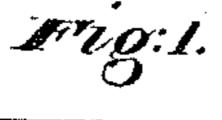
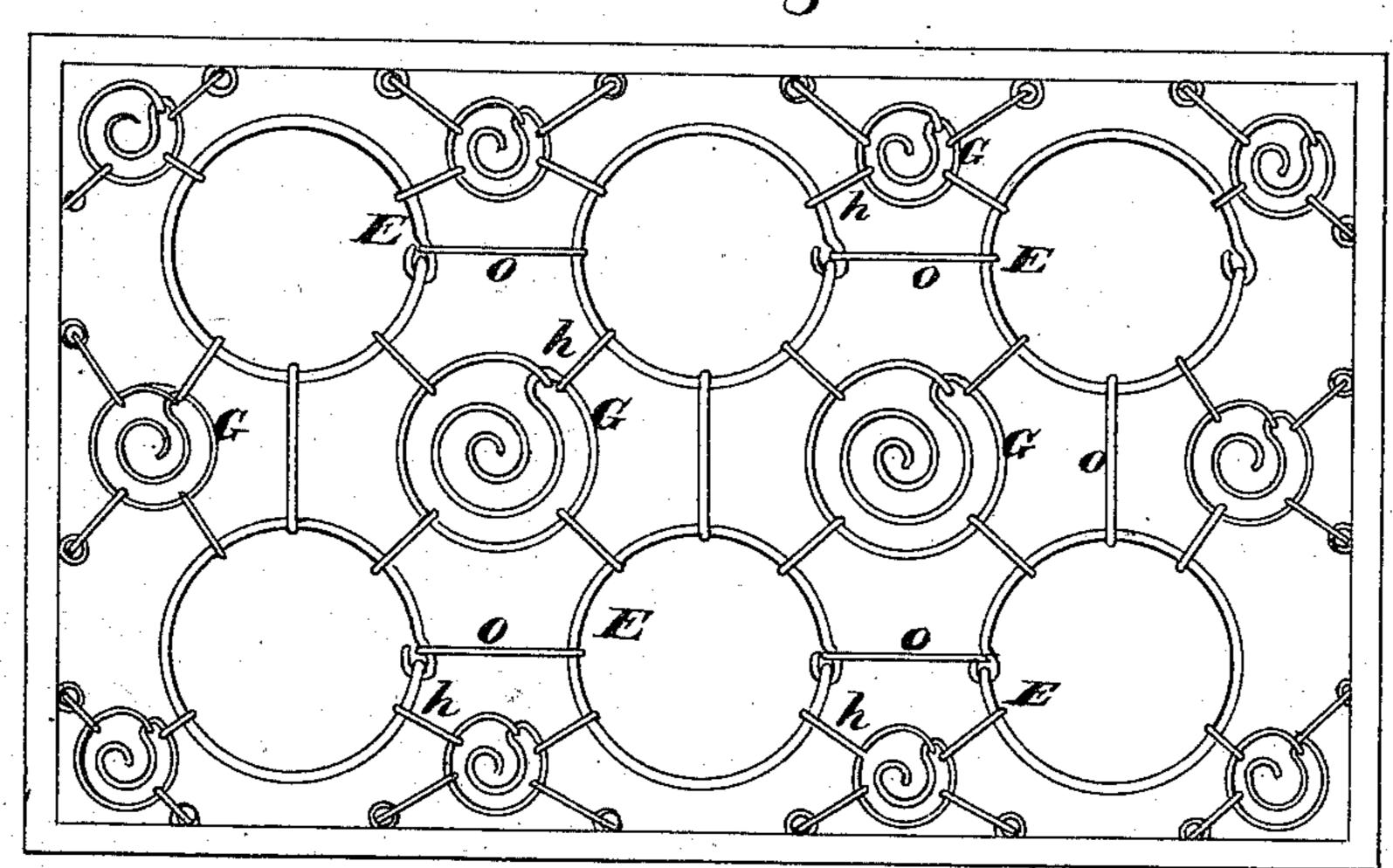
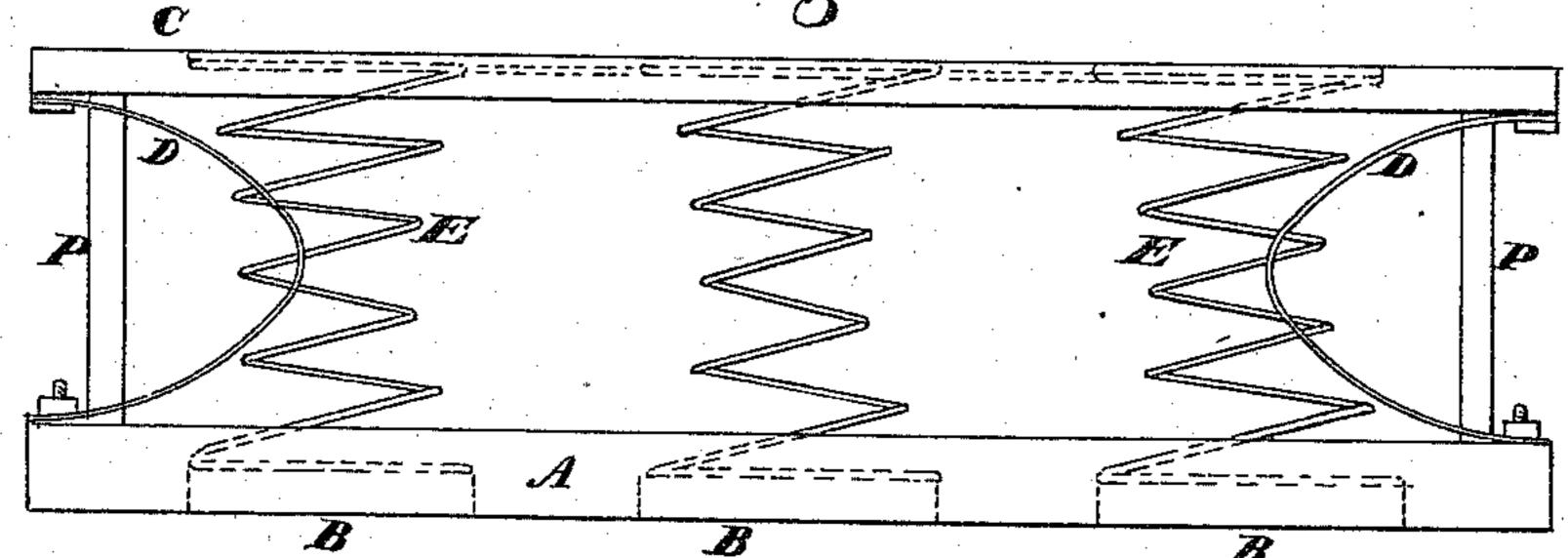
A. M. DENNEN & C. NEWHOUSE. Spring-Bed Bottom.

