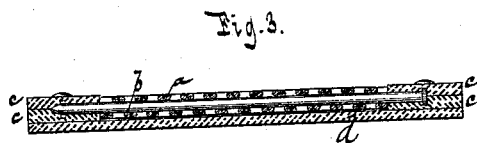
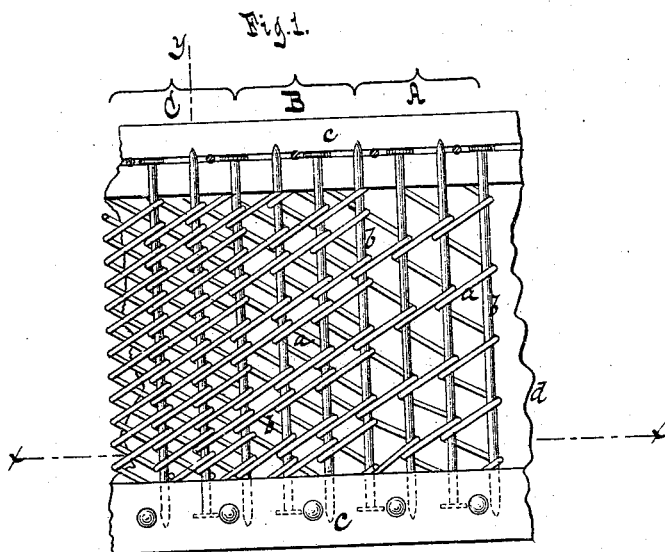


G. A. PICKHARDT.  
Wire-Belting.

No. 208,198.

Patented Sept. 17, 1878.



Witnesses.  
Otto Schufeland  
W. C. Hauff.

Inventor.  
Gustav Adolf Pickhardt  
by  
Van Santwood & Hauff,

his attorneys.

# UNITED STATES PATENT OFFICE.

GUSTAV A. PICKHARDT, OF BARMEN, PRUSSIA, GERMANY.

## IMPROVEMENT IN WIRE BELTING.

Specification forming part of Letters Patent No. **208,198**, dated September 17, 1878; application filed August 28, 1878.

*To all whom it may concern:*

Be it known that I, GUSTAV ADOLF PICKHARDT, of Barmen, in the Kingdom of Prussia and 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 or top view of a belt containing my invention. Fig. 2 is a longitudinal section thereof in the line *x x*, Fig. 1. Fig. 3 is a cross-section of the same in the line *y y*, Fig. 1.

Similar letters indicate corresponding parts.

My invention relates to that class of belts described in Letters Patent of the United States granted to Carl W. Sturmberg, November 27, 1877, No. 197,681.

The object of my invention is to produce a wire belt possessing greater stiffness in a transverse direction, and in which the strain on the strands is more uniformly distributed than in the belt described in said patent.

My invention consists in combining with each pair of the strands composing the belt a connecting-rod, which passes through the bights of the strands, so as to form a connection between the latter, and extends transversely of the belt, one end of the rods being provided with a head, which latter are embedded in an alternate manner between two longitudinal strips united together at the edges of a backing, as hereinafter fully set forth.

In the drawing, the letter *a* designates the wire strands of my belt, each of said strands being bent to a zigzag shape, and the whole interlaced, the same being, moreover, shown as arranged singly and in groups or clusters, as at A B C. Through the bights of each pair of the strands *a*—that is to say, through each two adjoining strands—passes a rod, *b*, so that this rod extends transversely of the belt, and the strands are connected together thereby.

In the wire belt before mentioned the strands are connected together merely by being interlaced. This arrangement of the strands renders the belt comparatively weak in a transverse direction, so that it bends easily crosswise, and also allows or causes an uneven distribution of strain on the strands. These disadvantages are obviated by the rod or rods *b*, which stiffen the belt without impairing its flexibility, and also to a great extent cause an even distribution of strain on the strands.

For the purpose of fastening the rods *b*, I inclose the opposite ends thereof between two strips, *c c*, of leather or other flexible material, these strips being riveted together and to a backing, *d*, and constituting a binding to the belt.

Prior to my invention driving-belts have been constructed with a series of flattened helices connected by intermeshing with each other coils of each helix, and secured in such position by means of transverse rods passing between the intermeshed parts.

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

The combination of the backing *d*, strips *c*, riveted together at each edge of the backing, the interlaced wire strands *a*, and the transverse rods *b* passing through the strands, and each having at one end a head, said heads being embedded alternately between the strips *c c* at the edges of the backing, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of June, 1878.

GUSTAV ADOLF PICKHARDT.

Witnesses:

FR. AUG. HARDT,  
C. W. STURMBERG.