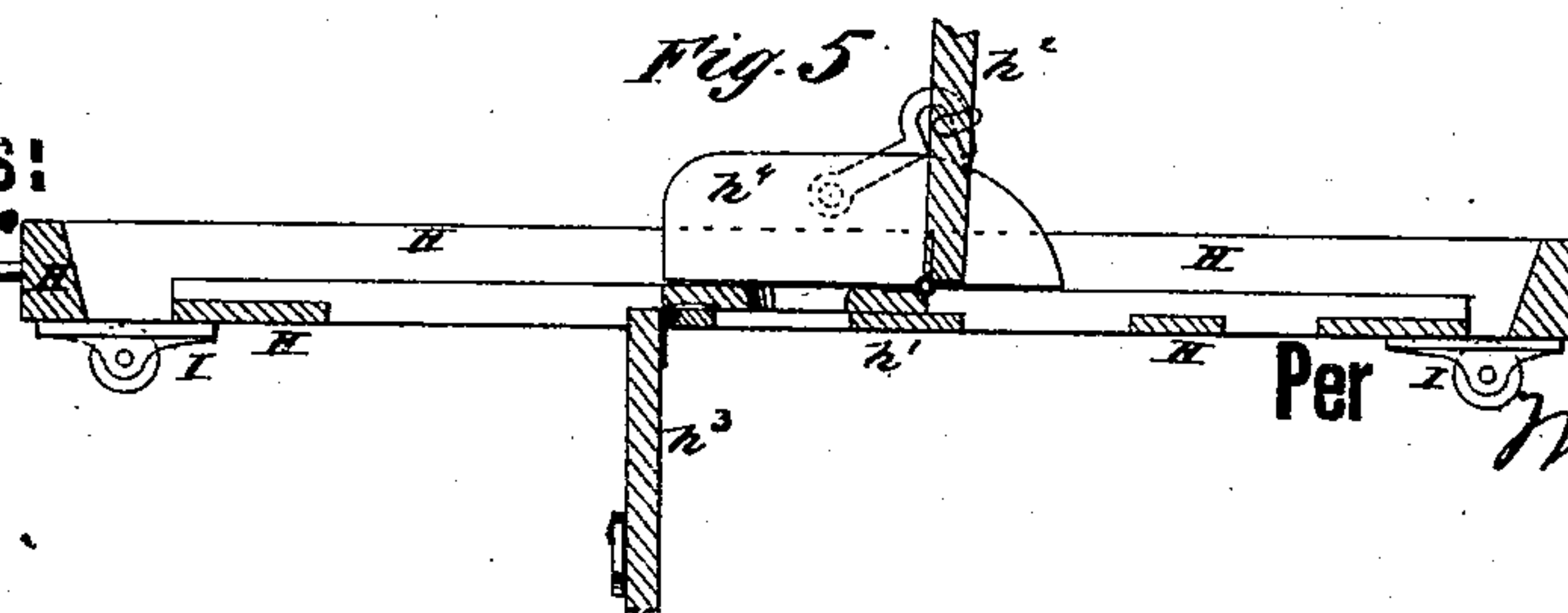
