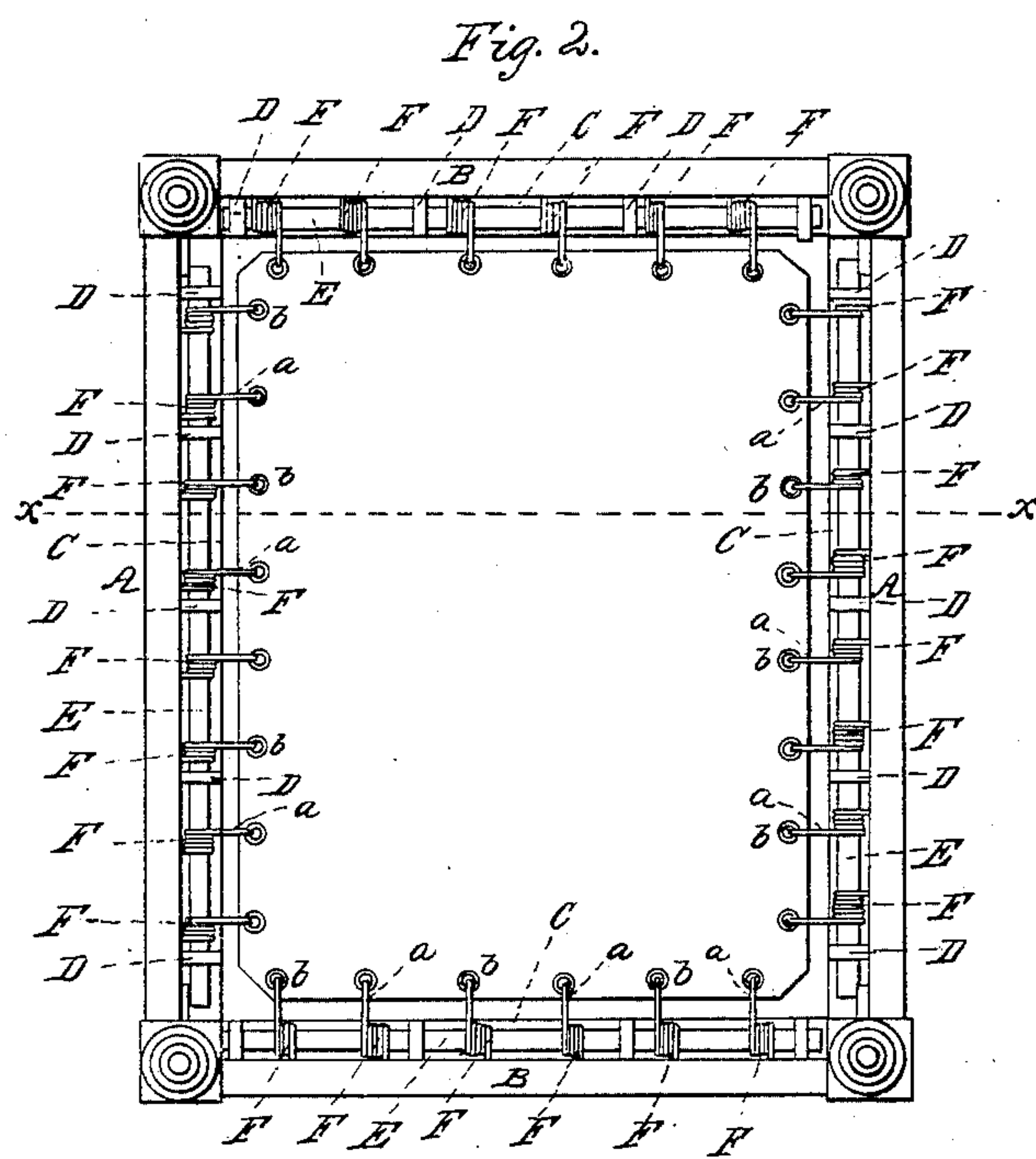
