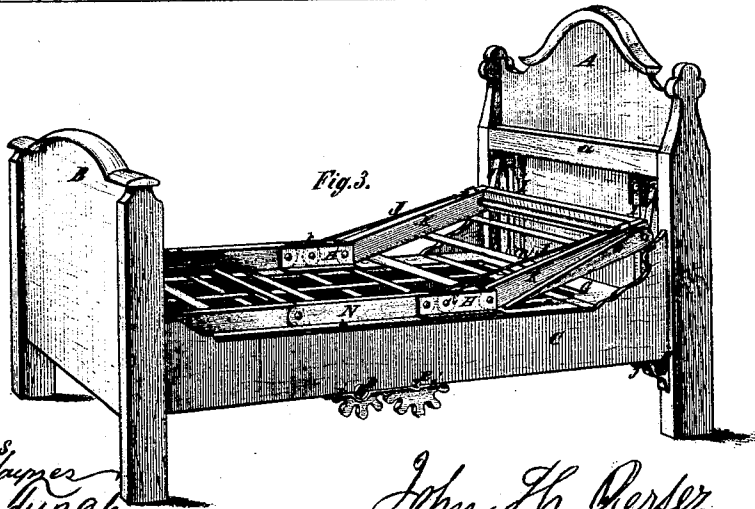
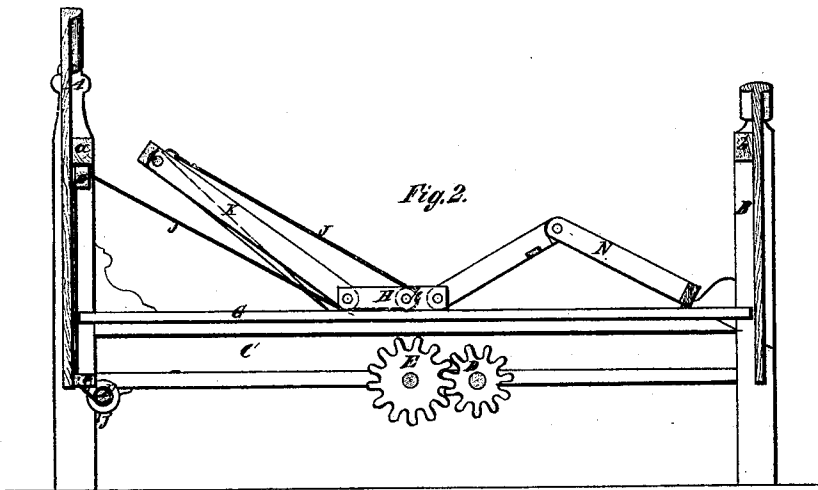
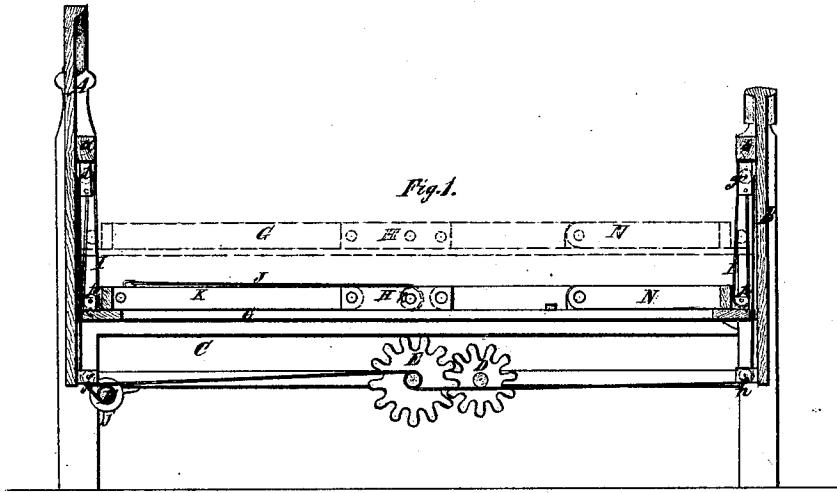


*J. H. Porter,*

*Invalid Bedstead.*

*No. 111561.*

*Patented Feb. 7. 1871.*



*Witnesses*  
*Fred. Hamer*  
*Perd. Busch*

*John H. Porter*

# UNITED STATES PATENT OFFICE.

JOHN H. OERTER, OF NEW YORK, N. Y.

