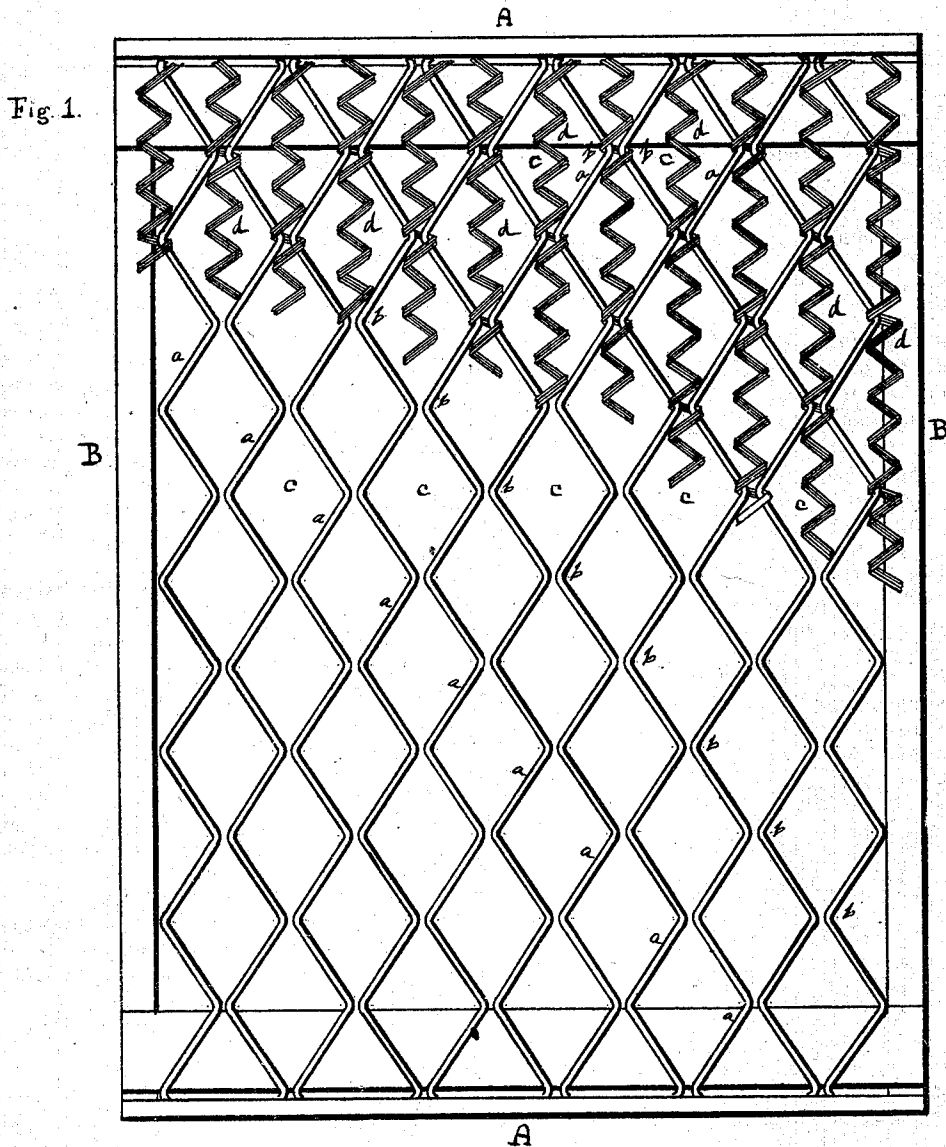


D. J. POWERS.
Wire Mattresses.

No. 144,564.

Patented Nov. 11, 1873.



Witnesses:

C. H. West
O. W. Bond.

Inventor:

Daniel J. Powers

UNITED STATES PATENT OFFICE.

DAVID J. POWERS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WIRE MATTRESSES.

Specification forming part of Letters Patent No. **144,564**, dated November 11, 1873; application filed April 28, 1873.

To all whom it may concern:

Be it known that I, DAVID J. POWERS, of Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Wire Mattresses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, in which there is a single figure representing a plan view.

My invention consists in constructing a wire mattress or bed-bottom, with a series of zigzag wires placed side by side, and so arranged that the angles of adjoining wires are opposite each other and near to each other, and in connecting such zigzag wires together at their angles by means of spiral-wire coils, substantially as specified. The zigzag wires and the connecting spiral-wire coils are to be connected at their ends to a suitable frame, and properly strained thereon for use, in the usual manner.

In the drawings, A represents the ends and B the sides of the frame, to which frame the wires and coils are suitably secured. *a* represents the zigzag wires. They should be made from high-spring wire, to give them elasticity, and may be of any suitable size. I use number fourteen or fifteen wire, usually.

The angles *b* of these wires may be about one and a half or two inches apart longitudinally. I prefer to so bend these wires that the spaces *c*, between the wires, will be dia-

mond-shaped, but do not limit myself to this form. *d* represents the spiral coils, the chief office of which is to connect together the zigzag wires at their angles. These coils *d*, being elastic and open, the wires *a* have such freedom of movement as is desirable in use, and at the same time are so connected together that they cannot, in use, move independently of each other.

These coils *d* may be made of number twenty spring-wire; and each coil may consist of a single coiled wire, or of two or more coiled wires, according to the size of wire used and the strength required. The longitudinal strength of the fabric depends chiefly upon the size and form of the zigzag wires *a*. The coils *d* must be strong enough to resist any lateral strain, and they can be readily inserted in place, so as to encircle the wires *a* at the angles *b* by turning the coil, as one coil is turned into another.

What I claim as new is as follows:

A wire mattress or bed-bottom, composed of zigzag wires *a*, connected together at their angles *b* by means of wire-coils *d*, substantially as specified.

DAVID J. POWERS.

Witnesses:

E. A. WEST,
O. W. BOND.