F. W. HOFFMANN.

Wire-Spring Matresses.

No. 133,533. Patented Dec. 3, 1872.

Fig. I.

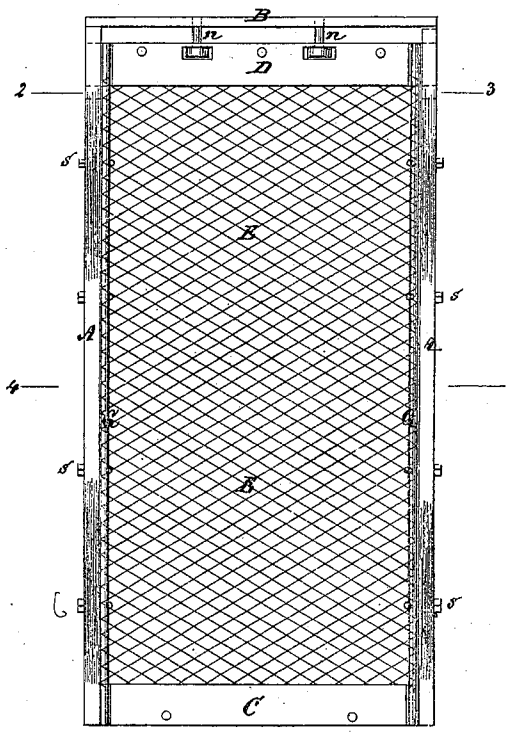

Fig. II.

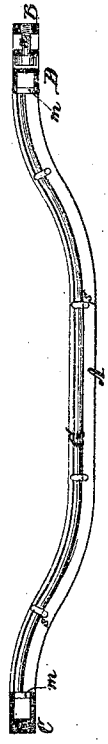

Fig. III.

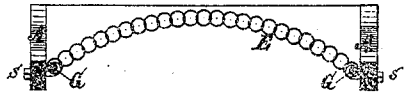

Fig. IV.

Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK W. HOFFMANN, OF MORRISANIA, NEW YORK.

IMPROVEMENT IN WIRE-SPRING MATTRESSES.

Specification forming part of Letters Patent No. **133,533**, dated December 3, 1872.

To all whom it may concern:

Be it known that I, FREDERICK W. HOFFMANN, of Morrisania, in the county of Westchester, in the State of New York, have invented a new and Improved Wire-Spring Mattress, of which the following is a specification:

The nature of my invention consists in the arrangement of spiral wire springs braided or linked together so as to form a connected web of woven wire, in combination with downwardly-curved side rails, rods, or bars passing through the outer rows of the spiral springs and fastened to the sides of the frame, whereby, by increasing or diminishing the downwardly curve of said side rails or bars, any desired curve can be given to the surface of the mattress.

Figure I represents a top view of a mattress embodying my invention; Fig. II is a longitudinal section of the same without the wire springs; Fig. III is a cross-section at line 2 3, Fig. I; and Fig. IV is a cross-section at line 5 6, Fig. I.

The frame of the mattress is formed by the side rails A A, the bar B on the head, and the bottom strut or brace C securely fastened together. The top strut or brace D is made to move in suitable slots in the side rails A A, and is fastened to the top bar B by means of screws *n n*. Between the struts C and D spiral wire springs E are stretched, linked together either single or double, so as to form one connected web of woven wire between the frame. The ends of the spiral springs E are hooked upon prongs or projections *m* made on the inner edges of the struts C and D, and by means of the screws *n n* any desired tension may be given to this web of wire springs lengthwise. Through the outer or side rows of the spiral springs rods or bars G are passed, bent or curved downward equally from the two extremes in the central part, (see Fig. II,) and securely fastened, by means of hooked bolts *s*, to the side rails A A. By this arrangement the spring web E is bent downward at the sides so as to form a curved surface on the top of the mattress, as shown in Fig. IV, the amount of curvation depending upon the downwardly bending of the side rods or bars G.

I do not claim a mattress composed of spiral wire springs linked together to form a connected web; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The downwardly curved or bent side rods or bars G, in combination with the linked spring wire bottom or mattress E, substantially as and for the purpose hereinbefore set forth.

2. The prongs or projections *m* on the inner edges of the struts C and D to hook the ends of the spiral wire springs on, substantially as herein described.

FREDERICK W. HOFFMANN.

Witnesses:

HENRY E. ROEDER,

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