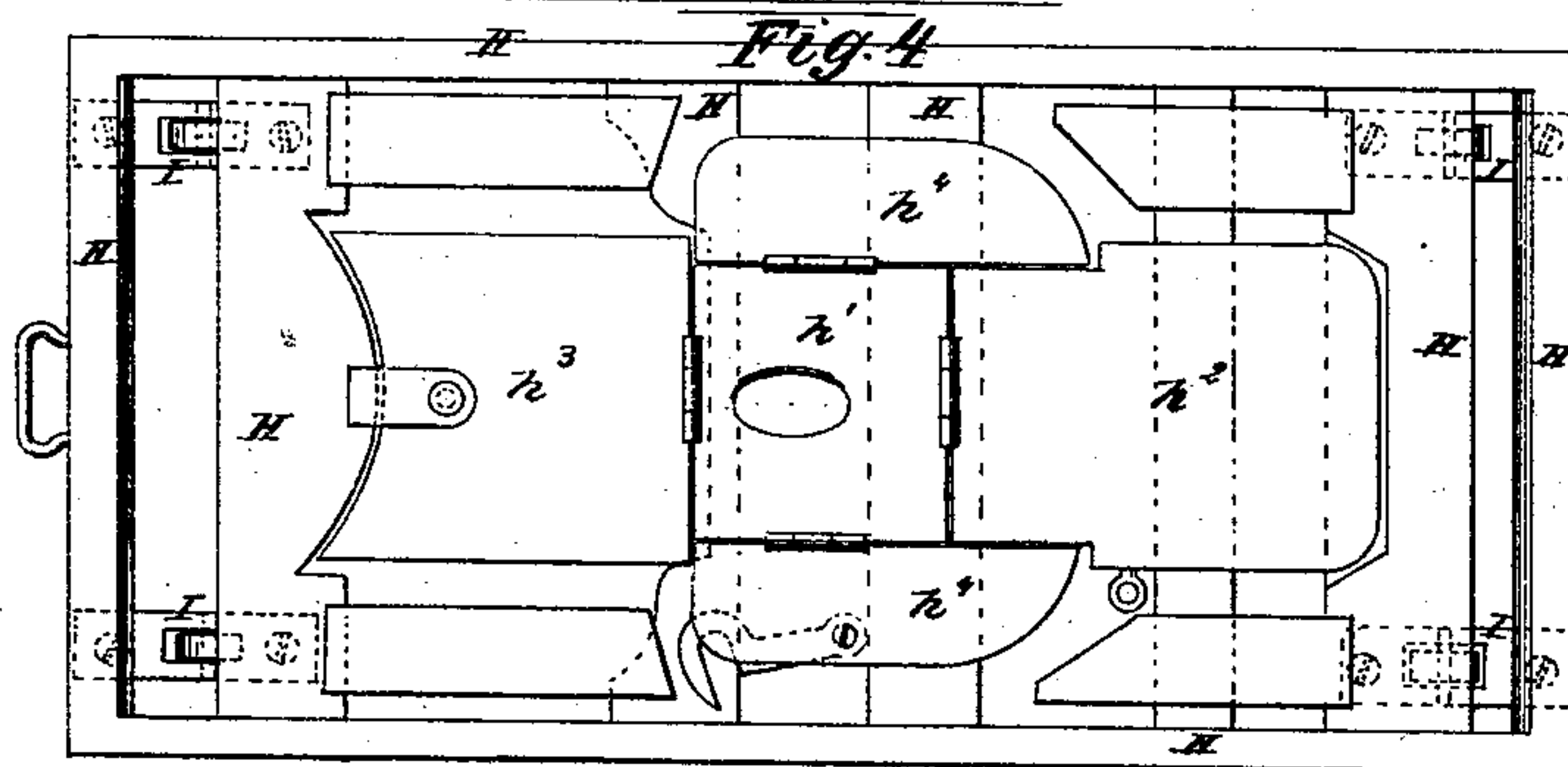
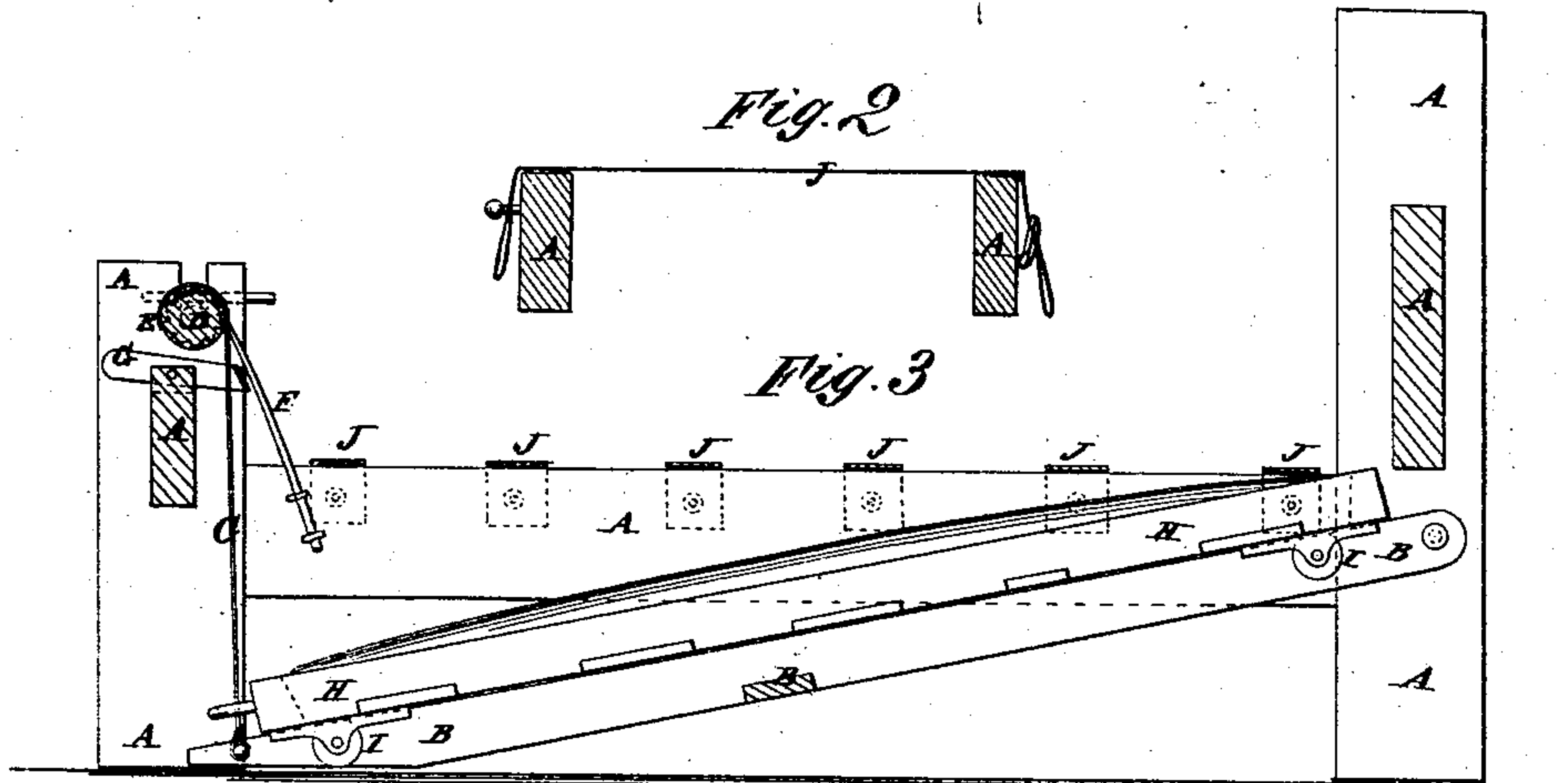
