

F. D. HILL.

Improvement in Spring Bed-Bottoms.

No. 128,867.

Patented July 9, 1872.

Fig. 2.

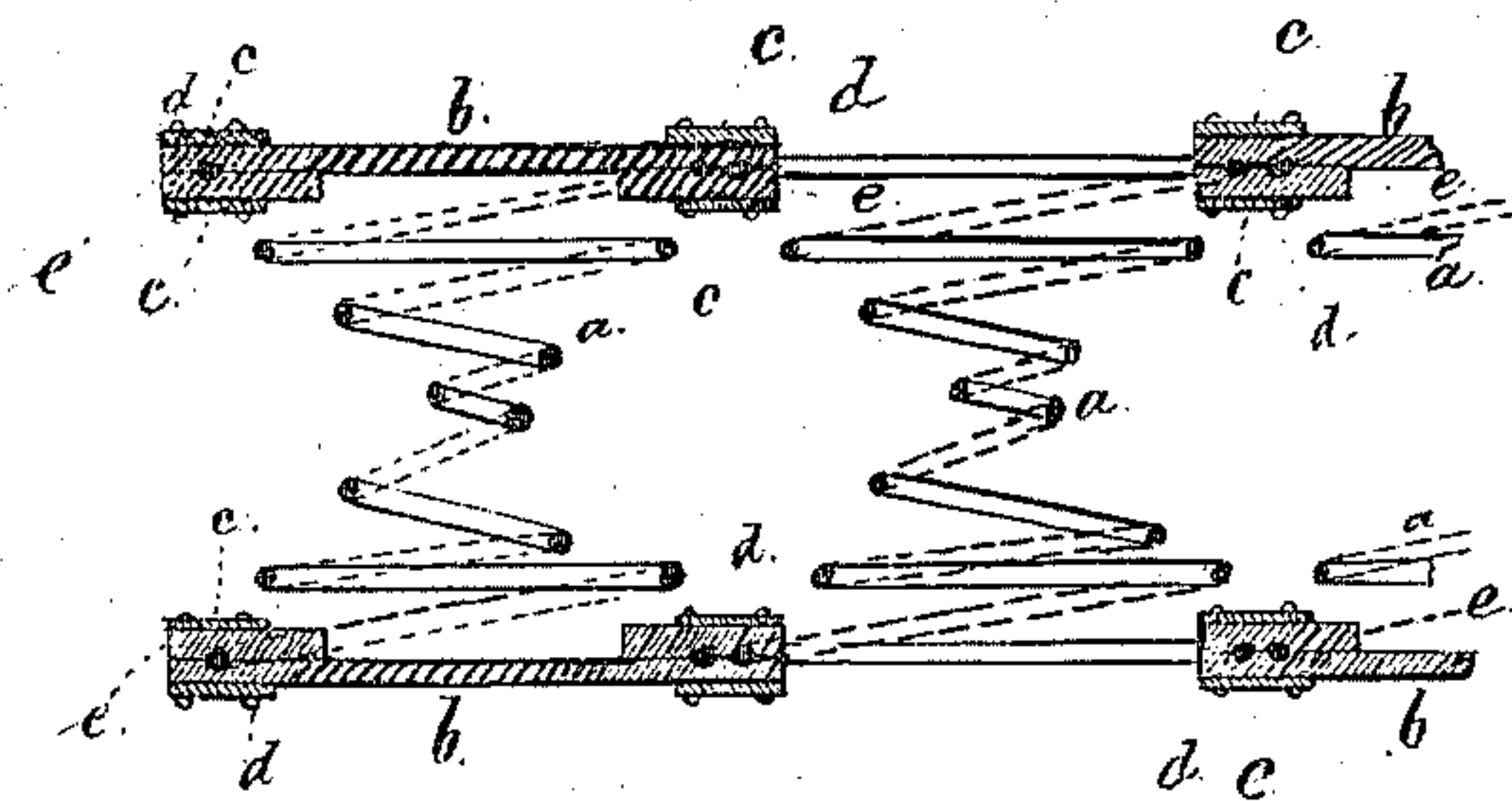
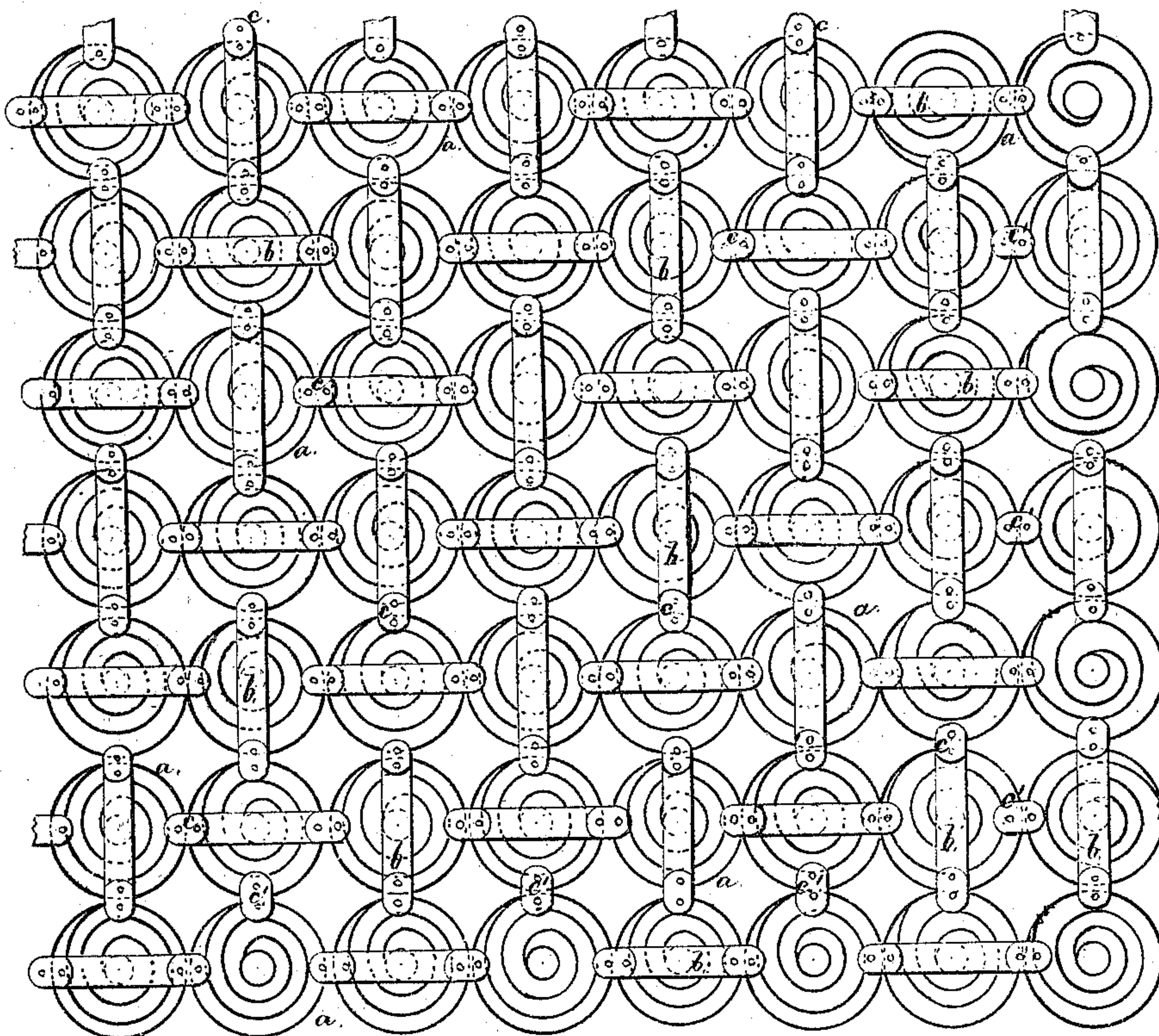


