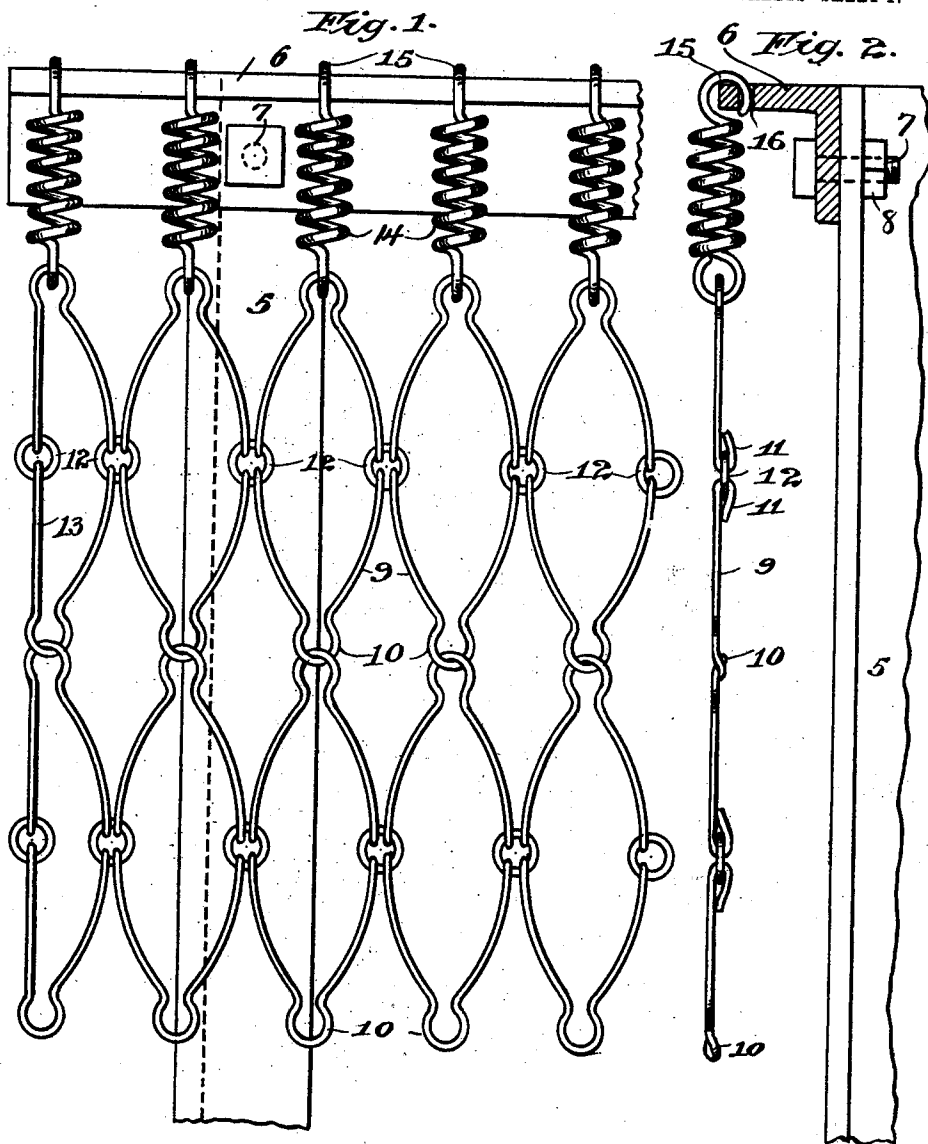


No. 827,036.

PATENTED JULY 24, 1906.

H. RICHARDSON.
BED BOTTOM FABRIC.
APPLICATION FILED JULY 28, 1905.

2 SHEETS—SHEET 1.



Witnesses,
J. S. Mann
S. H. Pond.

