

W. S. Hill,

Invalid Bedstead,

N^o 53,533.

Patented Mar. 27, 1866.

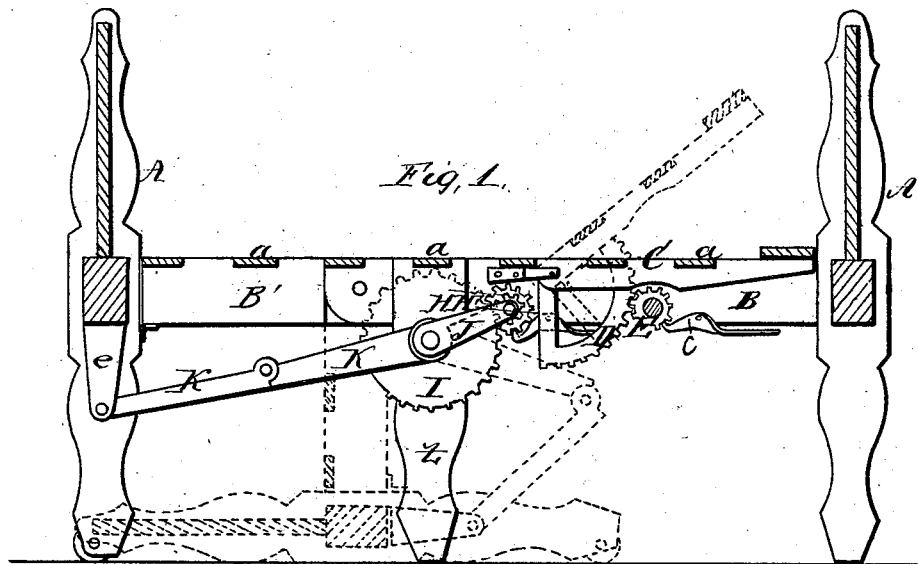
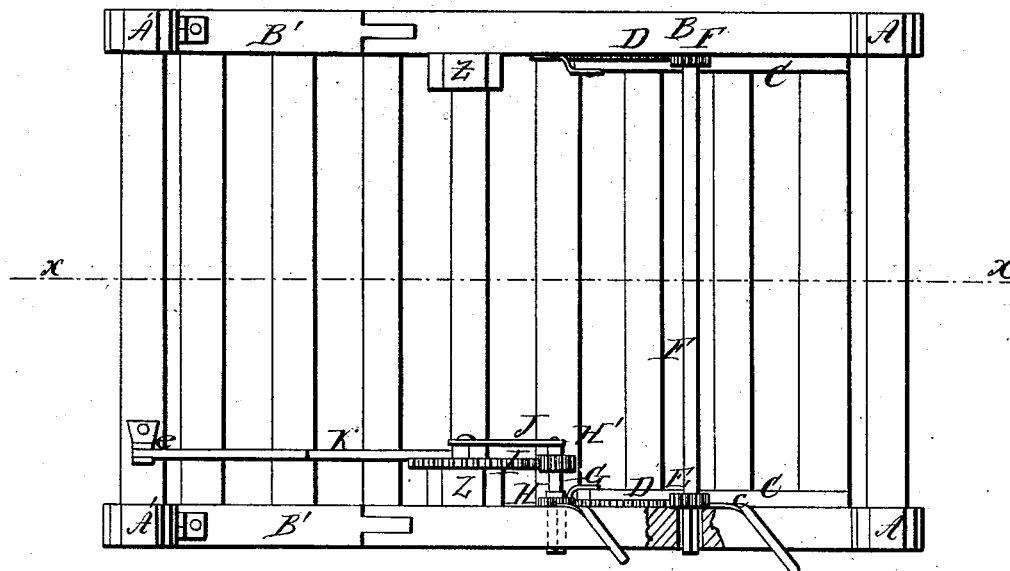


Fig. 2.



Witnesses;

Wm. Drenn
Thos. Tuck

Inventor;

W. S. Hill
By Wm. Hill
att'y

UNITED STATES PATENT OFFICE.