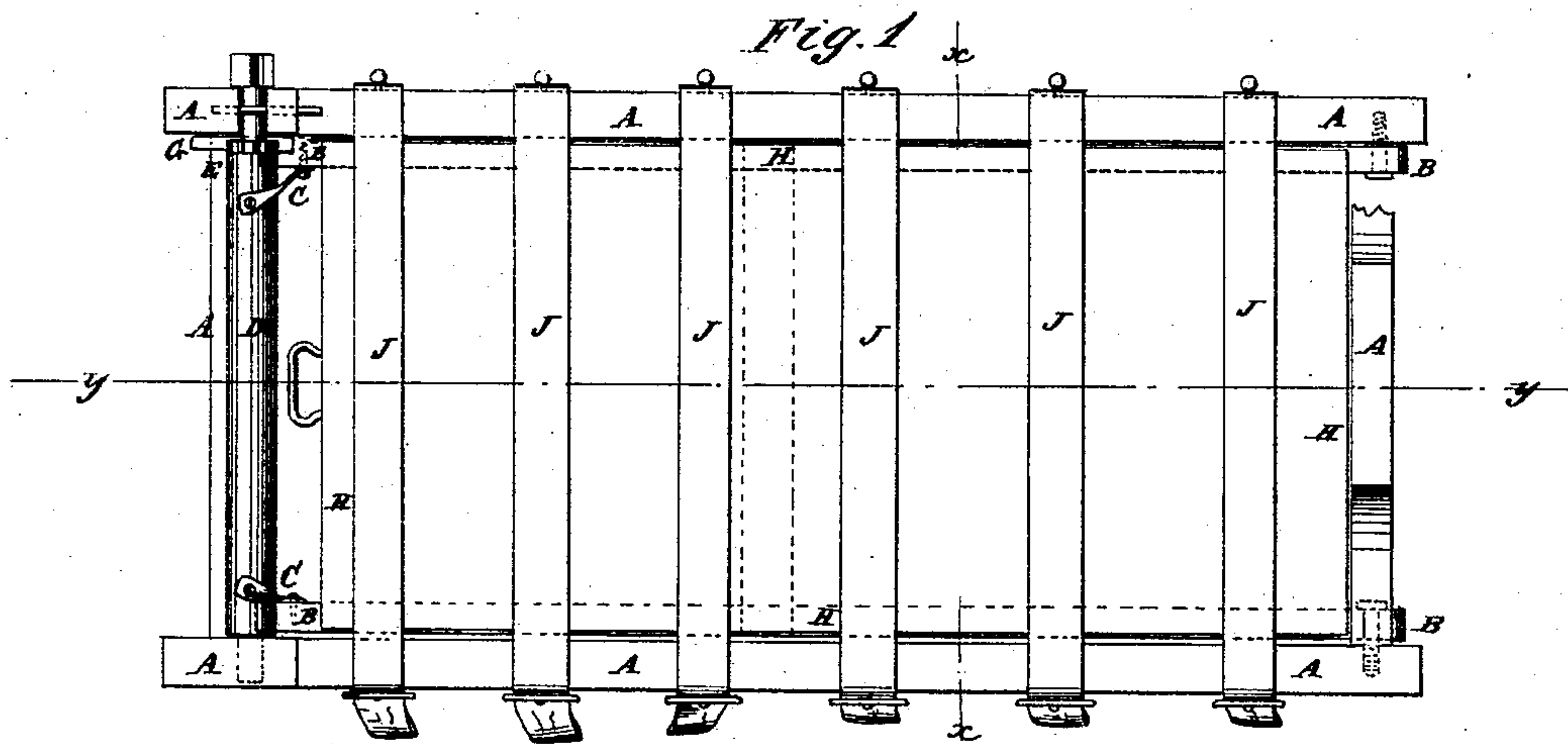


