

J.D.F. Dahl,

Bed Bottom,

N^o 77,720,

Patented May 12, 1868.

Fig. 1.

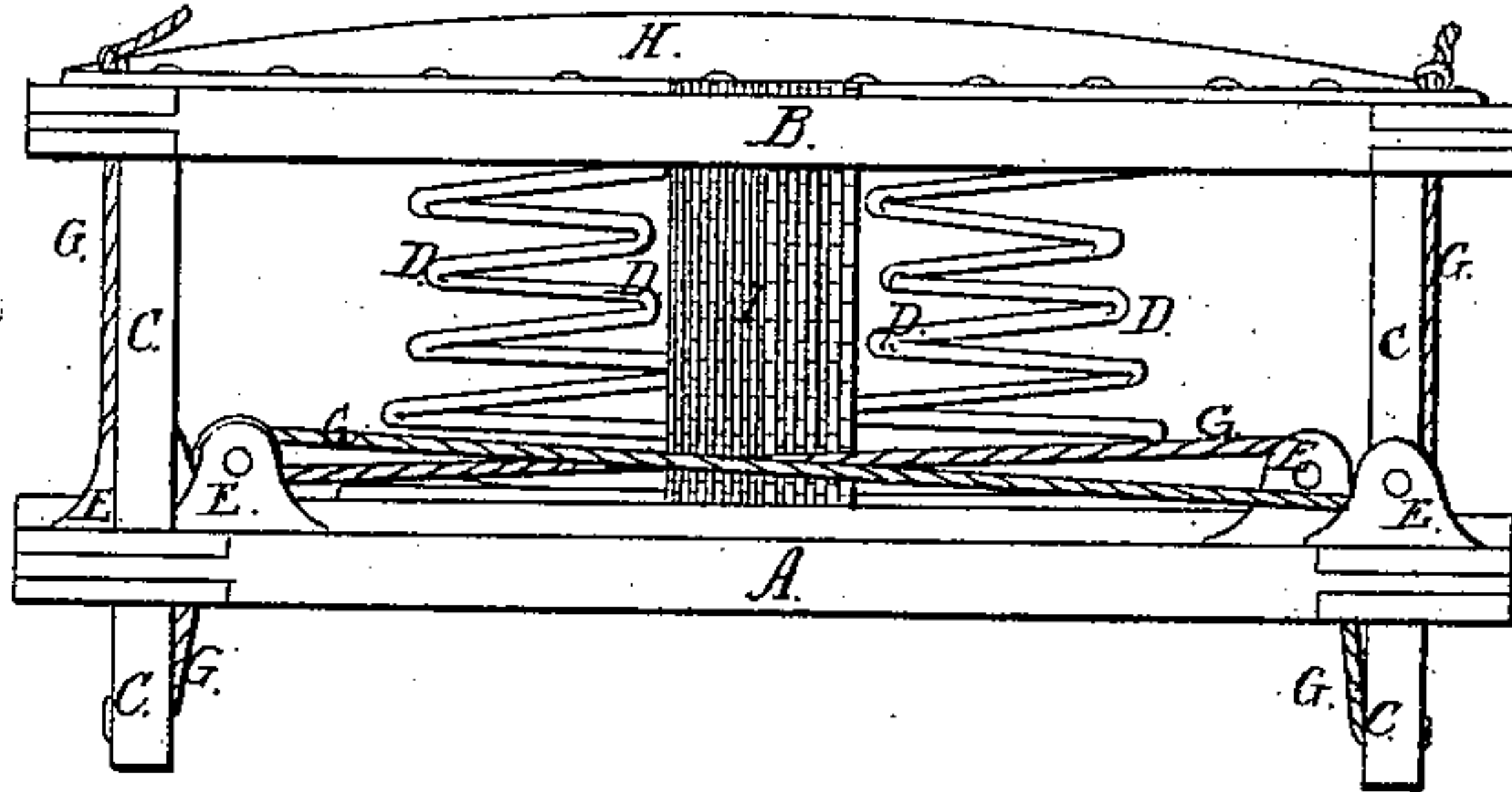
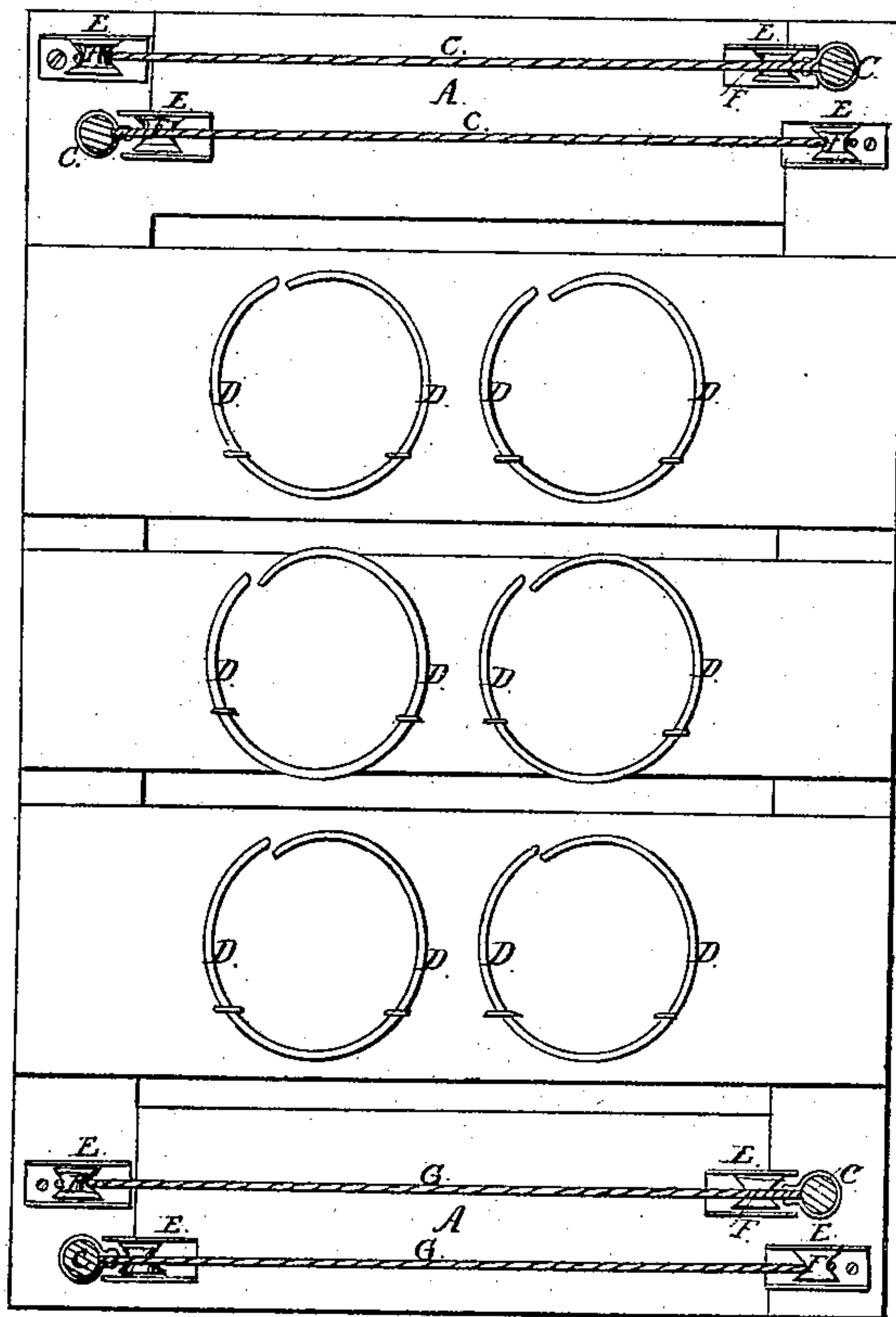