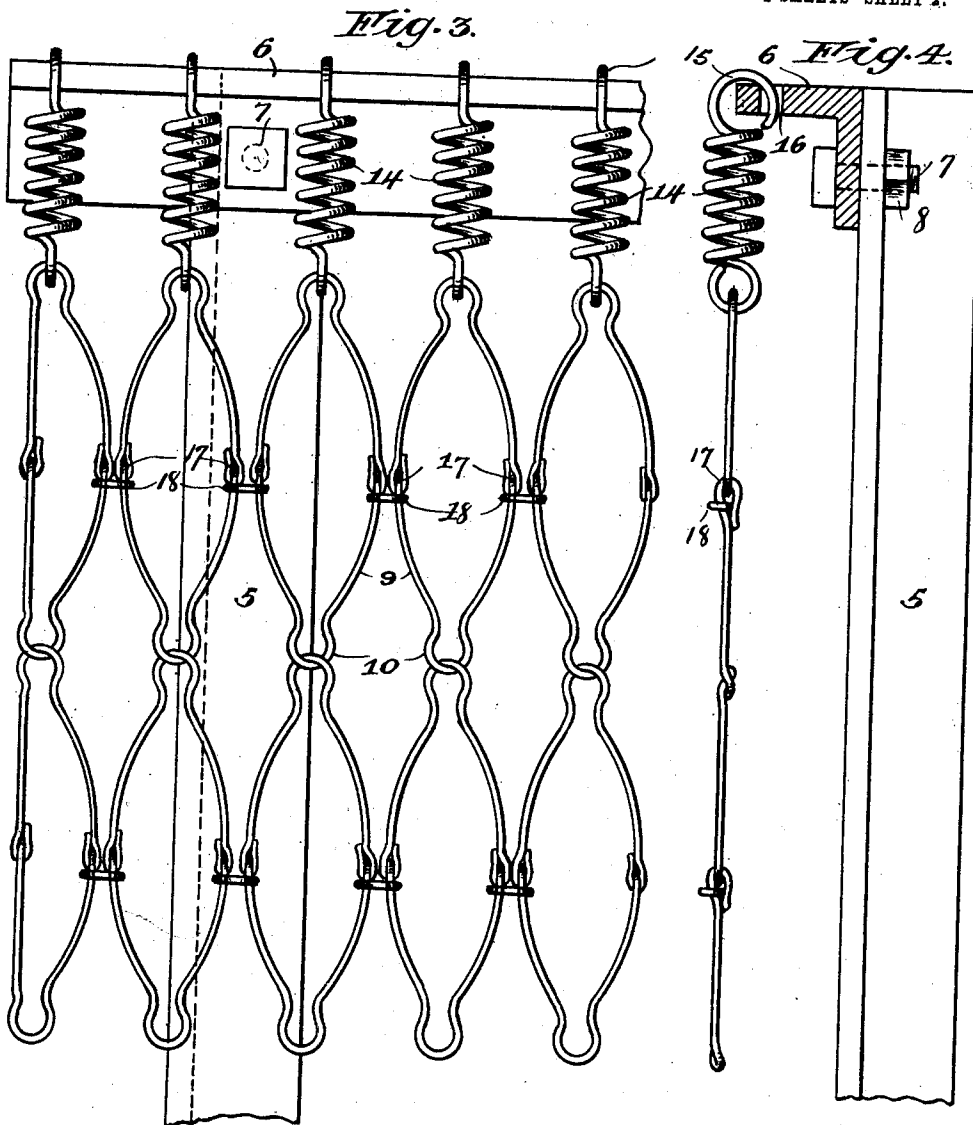
Inventor,
Harry Richardson
By *Offield, Fowler & Lathrop*
Attys.

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2 SHEETS—SHEET 2.



Witnesses,
S. S. Mann.
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UNITED STATES PATENT OFFICE.

HENRY RICHARDSON, OF CHICAGO, ILLINOIS.

BED-BOTTOM FABRIC.

No. 827,036.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed July 28, 1905. Serial No. 271,655.

To all whom it may concern:

Be it known that I, HENRY RICHARDSON, a subject of the King of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bed-Bottom Fabrics, of which the following is a specification.

My invention relates to bed-bottom fabrics, and pertains more especially to that class or type of fabrics which are made up of interconnected bent wire units. Numerous bed-bottom fabrics of this general type have been devised and used, in most of which, so far as I am aware, the units are so disposed and connected as to produce what is known as "diagonal tension," which is objectionable chiefly by reason of reducing the elasticity of the fabric and also by reason of drawing in the longitudinal edges of the fabric and requiring a positive connection of the latter to the sides of the bed-frame to counteract such tendency.

A leading object of my invention is to produce a bed-bottom fabric wherein the bent wire units shall be so disposed when connected as to substantially eliminate this diagonal tension, another object of the invention being to simplify the interconnecting of the units of the several longitudinal strands both as respects material employed and the time and labor of assembling the fabric. These objects I accomplish through the employment of wire units so bent as to present symmetrical longitudinal sides united integrally at one end to form a closed end for the unit, while at their opposite ends said sides are separated, producing an open end of the unit, these units being arranged in a series of longitudinal rows or strands, wherein adjacent units are inversely disposed so that their closed ends are adjacent to each other and their open ends are adjacent to each other, the closed ends being connected by simply interlinking the two units in the assembling of the fabric, the open ends of the units facilitating such interlinking, and the open ends being connected either by direct interhooking or by the interposition of connecting-links of ring or other form, which latter may perform the additional service of transversely connecting the longitudinal strands.

In the accompanying drawings I have illustrated two practical forms of fabric in which my invention may be embodied.

Referring to the drawings, Figure 1 is a plan view of a portion of a bed-frame, showing my improved fabric applied thereto. Fig. 2 is an edge view of the same. Fig. 3 is a view similar to Fig. 1, but showing a slight modification in the manner and means of connecting the open ends of the units; and Fig. 4 is an edge view of Fig. 3.

