G. A. TORNKVIST.

BED SPRING FRAME.

APPLICATION FILED MAY 13, 1908.

900,799. Patented Oct. 13, 1908

Fig. 1.

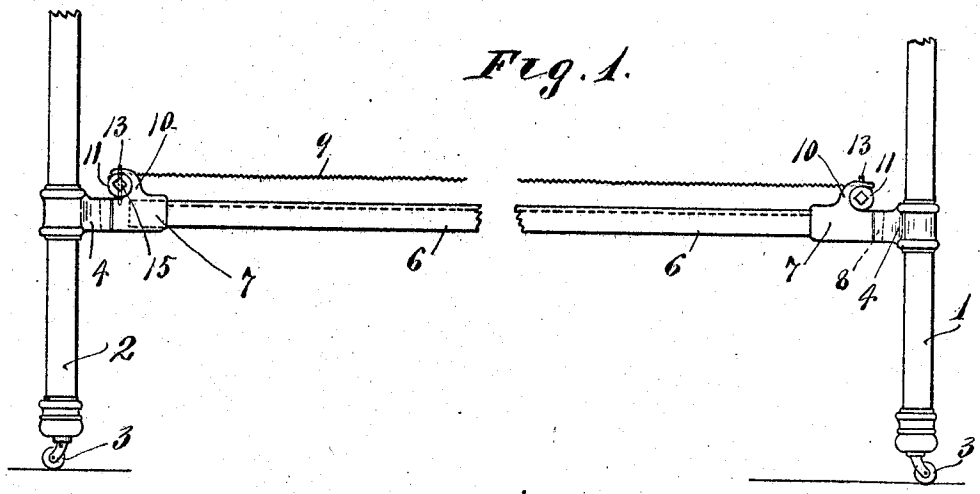


Fig. 2

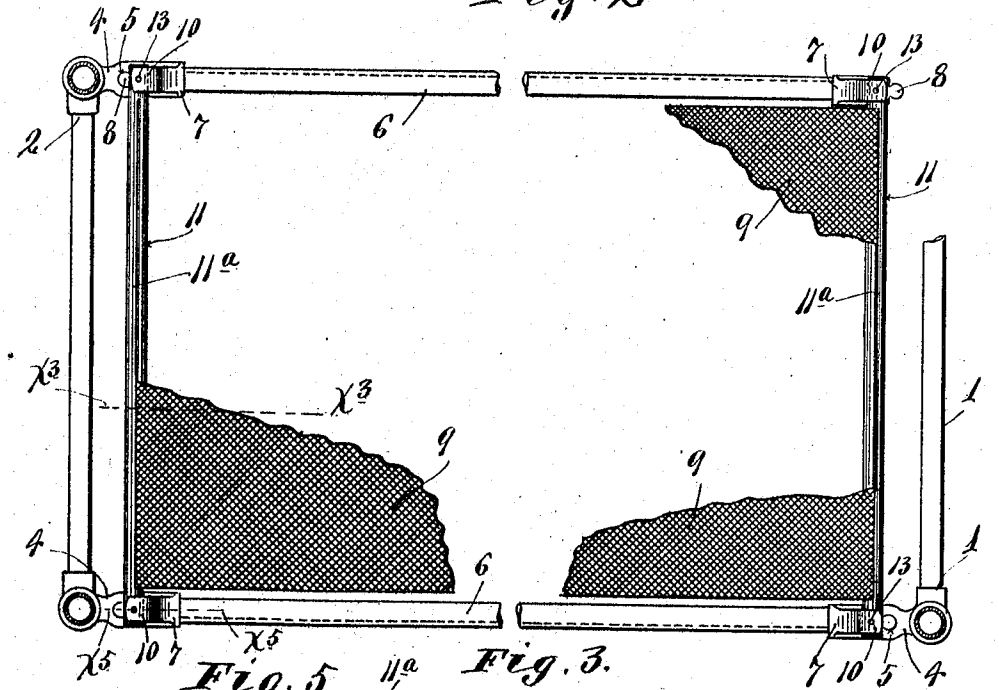


Fig. 5

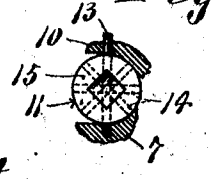


Fig. 3.