Fig. 1.



Witnesses,

Chas. H. Smith
Geo. D. Walker.

Inventor

Frederick D. Hill.
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UNITED STATES PATENT OFFICE.

FREDERICK DE WITT HILL, OF POUGHKEEPSIE, NEW YORK, ASSIGNOR TO
JOHN P. NELSON, JR., OF SAME PLACE.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 128,867, dated July 9, 1872.

To all whom it may concern:

Be it known that I, FREDERICK DE WITT HILL, of Poughkeepsie, in the county of Dutchess and State of New York, have invented an Improvement in Spring Bed-Bottoms; and the following is declared to be a correct description of the same.

Spring bed-bottoms have been made of hour-glass springs, united to each other by straps passing continuously across the tops and bottoms of the springs longitudinally and transversely of the bed, or diagonally. These straps are preferably of leather, and are both heavy and costly. It is necessary that the springs should be connected to those adjoining at both ends, and also that the large open space at the end of each spring should be subdivided by a strap to prevent the bed-clothes or mattress sinking down into the same. I effect these operations by employing a strap at the end of each spring that is only long enough to cross the spring and be clamped to the adjacent springs; and I arrange these straps so that one runs longitudinally of the bed and the other upon the next spring transversely; thereby each spring is connected at four points at each end to the adjoining springs, and only one strap is employed across each end, except in the cases of the border-springs, that require short-clip connections.

In the drawing, Figure 1 is a plan of a portion of the spring bed-bottom at one of the corners thereof, and Fig. 2 is a section of a spring and its straps.

The springs *a a* are of the ordinary character—smallest in the middle, or of an hour-glass shape. The straps *b b* are of a length to reach across the end of one spring and be connected thereto and to the adjacent springs by the clips or clamping-plates *c* and rivets *d*, as shown. To prevent noise when the parts may

move, a layer of leather, *e*, is placed between the under clamping-plate and the spring-wires. Each spring has one of these straps and connections only at each end; but by positioning these straps in the manner shown the springs are connected at four points at each end, because one strap runs lengthwise of the bed, and the straps in the adjoining springs run at right angles or transversely of the bed; hence the connections will be perfect; but there will be a great saving in the length of straps required, and each spring will have a strap across its end, subdividing the space and supporting the bedding. In attaching the border-springs it becomes necessary to employ at places the clamping-plates *c'* and rivets with short pieces of leather intervening, as represented; but, in the body of the spring bed-bottom, the straps, running alternately, as described, with their clamps, only are required.

I do not claim a spring bed-bottom in which there are straps crossing the springs, as in the patent No. 119,853. In that case some of the springs had two straps at right angles crossing each other, and other springs were without any crossing strap; hence the surface was not uniform.

I claim as my invention—

A bed-bottom in which each spring has one strap crossing each end and connected to the adjacent springs, when these straps are arranged in the manner specified at right angles to the straps of the adjacent springs, for the purposes and as set forth.

Signed by me this 13th day of April, A. D. 1872.

FREDERICK D. HILL.

Witnesses:

ROBT. N. PALMER,
H. D. VARICK.