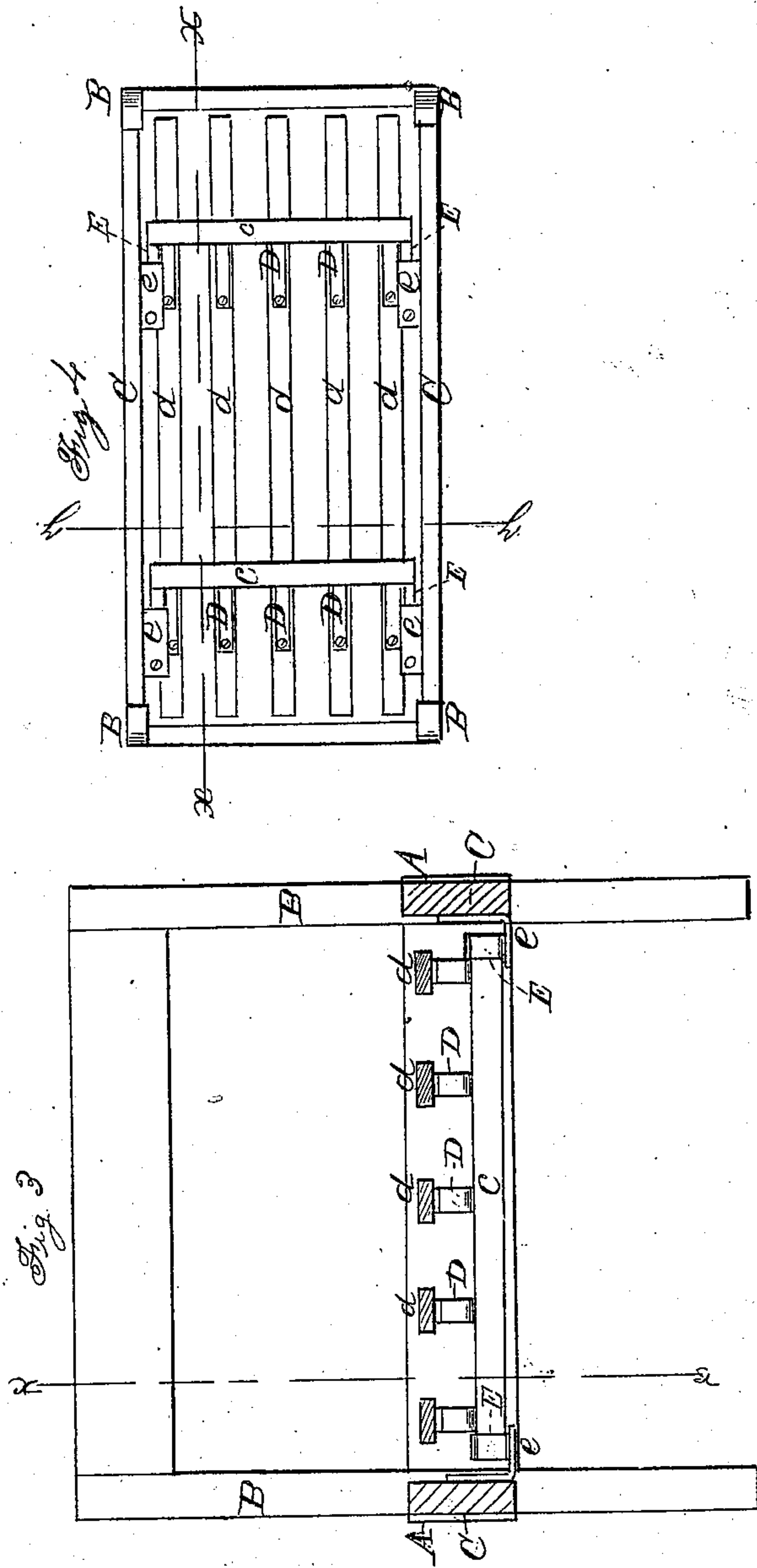
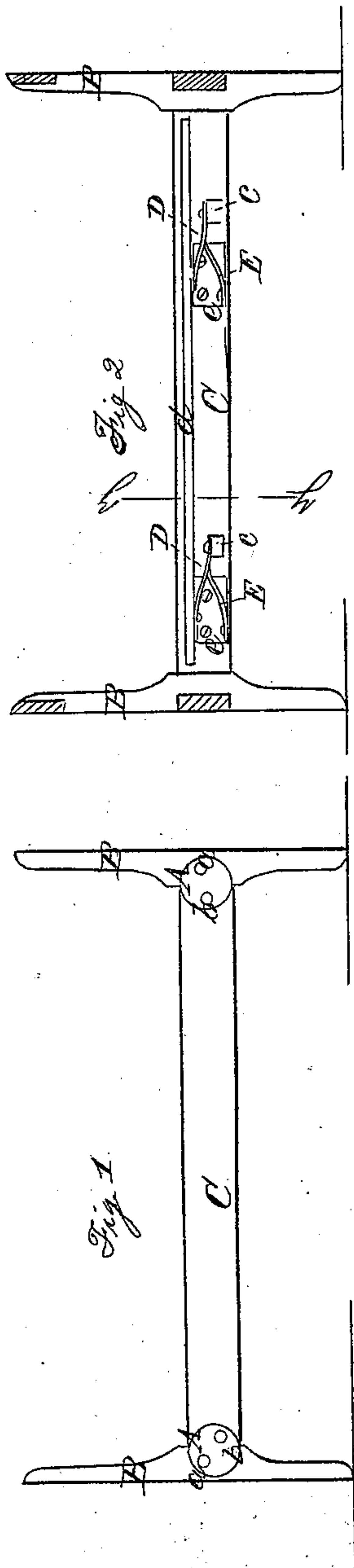


