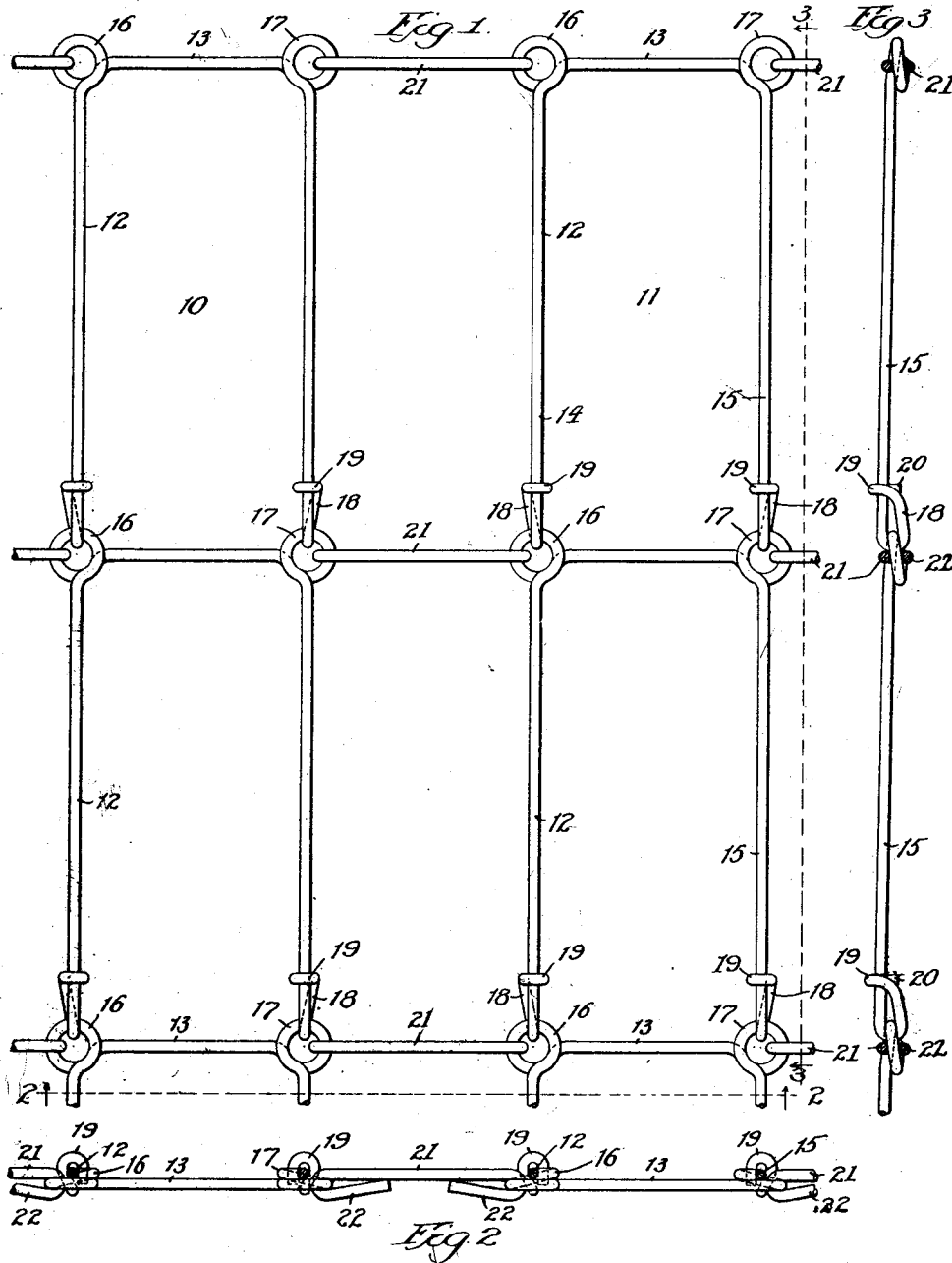


1,051,723.

Patented Jan. 28, 1913.



Witnesses.
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UNITED STATES PATENT OFFICE.

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COUCH FABRIC.

1,051,723.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES H. GAIL, a citizen of the United States, residing at Kenosha, in the county of Kenosha and State of Wisconsin, have invented certain new and useful Improvements in Couch Fabrics, of which the following is a specification.

