(No Model.)

E. OBERNDORFER.

Spring Bed Bottom.

No. 239,829. **Patented April 5, 1881.**

fig. 1

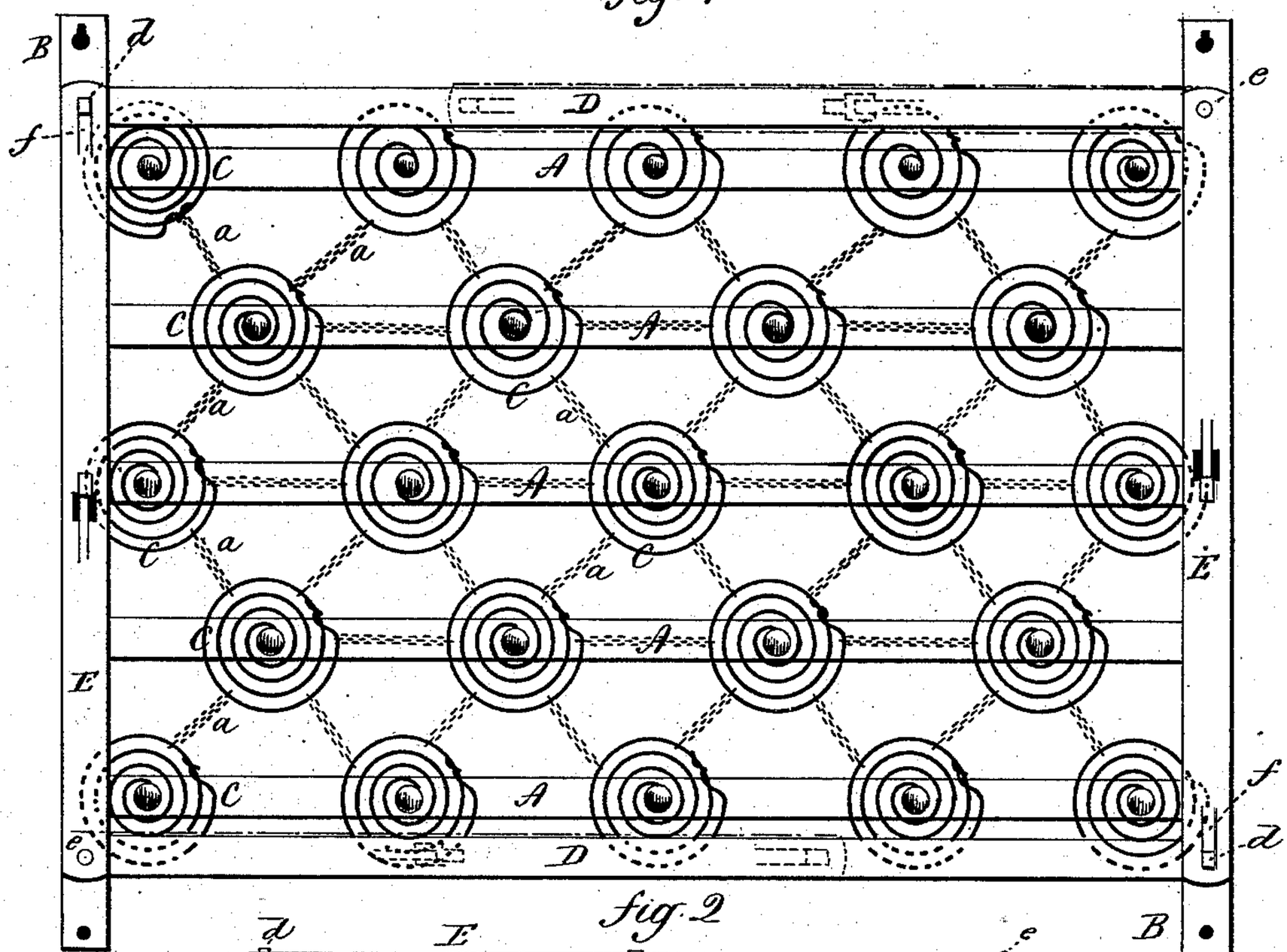


fig. 2

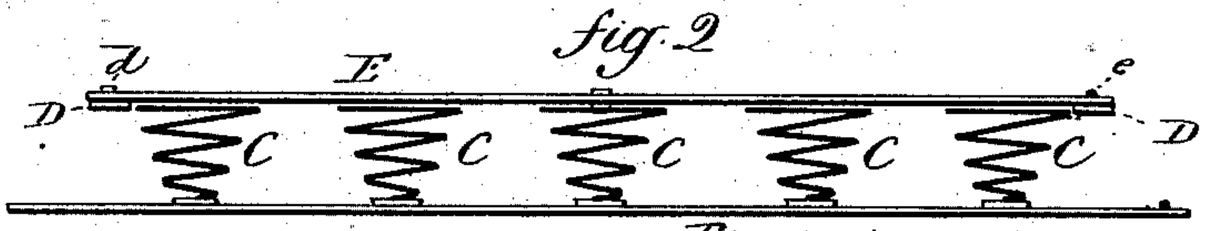


fig. 3

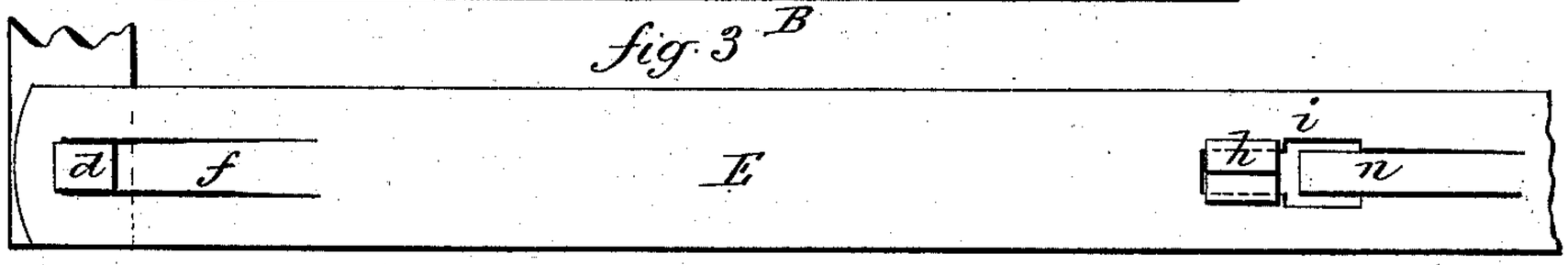


fig. 4

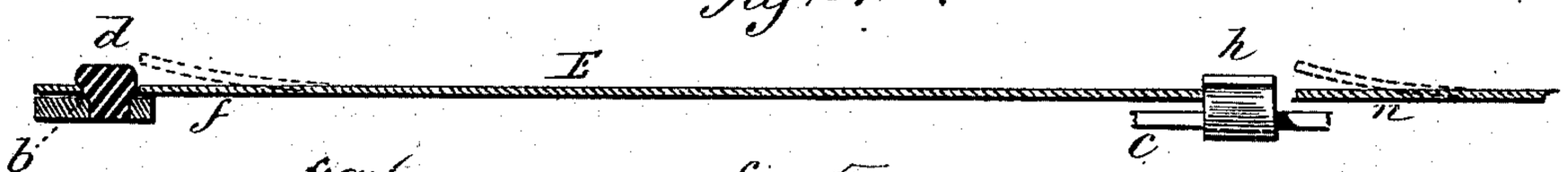


fig 6

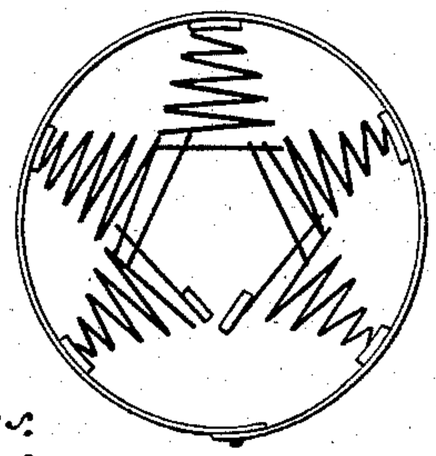
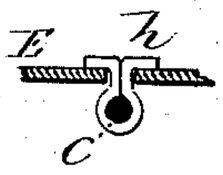


fig 5



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UNITED STATES PATENT OFFICE.

EMANUEL OBERNDORFER, OF NEW HAVEN, CONN., ASSIGNOR TO THE NEW HAVEN ROLL-UP SPRING BED COMPANY, OF SAME PLACE.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 239,829, dated April 5, 1881.

