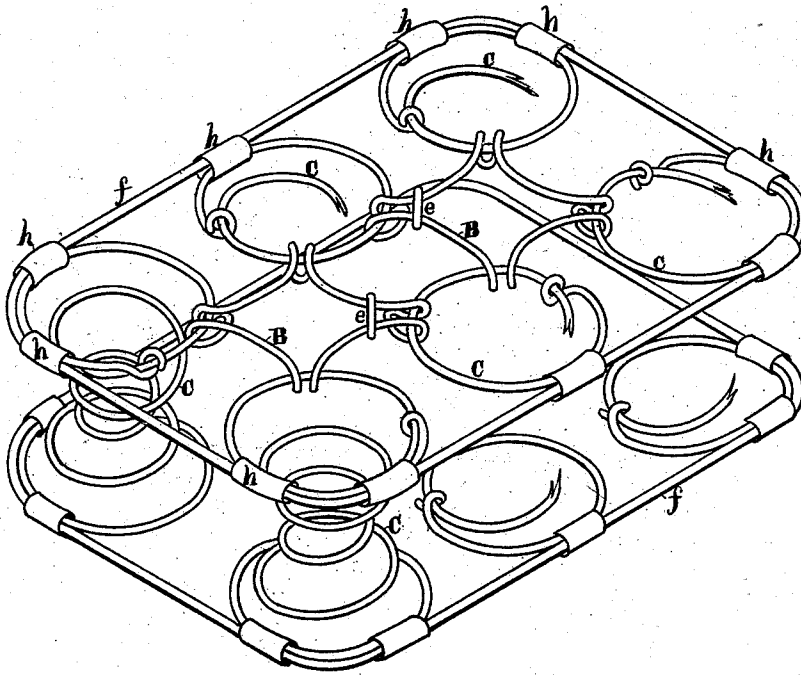


A. C. McMAINS.
SPRING MATTRESS

No. 187,660.

Patented Feb. 20, 1877.



Witnesses
Geo. H. Strong
Jms. L. Bond

Inventor
Alex. C. McMaine
by Dewey & Co
Attys

UNITED STATES PATENT OFFICE.

ALEXANDER C. McMAINS, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SPRING-MATTRESSES.

Specification forming part of Letters Patent No. 187,660, dated February 20, 1877; application filed November 25, 1876.

To all whom it may concern:

Be it known that I, ALEXANDER C. McMAINS, of the city and county of San Francisco, and State of California, have invented Improvements in Spring-Mattresses; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to certain improvements in that class of spring-mattresses in which a number of spiral springs sufficient to form the entire body and surface of the mattress, are simply connected together by a suitable connecting device.

My improvements are fully described in the following specification, reference being had to the accompanying drawings, in which the figure is a perspective view.

In constructing my mattress I connect together, by means of four-armed links or braces B, such as are described and claimed in the Letters Patent No. 160,274, which were issued to me on the 2d day of March, 1875, as many spiral springs, C, as will be required to form the entire body and surface of the mattress. This four-armed connecting link or brace B I have improved as follows:

As represented in Patent No. 160,274, above referred to, the two ends of the wire which form the link or brace are bent so as to form two unconnected parallel hooks, which project from one corner of the quadrilateral figure, into which the wire is bent. I have discovered that these hooks are liable to separate or spread apart unless they are connected together by a proper brace, which will connect the previously unconnected ends of the wire and render the brace or square link more rigid.

I therefore connect these two ends or hooks together by means of a cross-wire, *e*, as represented, thus improving the link by insuring the stability of the hooks.

My next improvement consists in binding the upper and lower edges of the mattress with a strong wire, *f*, by attaching the wire to the outer portion of the end coil of each outside spring. The upper binding-wire is attached to the upper coil of the outside springs, and the lower one to the lower coil of the outside springs. To secure them in place I coil or wrap a wide piece of sheet metal, *h*, around the upper coil of each spring and the binding-wire, thus providing a strong connection or fastener. The wires *f* are passed around outside of the edges of the upper and lower coils, and their extreme ends are fastened or soldered together, so that when they are attached to the coils by the wrapping connection above described the mattress will be completely edge-bound, and the springs will be prevented from becoming displaced. Any other suitable fastening, however, could be employed. I thus greatly improve this class of mattresses.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The connecting wire or brace *e* for uniting the hooked ends of the four-armed connecting-link B, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

A. C. McMAINS. [L. S.]

Witnesses:

JNO. L. BOONE,

FRANK. A. BROOKS.

625