My invention relates to wire bed or couch fabrics such as are used at the present time to a considerable extent in bed springs, wire mattresses, and sanitary or extension couches, the main and leading object of the invention being the provision of a fabric of this general character in which wire of a minimum caliber or diameter may be employed, the ends of the wire units or links being so secured as to effectively prevent their opening up or unfastening.

Another purpose of this invention is to so make the fabric that the usual transverse or cross links will be held in position and prevented from shifting longitudinally of the links composing the parallel spaced chains comprising the greater portion or body of the fabric.

In the accompanying drawing, which forms a part of this specification, and to which reference should be made for a full and complete understanding of the invention, and wherein I have illustrated a desirable and preferred embodiment of the same—Figure 1 is a fragmentary plan view of a portion of a fabric incorporating the invention; Fig. 2 is a section on line 2—2 of Fig. 1; and Fig. 3 is a section on line 3—3 of Fig. 1.

This fabric or wire body includes a plurality of spaced parallel chains each composed of a number of united wire links of substantially U-shape or form, a portion of two of such chains 10 and 11 being shown in Fig. 1. As is clearly indicated, each U-shaped link 12 is made of a single strand or section of wire of the desired or proper caliber and includes a cross-bar or strip 13 and a pair of parallel legs 14 and 15, the wire at the junctions of the cross piece with each of the legs being bent so as to form a substantially-round loop, bight, or eye 16 and 17, respectively. The end of each wire leg 14 and 15 of each U-shaped link is bent downwardly to form a securing loop 18 which passes through or engages the corresponding eye or bight of the next adjacent

link of the same chain. The end of each of such loops is bent over the top of its own leg of the link at 19, the extreme end of the wire 20 being downwardly-extended or projected so as not to interfere with, 60 rip, or tear any mattress or covering superposed on the fabric. Such bending of the wire over the link leg effectively acts to prevent unbending or opening up of the loop 18, and consequently eliminates all possibility of the separation of the links composing the chains one from another. As will be obvious, it is necessary or at least desirable to transversely connect together such longitudinal chains, and for this purpose the adjacent bights or eyes of such chains are joined or connected together by cross links 21, each end of which is bent downwardly to form a hook or loop 22 which takes into one of the round bights 16 or 17. It should be clear then that such transverse or cross-links are by engagement with these eyes or bights of the links which are arranged in transverse rows prevented from sliding or shifting longitudinally or lengthwise of the links. It should also be apparent that the top surface of such a fabric is comparatively smooth, and since all of the wire ends are below the top surface of the fabric there is no tendency or possibility for the mattress to become injured or damaged. 85

Whereas I have herein illustrated and described the links of the various chains as having closed eyes or loops as bights, it is to be understood that the form of such bights may be varied to a considerable degree, it being comparatively immaterial whether such loops or eyes are closed or not so long as they provide convenient means for the attachment of the loops 18 and the engagement of the hooks 22 of the cross-links. 95

Many other minor mechanical changes may be made in this fabric without departing from the substance and essence of the invention, and without sacrificing any of its benefits and advantages.

I claim:

1. A wire couch fabric comprising a plurality of parallel spaced apart chains divided into a plurality of uniformly sized rectangular spaces, the links of the same being substantially U-shaped with substantially closed single loop bights at the junctions 110

tion of the cross strands with the legs, said cross strands and legs lying in substantially the same plane, the ends of the latter being looped through the bights of the next adjacent link of the same chain and bent about their own legs, and cross links connecting said chains together transversely and engaging at their ends in said bights, the corresponding links of each chain lying in substantially the same longitudinal plane and the cross strands of the U-shaped links and the adjacent cross links lying in common transverse planes.

15 2. A wire couch fabric comprising a plurality of parallel spaced apart chains divided into a plurality of uniformly sized rectangular spaces, the links of the chain being substantially U-shaped and each comprising a pair of straight parallel leg portions, a straight cross strand, substantially

closed single loop bights at the juncture of the cross strands with the legs, the ends of the latter being looped through the bights of the next adjacent link of the same chain and having their ends bent downwardly, 25 and cross links connecting said chains together transversely and engaging at their ends in said bights, the ends of said cross links being bent inwardly toward the main body of the link to form substantially closed 30 loops, the legs of each loop being parallel to the legs of the laterally adjacent loops and in substantial alinement with the corresponding longitudinal loops of the respective chains, the cross strands and cross links 35 being similarly arranged.

CHARLES H. GAIL.

Witnesses:

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