# H. Ingraham, Bed Bottom.

No. 93305.

Patented Aug. 3, 1869.



Witnesses

W. R. R. R.  
H. R. R. R.

Inventor

H. Ingraham per  
his atty C. B. Jewell

# United States Patent Office.

HANFORD INGRAHAM, OF NAPLES, NEW YORK.

*Letters Patent No. 93,305, dated August 3, 1869.*

## IMPROVED BEDSTEAD.

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, HANFORD INGRAHAM, of Naples, in the county of Ontario, and State of New York, have invented a new and useful Improvement in Bedsteads; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a longitudinal section, as indicated by the lines *x-x* of figs. 3 and 4.

Figure 3 is a transverse section, as indicated by the lines *y-y* of figs. 2 and 4.—

Figure 4 is a bottom view.

Like letters in the different figures indicate like parts.

My invention consists—

First, in fastening the rails to the posts, by means of metallic plates and pivot-screws or bolts, so that the weight or pressure on the rails will draw their shoulders squarely against the posts, and thus form a tight-fitting joint therewith.

Second, in the arrangement of flat steel springs on the under sides of the slats, in combination with cross-bars, having similar springs on their ends, fastened to bracket-plates, the latter being secured to the rails by screws, so that the springs of the slats, being all inclined in one direction, carry the slats forward when pressed down, while the springs of the cross-bars, being inclined in an opposite direction, press them backwards at the same time, thus equalizing the pressure, and, by this arrangement of the springs, enabling them to be placed at such a distance from the ends of

the slats as to distribute the weight more equally upon each spring, and preventing the liability of the slats, therefore, to break, or bend too much in the middle.

I construct my invention as follows:

A A are circular metallic plates, which are first attached to the posts B B by a pivot-screw or bolt, *a*. The rails C C are then lifted up to their proper positions, and fastened to the posts by another pivot-screw or bolt, *b*, being inserted through the plates into the rails, thus the pressure or weight on the rails will draw their ends firmly against the posts, so that the greater the pressure, the tighter the joint will be.

D are the flat steel springs, arranged to incline all one way, and attached by screws to the tops of the cross-bars *c* and under sides of the slats *d*.

The cross-bars have a similar spring, E, attached by screws at their ends, but arranged to incline in an opposite direction to those of the slats, and riveted or otherwise fastened to the bracket-plates *e*, which are secured to the rails by screws.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination of the plates A A and pivot-screws or bolts *a* and *b*, with the posts B B and rails C C, substantially as described.

2. The flat steel springs D, as arranged and connected with the slats *d* and cross-bars *c*, when said cross-bars are suspended from springs E, arranged and attached to bracket-plates *e*, substantially as described.

HANFORD INGRAHAM.

Witnesses:

O. M. LYON,  
JOSIAH PORTER.