No. 162,906.

Patented May 4, 1875.







Witnesses

Jos. L. Borne

Invento.

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UNITED STATES PATENT OFFICE.

AUGUSTUS M. DENNEN AND CASEY NEWHOUSE, OF STOCKTON, CALIFORNIA.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 162,906, dated May 4, 1875; application filed March 25, 1875.

To all whom it may concern:

Be it known that we, Augustus M. Dennen and Casey Newhouse, of Stockton, San Joaquin county, State of California, have invented an Improved Bed-Bottom; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention or improvement, without further invention or experiment.

Our invention relates to an improved arrangement for connecting the upper coils of the springs together when they are secured in position in the bed-bottom frame.

Referring to the accompanying drawing for a more convenient description, Figure 1 is a plan view of our bed-bottom. Fig. 2 is a side elevation. Fig. 3 is a view of a single spiral.

A is the lower frame, which supports the slats B of the bed-bottom. C is the upper frame, which I support at the proper height above the frame A, by means of a metal Cshaped spring, D, applied between them at each corner, as shown. The spiral springs E, which we employ, are constructed similar to any ordinary spiral spring, with the exception of their upper and lower coils. These coils we form by bending the wire short upon itself, as at f, and coiling it backward in a direction opposite to that in which the intermediate coils are wound, and then hooking the extremity of the wire in the short bend f, so that a perfectly flat and complete ring is formed on each end of the spiral spring.

When the springs E are secured upon the slats B B in their proper relative positions,

we secure a flat coiled spring, G, in the space between the upper coils of each four springs by means of wire hooks or connections h h, which connect the top coil of each of the four springs E with the lower or base coil of the flat coiled springs G, thus providing a springbearing in what would otherwise be an open space.

We also connect the upper coils of the springs together by a wire-rod, o, as shown, to prevent the springs from spreading apart. The hooks of these wires can be covered with leather to render them noiseless.

A leather or other equivalent strap, P, has one end fastened to each of the frames A C, opposite the C springs. By shortening this connecting-strap, the tension of all the springs E, as well as that of the C springs, can be increased and the bed thus regulated for a light or heavy weight.

We thus provide a superior bed-bottom, which will not get out of shape and which has a level and uniform bearing-surface.

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

In combination with the springs E E, the flat coiled spring G, placed between the upper coils of the springs E, and connected with them by links h h, substantially as and for the purpose described.

In witness whereof we hereunto set our hands and seals.

AUGUSTUS M. DENNEN. [L.s.] CASEY NEWHOUSE. [L.s.]

Witnesses:

JNO. C. REID,
H. T. COMPTON.