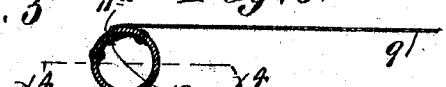
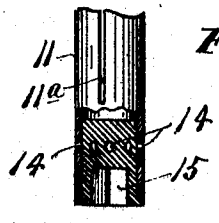


Fig. 4.



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BED-SPRING FRAME.

No. 900,799. Specification of Letters Patent. Patented Oct. 13, 1908.

Application filed May 13, 1908. Serial No. 432,607.

To all whom it may concern:

Be it known that I, GUSTAF A. TORNKVIST, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Bed-Spring Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an improved bedspring especially adapted for use in connection with iron bedsteads; and to this end it consists of the novel devices and combinations of devices hereinafter described and defined in the claim.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view in side elevation, with some parts broken away, showing my improved bed spring connected to the head and foot frames of an iron bedstead. Fig. 2 is a plan view of the parts shown in Fig. 1, some parts being removed and some being broken away. Fig. 3 is a section taken on the line x^3 x^3 of Fig. 2. Fig. 4 is a detail partly in side elevation and partly in section on the line x^4 x^4 of Fig. 3; and Fig. 5 is a detail in section on the line x^5 x^5 of Fig. 2.

The numeral 1 indicates the head frame and the numeral 2 the foot frame of an iron bedstead of standard or any suitable construction, the same, as shown, being mounted on casters 3. These head and foot frames 1 and 2, as is customary, are formed with tubular columns to which are rigidly secured, preferably by being cast thereon, coupling brackets 4 having in their inwardly projecting ends the customary lock grooves 5. The sides of the spring frame are preferably made of angle iron bars 6, to the ends of which are rigidly secured, preferably by being cast thereon, quite heavy coupling brackets 7 that are provided with vertically tapered heads 8 adapted to fit the lock grooves 5 of the coupling brackets 4 in substantially the usual way. The side bars of the spring frame also serve as the side bars to the bedstead; and, for the attachment of the woven spring body 9, the coupling brackets 7 are formed with upwardly and forwardly curved anchoring lugs 10 that receive and closely fit transversely extended rods 11, which rods are preferably formed by iron or steel pipe sections cut to the width of the bedstead. The spring body 9, at its ends, is secured to the two rods 11, and preferably this is done by slitting the pipes at 11^a so that the edges of the said wire body may be inserted into the pipes and there secured or anchored by clamping strips 12 or other suitable means, shown in Fig. 3. These rods or pipes 11 serve as windlass shafts, by means of which the spring body may be tightened.

To hold the pipes or shafts 11 against rotation, anchoring pins 13 are driven through radial perforations 14 of the said pipes and through suitable seats formed in the anchoring lugs 10 and in the bodies of the coupling brackets 7. Preferably, the pipes are provided with quite a number of perforations 14, intersecting each other at angles of about 45 degrees, as best shown in Fig. 5.

To facilitate turning of the pipes or shafts 11 to tighten the spring, metal plugs 15 having angular wrench seats are preferably secured in the ends of the said shafts, as best shown in Fig. 4.

With the device described, it is a very easy matter, at any time, to tighten up the spring body and thereby take out the sag thereof due to stretching incident to use. At the same time, the spring frame itself affords means for connecting the head and foot frames of the bedstead and thereby eliminates the necessity of independent rails for the bedstead.

What I claim is:

The combination with side rails and coupling brackets secured to the ends thereof, said coupling brackets having curved anchoring lugs, of tubular shafts rotatively held by said lugs, plugs having angular wrench seats secured to the ends of the tubular shafts, pins driven through seats in the anchoring lugs, through diametrically alined perforations in the tubular shafts and plugs and into seats in the coupling brackets, and a woven wire spring secured at its ends to said shafts, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GUSTAF A. TORNKVIST.

Witnesses:

MALIE HOEL,

HARRY D. KILGORE.