# H. BULL. Invalid-Bedsteads.

No. 155,417.

Patented Sept. 29, 1874.



Witnesses:  
A. W. Almquist  
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Inventor:  
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Per *[Signature]*  
Attorneys.

# UNITED STATES PATENT OFFICE.

HENRY BULL, OF NEWPORT, RHODE ISLAND.

## IMPROVEMENT IN INVALID-BEDSTEADS.

Specification forming part of Letters Patent No. **155,417**, dated September 29, 1874; application filed January 24, 1874.

*To all whom it may concern:*

Be it known that I, HENRY BULL, of Newport, in the county of Newport and State of Rhode Island, have invented a new and useful Improvement in Invalid-Bedstead, of which the following is a specification:

Figure 1 is a top view of my improved invalid-bedstead. Fig. 2 is a detail cross-section of the side bars of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a vertical longitudinal section of the same, taken through the line *y y*, Fig. 1. Fig. 4 is a top view of the bed-bottom detached, the mattress being removed. Fig. 5 is a detail longitudinal central section of the bed-bottom adjusted for using a bed-pan.

Similar letters of reference indicate corresponding parts.

The invention relates to a bed-bottom provided with rollers, and adapted to be slid on and off rails which are hinged to the bedstead at one end, and may be lowered at the other by a windlass or other suitable means. It also relates to the arrangement on said bed-bottom of hinged pieces and a fixed apertured seat-piece, so that, when extended, the said hinged pieces form part of the floor, and when otherwise adjusted one of them drops down, and the others are elevated and connected by hooks to adapt them to support the patient, as hereinafter shown and described.

B is a frame, fitting into the frame A of the bedstead, and pivoted to it at one end. Two straps or cords, C, are attached to the other end, and to a shaft, D, which is journaled in the upwardly-projecting ends of the footposts of the bedstead A. The shaft may be conveniently turned by a crank to wind and unwind the straps C, and thus raise and lower the foot end of the frame B. The shaft is provided with a ratchet-wheel, E, and pawl F, for holding the frame B securely when raised, and with a small trip-lever, G, for disconnecting the pawl F when desired. The bed-bottom frame H rests upon the frame B, and when the foot end of the same has been lowered it may be readily slid onto the floor, or from the floor to said frame, as required. The frame H is provided with small rollers

or wheels I, to enable the bed-bottom to be easily moved from one place to another upon the floor. The boards *h<sup>2</sup> h<sup>3</sup> h<sup>4</sup>* are hinged to the four sides of the fixed piece *h<sup>1</sup>*, which has an opening like a privy-seat. Thus, when arranged as shown in Fig. 5, these parts form a seat and support for the patient. Straps J J, made of cloth or other suitable material, extend across the bedstead, and are secured to the rails.

With this construction, to change the under bed-clothes, or turn the mattress, the bed-bottom H and frame B are lowered by means of the shaft D and straps C, leaving the invalid suspended upon the straps J. The bed-bottom H is then slid out, and the sheets are changed, or the mattress turned, as desired.

To move the invalid to another room, the straps J are detached from the bedstead, and the invalid, the bed-bottom H, and the frame B are lowered, and the bottom H is slid out and rolled to the desired place. To convert the bedstead into an easy or stool chair, the bed-bottom is lowered and run out, as before described, leaving the invalid upon the straps J. The mattress is then removed, and the bottom is slid back, and raised until the invalid rests upon the floor of the bed-bottom. The straps J are then detached, and the piece *h<sup>3</sup>* is lowered, and the pieces *h<sup>2</sup> h<sup>4</sup>* are raised and secured together by means of hooks, as shown in Fig. 5.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The bed-bottom H, having rollers I, in combination with the pivoted rails B, windlass D, pawl F, straps C, and bedstead A, all as shown and described, to operate as specified.

2. The combination, with bed-bottom frame H, of the apertured seat-piece *h<sup>1</sup>*, hinged drop-piece *h<sup>3</sup>*, back *h<sup>2</sup>*, and side pieces *h<sup>4</sup>*, the back and sides being connected for mutual support when elevated, all arranged as shown and described.

HENRY BULL.

Witnesses:

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