

T. W. COLLERAN.
ELASTIC WIRE CABLE.
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923,626.

Patented June 1, 1909.

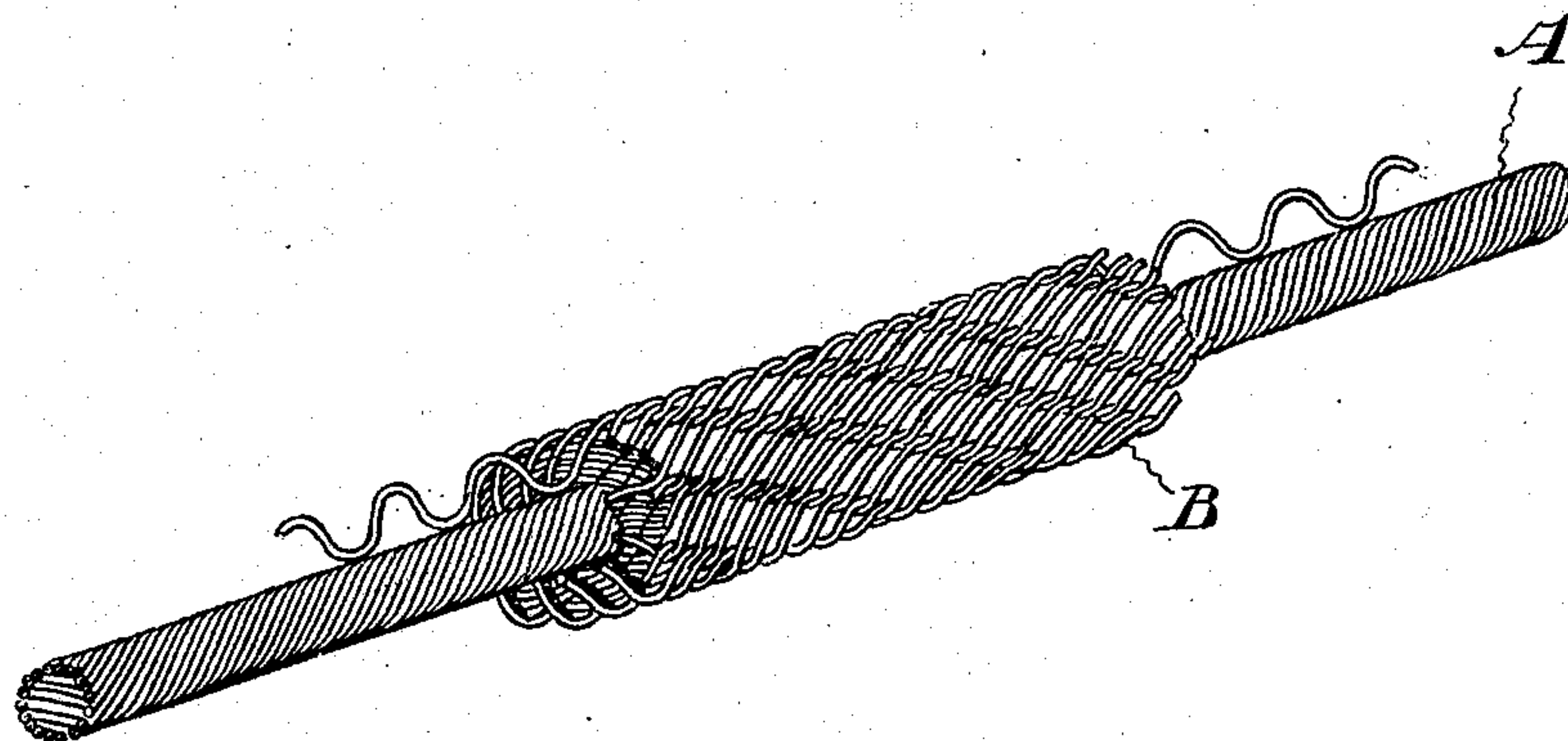


Fig. 1.