## IMPROVEMENT IN INVALID-BEDSTEADS.

Specification forming part of Letters Patent No. 111,561, dated February 7, 1871.

*To all whom it may concern:*

Be it known that I, JOHN H. OERTER, of the city, county, and State of New York, have invented certain new and useful Improvements in Invalid-Bedsteads; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification.

This invention consists in certain means whereby provision is made for bodily raising a mattress from the bedstead in order to facilitate the placing of a bed-pan under it, or, when two or more mattresses are employed, for raising the upper one in order to ventilate between them. It also provides for so raising the portion of the mattress next the head of the bedstead as to raise the invalid from a recumbent to a more or less elevated reclining position.

In the accompanying drawings, Figure 1 is a central longitudinal section of a bedstead constructed according to my invention, showing the frame which supports the mattress in its normal position in bold lines, and raised in dotted lines. Fig. 2 is a similar view showing the head-piece raised, and Fig. 3 is a perspective view of the same.

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

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation with reference to the drawings.

The frame of the bedstead is of ordinary form, composed of a head-piece, A, foot-piece B, and two sides, C C. Across the top portion of the inner side of the head A there extends a brace, *a*, to each end portion of which there is attached a pulley, *c*, and near each of these pulleys is another pulley, *d*. On the lower portion of the head, in line with the pulleys *c c*, are pulleys *e e*, and in line with the pulleys *d d* are pulleys *f f*.

Across the foot B of the bed, opposite the brace *a* on the head, is a brace, *b*, near each end of which, opposite the pulleys *d d*, is a pulley, *g*, and in line with each of these pulleys *g*, on the lower portion of the foot-piece, is a pulley, *h*.

Supported in bearings *i i*, underneath the sides C C, are two axles, D E, which are geared together by gear-wheels provided thereon.

The end of the shaft D is squared or otherwise shaped for the reception of a crank, by which it is turned. Near the junction of the sides with the head of the bed is another axle, F, which is supported in bearings *j j*, and one end of which is squared or otherwise shaped for the reception of a crank, similarly to the shaft D.

G is a rectangular frame, which has webbing stretched across it from side to side and from end to end for the support of a mattress, and has attached near each of its corners a pulley, *p*. This frame is supported, when down, by the frame of the bedstead, or, when two mattresses are used, contains the upper one and is supported by the lower, which may be arranged on slats or in other suitable manner. When raised, as shown by the dotted lines in Fig. 1, the frame is suspended by four straps, I I, one end of each of which is attached to one of the frames or bearings of the pulleys *d d* and *g g*. These straps pass one under each of one of the four pulleys *p p* on the frame, thence over the pulleys *d d g g*, and thence under the pulleys *f f* and *h h*, attached, respectively, to the lower portions of the head A and foot B, and are secured at their other ends to the axle E, and by applying the crank to turn the axle D, that gears therewith, the straps are wound or unwound from the said axle, thereby raising and lowering the frame G and the superincumbent mattress.

On each side of the frame G, about midway from the ends thereof, is a metal plate, H, which contains a pulley, *k*. These plates have hinged to their forward ends a frame, K, which has attached to its forward portion the ends of straps J J, which pass over the pulleys *k k* in the plates H H, then over the pulleys *c c*, attached to the brace *a* of the head A, and under the pulleys *e e* on the lower portion of the said head A, and have their other ends attached to the axle F. To raise this frame K the crank is applied to the axle F, which is thereby turned to wind up the straps, and these first raise the frame by bearing under and lifting its forward end, as shown in Fig. 3, and afterward continue to raise it by a direct pull on the frame itself, as shown in Fig. 2. When this frame K is raised to the required inclination, or to an upright position, it may be supported by legs O O, hinged to its outer sides, resting on the frame of the bed.

In order further to perfect this bed, I hinge a jointed leg-rest, N, which is operated by hand, to the rear end of the plate H.

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

The hinged and jointed frame K H N, in combination with the frame G and their oper-

ating cords and pulleys, all constructed and arranged substantially as shown and described.

JOHN H. OERTER.

Witnesses:

FRED. HAYNES,  
FERD. TUSCH.