Fig. 2.



Witnesses:

J. D. Smith
Arcy B. Smith

Inventor:

J. D. F. Dahl

United States Patent Office.

J. D. F. DAHL, OF MILWAUKEE, WISCONSIN.

Letters Patent No. 77,720, dated May 12, 1868.

IMPROVED BED-BOTTOM.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. D. F. DAHL, of the city and county of Milwaukee, and State of Wisconsin, have invented a new and useful Improvement in Spring-Bed Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is an end view.

Figure 2, a plan view of the bottom frame with the top removed.

Similar letters of reference in each of the figures indicate corresponding parts.

The object of my invention is to make a spring-bed bottom so arranged that it will maintain a level position at all times, so that when the weight of a person is on one side of the bed, or when two persons are sleeping in the bed, one much heavier than the other, both sides of the bed shall move down together, and at the same time preserve all the elasticity of the springs. I make my bed-bottom of two frames, covering the top frame with canvas or some other textile fabric; the bottom frame with wide cross-pieces on which are spiral springs, said springs fastened at the upper ends to the canvas and the lower ends to the cross-pieces. At each corner of the top frame is secured a pillar or post, its lower end passing down through holes in the corners of the bottom frame, and at the lower end of each pillar is fastened a cord or chain, which passes up over a pulley, and along the end of the frame under a pulley on the opposite corner, and its other end fastened to the upper frame. In the drawing, cords and pulleys are shown only at the ends of the lower frame, but when necessary, I convey similar cords or chains under and over similar pulleys on the sides. This bed-bottom I place on bearers inside of any bedstead, so that the pillars can pass down through the bottom frame freely.

A is the bottom frame; B, the top frame; C, pillars at the corners of the frame; D, spiral springs; E, pulley-blocks; F, sheaves; G, ropes or chains; H, canvas top; I, straps at each end of the bed-bottom, to hold the top and bottom frames together, when there is no load on the bed-bottom.

The operation of this arrangement is obvious. When a weight is placed on one side of the bed, the pillars C on that side of the bed pass down through the holes in the lower frame, pulling on the cords attached to their ends, and, passing through the pulleys E, pull the other side of the bed down at the same time, thus equalizing the pressure on the springs on both sides.

I do not mean to confine myself to the use of this levelling arrangement for bed-bottoms alone, but to railroad-cars or any other platforms which rest on springs, and require to be kept in a level position.

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

The combination of the frame B, provided with the guide-rods C, and the frame A, with the springs D, cords G, and pulleys E, all constructed and arranged to operate as set forth.

J. D. F. DAHL.

Witnesses:

J. B. SMITH,

PERCY B. SMITH.