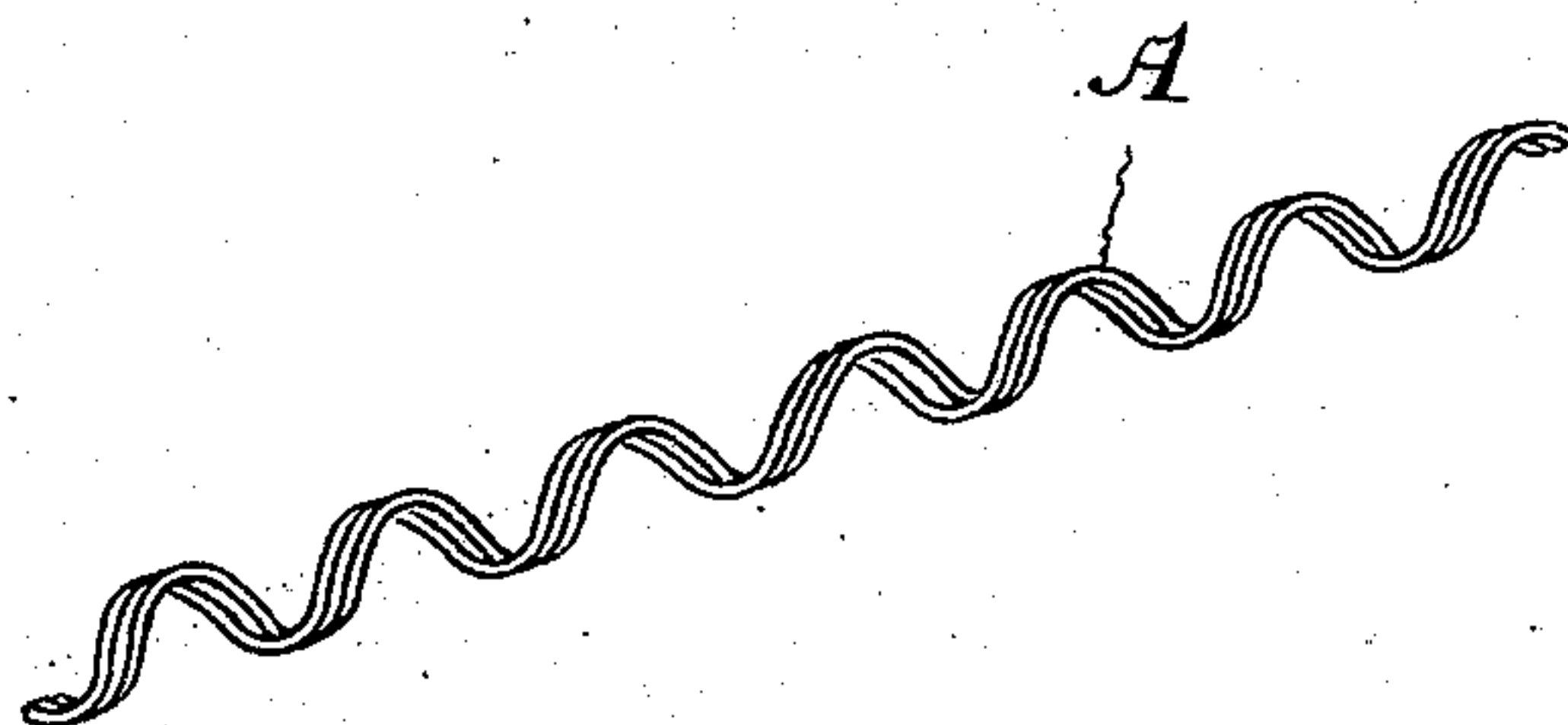


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS W. COLLERAN, OF TORONTO, ONTARIO, CANADA.

ELASTIC WIRE CABLE.

No. 923,626.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed January 18, 1909. Serial No. 472,986.

To all whom it may concern:

Be it known that I, THOMAS W. COLLERAN, of the city of Toronto, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Elastic Wire Cables, of which the following is a specification.

This invention relates to improvements in wire cables such as shown in my prior Canadian Letters Patent No. 87,049, dated May the 10th, 1904, and my object is to devise a cable possessing greater strength and elasticity than the cable therein shown.

In carrying out my invention I form a core by interweaving a plurality of coiled strands to form a filled coil. About this core I form a tube of interwoven coils, each running parallel to the axis of the cable. The specific weave is not important provided sufficient space is left within the tube for the core. For instance, a weave such as shown in the prior patent above referred to might be employed.

Figure 1 is a perspective view of a portion of a cable constructed in accordance with my invention. Fig. 2 is a perspective view of a portion of the core before the latter has been completely filled.

In the drawings like letters of reference indicate corresponding parts in the different figures.

In forming my cable I first construct a core A. This is formed by interweaving a plurality of coiled wires in the manner shown in Fig. 2 until the spaces between the coils are completely filled or closed, as shown in Fig. 1. Such a coil is of course well known in the art. About this core I form a tubular elastic cable B by interweaving coiled wires running parallel to the axis of the cable. This may be formed if desired, in the manner described and illustrated in my prior patent hereinbefore referred to, care being taken that a sufficient width of fabric be formed before being joined into a tube to provide a central space sufficiently large to contain the core A. Any weaves may, however, be employed in which a tube is formed by interweaving parallel coiled wires. Other elastic

cores might also be used though I prefer a core constructed as described and illustrated.

An elastic cable constructed in accordance with my prior patent was naturally limited in size, and accordingly in strength and elasticity, whereas with my present arrangement a larger cable can be formed containing more wire, and which therefore can be made of any desired size, strength and elasticity merely by varying the size of the elastic tube and the size of the core.

I have demonstrated that a cable constructed in accordance with my invention forms a very strong and elastic supporting cable for use at the edges, or elsewhere, of the woven wire fabrics commonly employed for mattresses.

I am aware that wire cables with cores are already known in the art, but they are either formed with the external part of ordinary twisted strands passing helically around the core or else braided, in which case the individual wires also pass helically around the core. In my construction no wire passes around the core but each runs in a direction parallel to the axis of the cable and is coiled to intermesh with its neighbors. It will be seen that the individual wires of the core also are parallel to one another and to the wires of the tube. This it is which gives the cable its great elasticity, an elasticity far in excess of that of ordinary twisted or braided cables.

What I claim as my invention is:—

1. An elastic wire cable comprising a tube of interwoven coiled wires, the wires of said tube running parallel to the axis thereof, and a separate core of interwoven coiled wires.

2. An elastic wire cable comprising a tube of interwoven coiled wires the wires of said tube running parallel to the axis thereof, and a separate core of interwoven coiled wires formed as a close or filled coil.

3. An elastic wire cable comprising a tube of interwoven coiled wires the wires of said tube running parallel to the axis thereof and a separate elastic core.

4. An elastic wire cable in which the individual wires run from end to end of the cable

without passing around the axis thereof, said cable having a separate elastic core.

5 5. An elastic wire cable in which the individual wires run from end to end of the cable without passing around the axis thereof, said cable having a separate hollow elastic core.

6. An elastic wire cable in which the individual wires run from end to end of the cable

without passing around the axis thereof, said 10 cable having a separate core of interwoven coiled wires formed as a close or filled coil.

Dated at Toronto, Ont., this 26th day of December, 1908.

THOMAS W. COLLERAN.

Signed in the presence of—

F. W. McKENDRICK,
EDGAR M. SHEPPARD.