Application filed February 23, 1881. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL OBERNDORFER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Spring Bed-Bottoms; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top view; Fig. 2, end view; Fig. 3, top view of the transverse tie enlarged; Fig. 4, longitudinal section of the same; Fig. 5, transverse section through the spring-coupling; Fig. 6, end view of the bed-bottom in its rolled condition.

This invention relates to an improvement in that class of spring-beds which are composed of a series of longitudinal parallel slats connected by transverse flexible bars at the end, and having coiled conical springs arranged on the said longitudinal bars, connected together so that the bed may be rolled into a small space, as for transportation.

In the usual construction the springs at the top are simply connected by flexible connections, as short pieces of chain or straps, as shown in Fig. 1; but in practice it is found that this does not give the requisite support to the springs. They tip to the right and left, or toward the head and foot, so that frequently the springs break down.

The object of this invention is to give a support to the outside springs to hold them in their position, and thereby support the springs to which they are connected, and yet permit the bed-bottom to be rolled; and it consists in the construction hereinafter described, and particularly recited in the claim.

A A represent the longitudinal slats, which are usually made from strips of metal and connected by a transverse slat, B, at the head and foot. Onto the longitudinal slats A conical coiled springs C are arranged in the usual manner, the several springs joined togther by the usual flexible connection, *a*. Usually a longitudinal side bar, D, is attached to the top of the outside springs. The transverse slats B are also of metal and flexible or elastic, so that the bottom may be rolled one side toward the other, and the ends of the transverse slats secured together, as seen in Fig. 6. This brings the bed into a contracted state, for transportation or other purposes. While the side bars, D, hold the side springs together there is nothing to prevent the springs between them from being drawn toward each other longitudinally of the bottom. If bars like the bars D were placed across the ends and permanently attached to the side bars and the springs connected to those end bars, the longitudinal displacement of the springs would be avoided, but the bottom could not be rolled. To apply such end bars and yet permit the rolling of the bed, I take a strip of elastic or flexible metal and form a bar, E, for each end, and pivot each to the opposite side bar, as at *e* and *e*, Fig. 1. At the opposite end of the bars E, I make a perforation, *b*, to set over the stud *d* attached to the side bars. The stud *d* is provided with a head longer than the perforation *b*. A tongue, *f*, is cut from the perforation *b* inward, as seen in Fig. 3, which, partaking of the elasticity of the bar E, may be raised, as seen in broken lines, Fig. 4, so as to permit the enlarged head of the stud *d* to pass up through the perforation *b*, and then when the tongue *f* falls back it draws the perforation beneath the head and locks the bar to the stud.

To disengage the end bars raise the tongue *f*, as indicated in broken lines, Fig. 4; then lift the bar from the stud, and when so lifted the end bars are turned on their pivots *e* longitudinally onto their respective side bars, D, as seen in Fig. 1, so that when the said end bars E are turned to connect with the opposite side bars, as seen in Fig. 1, they so unite the side bars that they sustain each other; but when turned onto their respective side bars the bed-bottom may be rolled the same as if the end bars were not present. The springs at the ends intermediate between the said bars are detachably connected to their respective end bars by a device corresponding to the headed stud *d* and tongue *f*, at the side—that is to say, a coupling, *h*, (see Fig. 5,) is made fast to each spring. This coupling, having a head corre-

sponding to the head of the stud, is introduced through a perforation, *i*, in the end bar, and the tongue *n* drops in behind it, so that it becomes interlocked with the end bar; and when the end bar is to be detached, as before described, the tongue is raised, as seen in broken lines, Fig. 4, and the coupling *h* slipped from its connection with the bar.

The connection of the end springs with the end bar holds the end springs in their vertical position and prevents their tipping toward the center, and because of their connection with the intermediate springs holds such intermediate springs in their vertical position when the end bars are turned onto the side bars, as before described, so as to bring the extreme ends of the transverse slats together, in which condition they are interlocked in the usual manner, as seen in Fig. 6.

While I prefer the detachable connection described, between the end bars and side bars and the intermediate springs, other detachable connections may be employed. I therefore do not wish to be understood as limiting my invention to the precise detachable connection shown.

I claim—

In a spring-bed, the combination of the longitudinal slats A, transverse flexible slats B, and conical springs arranged on said longitudinal slats, with flexible connection between said springs, side bars, D, attached to the outside springs, combined with end bars, E, pivoted at one end to one of said side bars, and detachably connected at the other end with the other side bar, and with the intermediate end springs, substantially as and for the purpose described.

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