Referring to the drawings, 5 may designate the side rail, and 6 the end rail, of an ordinary bed-frame, said rails being preferably in the form of angle-bars rigidly united at the corners by bolts 7 and nuts 8.

The fabric of the bed-bottom is composed, preferably, of a series of bent wire units that are disposed in straight longitudinal and transverse rows or strands. While the particular form of the bent wire unit herein shown is not of the essence of the present invention yet within the invention, the unit is characterized by a wire so bent as to present a substantially symmetrical pair of sides that meet at one end in a closed end of the unit, while at the opposite end of the unit said sides are separated, thus producing an open end of the unit. In the drawings I have designated the main portion of the sides of the units by 9, the closed end which is preferably bent to present an eye being designated by 10. The free ends of the sides 9 at the open end of the unit are preferably doubled back to produce hooks, (designated by 11, Fig. 2.)

As regards the arrangement of the units it will be observed that in each longitudinal strand adjacent units are inversely disposed—that is to say, the closed ends are adjacent to each other and the open ends are adjacent to each other. The units of each longitudinal strand are connected at their closed ends by a simple interlinking, for which purpose the sides of the units at the closed ends are slightly offset in opposite directions relatively to the plane of the unit, and when the closed ends are made in the eye form illustrated this effect is produced by angularly offsetting the eye slightly relatively to the plane of the unit, which construction permits the units to be interlinked, while at the same time maintaining the body portions of the units under tension in the common plane of the fabric. The adjacent open ends of the units in the preferred form of the fabric are connected through the interposition of links 12 of ring shape, which are engaged by hooks

11 on the open ends of the units, said rings also serving to transversely unite the several longitudinal strands at suitable intervals.

On each longitudinal side of the fabric in order to produce a straight edge I employ a longitudinal strand made up of half units, (designated as an entirety by 13,) said half units being connected endwise by interlinking at their closed ends and by the ring links 12 at their open ends, the same as the entire units.

To afford increased elasticity, the fabric at either or both ends is preferably connected with the end rail 6 through the interposition of helical springs 14, having at their outer ends hooks 15, that engage apertures 16, formed in and through said rail, all as usual in this type of bed-bottom fabric.

The form of fabric illustrated in Figs. 3 and 4 differs from that of Figs. 1 and 2 only in omitting the connecting-links 12 between the open ends of the units and in place thereof directly interhooking said open ends, as indicated at 17, and connecting the longitudinal strands at intervals by means of transverse clips 18, which latter may be located at any convenient or preferred point or points, but which preferably are located adjacent to the interhooked ends of the units, as shown.

From the foregoing it will be seen that my invention provides a bed-bottom fabric capable of being easily and quickly assembled through simple interlinking and interhooking operations, presenting a neat and attractive appearance, and so organized as to resist superimposed strains along longitudinal and transverse lines, avoiding diagonal or oblique tension with the stiffness and deformation resultant therefrom.

I claim—

1. A bed-bottom fabric of the class described, comprising a series of longitudinal rows or strands each including a plurality of bent wire units, each of said units having a closed and an open end, the closed ends of adjacent units being interlinked with each other, and rigid links connecting the open ends of adjacent units, substantially as described.

2. A bed-bottom fabric of the class described, comprising a series of longitudinal rows or strands each including a plurality of

bent wire units, each of said units having an open end and a closed end formed with an eye, the eyes at the closed ends of adjacent units being interlinked with each other, and rigid links connecting the adjacent open ends of the units, substantially as described.

3. A bed-bottom fabric of the class described, comprising a plurality of longitudinal rows or strands of bent wire units, each of said units having a closed and an open end terminating in hooks, the closed ends of adjacent units being interlinked with each other, and rings engaged by and connecting the open-hooked ends of adjacent units, said rings also transversely uniting the longitudinal rows or strands, substantially as described.

4. A bed-bottom fabric of the class described, comprising a plurality of longitudinal rows or strands of endwise-connected bent wire units, each of said units having a closed and an open end with the sides of the units at the closed end offset in opposite directions relatively to the plane of the unit, and said offset ends of adjacent units being interlinked with each other, substantially as described.

5. A bed-bottom fabric of the class described, comprising a plurality of longitudinal rows or strands of endwise-connected bent wire units, each of said units having a closed end formed with an eye and an open end, the portions of wire forming the sides of said eye being offset in opposite directions relatively to the plane of the unit, and the eyes of said units being interlinked with each other, substantially as described.

6. A bed-bottom fabric of the class described, comprising a plurality of longitudinal rows or strands of bent wire units, each of said units having a closed end formed with an eye angularly offset relatively to the plane of the unit and an open end, adjacent links being inversely disposed with their closed ends interlinked, and separate links uniting the open ends of adjacent units, substantially as described.

HENRY RICHARDSON.

Witnesses:

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