired, be strengthened by wires running along, and suitably attached to, its edges.

If it is desired to give to my belt an endless form, the strands at the opposite ends thereof are simply interlaced.

I provide my belt with a border, C, of leather or other suitable material, for the purpose of increasing its frictional power; and in the example shown (see Fig. 3) this border is formed by enveloping the edges of the belt by a leather or other band, which is passed through the spaces near said edges of the belt, and also around a rope, D, drawn through the belt near its said edges.

What I claim as new, and desire to secure by Letters Patent, is—

1. A wire belt constructed of a series of transverse strands, each bent to a zigzag shape, and the whole interlaced, and either with or without an edge-facing of leather or similar material, substantially as described.

2. A wire belt constructed of a series of transverse strands, arranged in groups or sets, each bent to a zigzag shape, and the whole interlaced, either with or without an edge-facing of leather or similar material, substantially as set forth.

Elberfeld, September 13, 1877.

CARL WILHELM STURMBERG.

Witnesses:

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