T. R. WHITE & W. G. BEDFORD.

DRIVING BELT.

No. 66,111. Patented June 25, 1867.

Fig. 2.

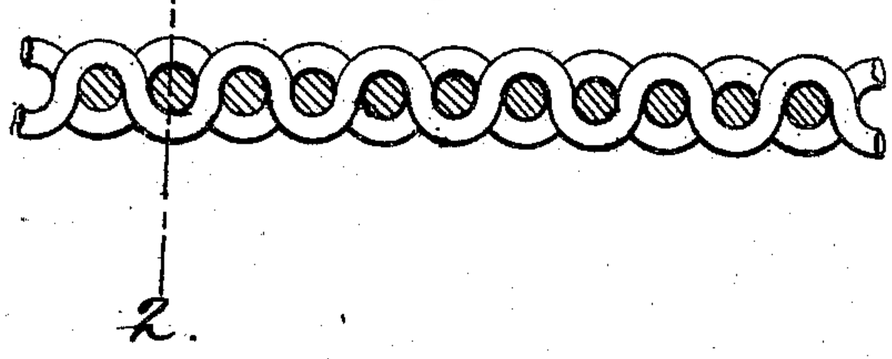


Fig. 1.

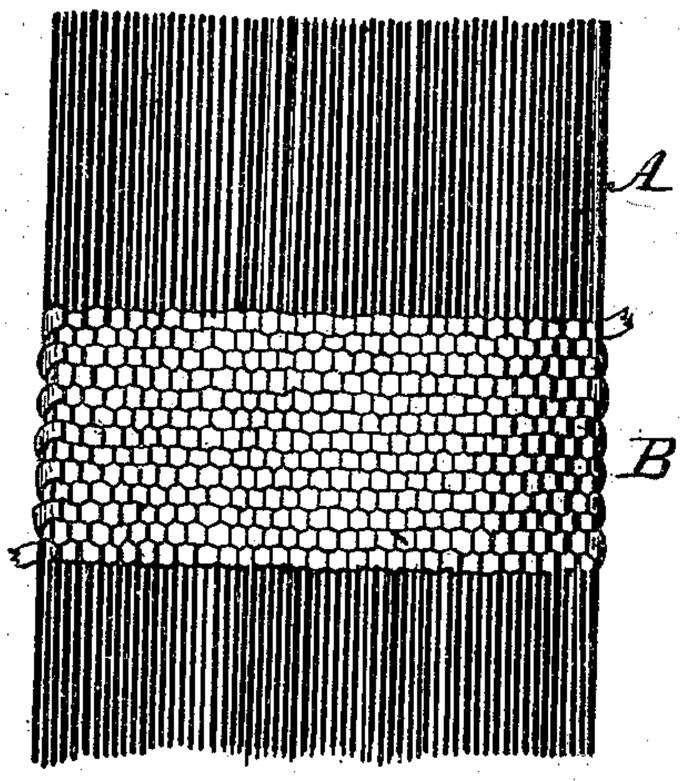
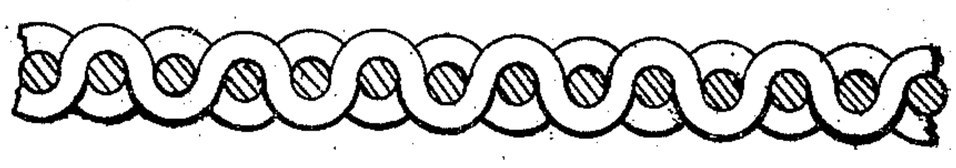


Fig. 3.



Witnesses:

Thos. Bolton

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United States Patent Office.

THOMAS R. WHITE AND WILLIAM G. BEDFORD, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 66,111, *dated June* 25, 1867; *antedated June* 15, 1867.

IMPROVEMENT IN DRIVING-BELTS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, T. R. WHITE and W. G. BEDFORD, of Philadelphia, Pennsylvania, have invented an improved Driving-Belt; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

Our invention consists of a driving-belt composed of wires, bent or corrugated, as described hereafter, and interwoven with threads or strands of cotton, hemp, jute, oakum, or other fibrous material, the belt thus manufactured being more efficient than belts composed of wire and threads heretofore made.

In order to enable others to make our invention, we will now proceed to describe the manner in which it may be constructed. On reference to the accompanying drawing, which forms a part of this specification—

Figure 1 represents a portion of our improved driving-belt.

Figure 2 a section of the same drawn to an enlarged scale; and

Figure 3 is a section on the line 1–2, fig. 2.

A represents the warp, composed of ordinary wire, which is corrugated or bent, as shown, and B a portion of the belt completed by interweaving with the warp wires, threads or strands of cotton, hemp, jute, oakum, or other fibrous material. The weaving of this fabric may be rapidly accomplished in a loom differing but little from those of ordinary construction, the wire being corrugated in the loom previous to interweaving the thread with the same, or being corrugated previous to being placed in the loom.

Experiments have proved that driving-belts thus made are most efficient and of great strength, and that they improve by continued use, owing to the surface becoming gradually smooth by contact with the pulleys, while the corrugations in the wire prevent the weft threads from slipping on the wires, as occurs when the threads are woven with straight wires in the ordinary manner.

By making the wires at each edge somewhat thicker and stronger than those in the middle the quality of the belt is improved.

That side of the belt in contact with the pulleys may be coated with gum elastic or gutta percha, or may be coated with water-proof varnish or paint, and the wires may be clothed with threads of any suitable fibrous material, by braiding or otherwise, prior to being interwoven with the weft threads.

We claim as our invention, and desire to secure by Letters Patent as a new manufacture—

A driving-belt composed of wires, corrugated or bent, as described, and threads of cotton or other fibrous material interwoven, as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS R. WHITE,
WM. G. BEDFORD.

Witnesses:
CHAS. E. FOSTER,
JOHN WHITE.