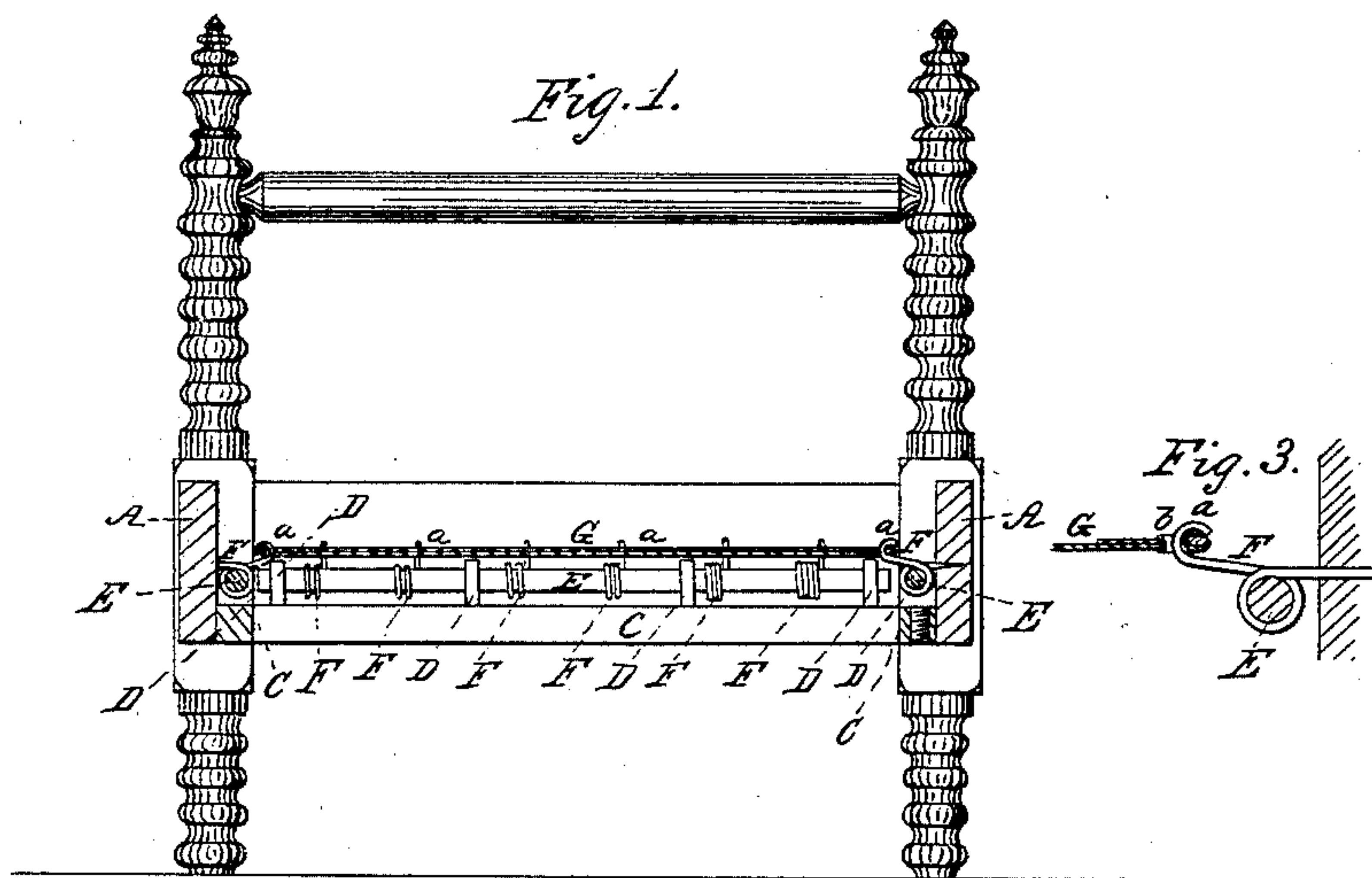