WARREN S. HILL, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR TO
C. S. BAKER, OF SAME PLACE.

IMPROVEMENT IN INVALID-BEDSTEADS.

Specification forming part of Letters Patent No. 53,533, dated March 27, 1866.

To all whom it may concern:

Be it known that I, WARREN S. HILL, of Manchester, in the county of Hillsborough and State of New Hampshire, have invented a new and Improved Invalid or Hospital Bedstead; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of my bedstead, taken in the plane of the line *x x*, Fig. 2. Fig. 2 is a bottom view of the bedstead.

Similar letters of reference indicate like parts.

This invention is designed especially for use in hospitals; and it consists in the employment and arrangement of mechanism, as will be hereinafter described, for raising the head-rest or rack of the bedstead; also, for lowering the foot portion of the bedstead to make the bedstead answer the purpose of a chair.

To enable others to understand my invention, I will proceed to describe it.

A A' represent the head and foot posts, respectively, of the bedstead, and B B' the side rails, and *a a* the slats. C is the head-rest or rack, carrying a number of the slats of the bedstead, and hinged to the side rails, so as to be capable of being raised and lowered, as desired.

The first part of my invention consists in the mechanism I employ for elevating this head-rest or rack.

D is a cogged segment, which is hinged to the side rails, B, (one in each side,) of the bedstead, and connected to the rack C. This is operated by a cog-wheel, E, which meshes with it, and is mounted on a shaft, F, running across the bedstead, and having its journals in the side rails thereof, one of which is carried through to permit the application of a crank, by which to turn the same.

A pawl, *c*, is pivoted to the side rail, one end of which engages with the cog-wheel E, while the other constitutes a lever on which to press in order to disengage the pawl from the cog-wheel E.

Thus it will be seen that by turning the shaft F the rack can be elevated as desired, and held there by the pawl *c*, and that when the pawl *c* is disengaged from the cog-wheel E the rack will descend by reason of its own gravity.

The second part of my invention consists in the mechanism I employ for lowering the foot portion of the bedstead, and to admit the application of this part of my invention each side rail of the bedstead is made in two parts, and the foot portion hinged to the other portion, so as to be capable of swinging down and carrying the foot-posts and foot-board with it, a pair of intermediate legs, Z Z, being provided, on which the head portion of the bedstead can rest when the foot portion is inclined or thrown down.

G (see Fig. 2) is a shaft carrying two cog-wheels, H H'. The said shaft extends through the side rail of the bedstead, so as to permit the application of a crank for operating it. The wheel H is placed near the side rail, and it serves as a ratchet-wheel to be acted upon by a pawl, *d*, by which arrangement the foot portion of the bedstead can be lowered and held at any desired angle. The wheel H' engages with a segment, I, which has its bearings in one of the central posts of the bedstead, and the other in an arm or brace, J, extending from the same to the shaft G, one end of which latter also has its bearings in the said brace. A jointed arm, K, is pivoted to the segment I and to a standard, *e*, or to the bottom-end rail of the bedstead.

From the above description it can be seen that when it is desired to lower the foot portion of the bedstead it will be necessary to disengage the pawl *d* and rotate the shaft G. This causes the cog-wheel H to actuate the segment I, which, through the medium of the jointed arm K, draws down the foot of the bedstead, and thus the inclination of the latter can be regulated as desired.

The position of the bedstead when it is desired to place the patient in a sitting posture is represented in red outline in Fig. 1, in which position he can be placed without being removed from the bed.

I do not claim racks in connection with a

bedstead, nor do I claim a folding bedstead; but

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

The combination of the rack *c*, segment *D*, cog-wheel *E*, shaft *G*, wheels *H*, jointed arm *K*, and feet *A'*, constructed and arranged rel-

atively to each other and operating in the manner and for the purpose herein specified.

WARREN S. HILL.

Witnesses:

SAMUEL UPTON,
ISAAC W. SMITH.