R. HATCH
Bed Bottom

No. 18,968.

Patented Dec. 29, 1857.



UNITED STATES PATENT OFFICE.

ROYAL HATCH, OF STRAFFORD, VERMONT.

SPRING-BOTTOM FOR BEDSTEADS.

Specification of Letters Patent No. 18,968, dated December 29, 1857.

To all whom it may concern:

Be it known that I, ROYAL HATCH, of Strafford, in the county of Orange and State of Vermont, have invented a new and Improved Spring-Bottom for Bedsteads; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a transverse vertical section of my improvement; (x) (x) in Fig. 2, showing the plane of section. Fig. 2, is a plan or top view of the same. Fig. 3, is a detached view of one of the springs; the rod on which it is placed being bisected transversely.

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

My invention consists in attaching the ends and sides of a canvas or sacking bottom to the end and side rails of a bedstead by means of spiral springs, arranged as will be hereinafter fully shown and described, whereby a perfectly elastic or flexible bed-bottom is obtained, and one that will yield or give, so as to conform to the different positions of the body while resting upon it.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, A, represent the side and B, B, the end rails of a bedstead of the usual construction. To the inner side of each of the rails a longitudinal strip or ledge C, is attached by means of screws, or in any other proper manner. To the ledges C, upright plates D are attached; these plates D are each perforated by a hole, and cylindrical rods E are fitted therein; a rod E extending the whole length of each rail of the bedstead, as plainly shown in Fig. 2. On each rod E, a series of spiral springs F, are placed. The outer ends of these springs are secured to the end and side rails A, B, of the bedstead; and the inner ends are bent in hook form, as shown clearly at (a) in Figs. 1 and 3.

G, represents a sacking bottom, which has eyes or thimbles (b) secured in it, all around its edges, and the hooks (a) are fitted in the thimbles (b). The sacking-bottom G, therefore, is supported by the springs F

only; and said springs should be sufficiently stiff to support or sustain the sacking bottom, so that it will have a requisite degree of firmness, and still allow the necessary degree of elasticity or flexibility.

By the above improvement, a perfect elastic and flexible bed-bottom is obtained, and one that may be produced at a trifling cost, and one that is not liable to get out of repair.

I am aware that many forms of elastic or spring bed-bottoms have been devised. Many, however, possess only a partial degree of elasticity or flexibility; for instance, wooden bars have been placed longitudinally with the bedstead and attached to springs arranged in various ways. This form of bottom is not perfectly elastic, or rather, these bottoms cannot be termed flexible bottoms, because they will yield or "give" only in one direction, and will not yield or "give" so as to conform perfectly to the various positions of the body.

My improved bed-bottom is perfectly elastic and flexible, and will yield or "give" in either direction, because the sacking bottom is attached on all sides to the springs F. It is far superior to a combination of wooden and stiff or rigid bars and springs. Such bottoms cannot be made flexible, although they may be elastic; but elasticity is not the only object to be obtained: flexibility is requisite to form an easy and yielding bottom.

The springs F take the place of the cords commonly used to stretch the sacking bottom; said springs possess the strength of the cords for supporting the sacking, and present the additional quality of free elasticity.

The superiority of canvas or its equivalent pliable materials, as a bed-bottom is well-known; its lightness, the ease with which it can be transported, and its uniformity of surface when in use renders it far more desirable than rigid bars or any other substitute. But to the best of my knowledge and belief, the canvas bottom has never before been rendered elastic as a bed-bottom by being stretched upon springs in the manner herein described.

Where slats are used, it is indispensable that a bed of wool or other substance be interposed between the body of the person and

the slats. But in my improvement, no additional bed is required, since the surface of the canvas presents a smooth, agreeable, and elastic surface on which to recline.

- 5 Having thus described my invention, what I claim as new, and desire to secure by Letters-Patent, is:—

Stretching the sacking bottom G, upon springs F, all in the manner substantially as described.

ROYAL HATCH.

Witnesses:

JAMES S. MOORE,

HENRY C. HATCH.