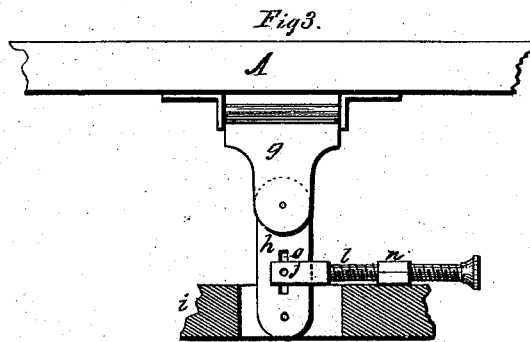
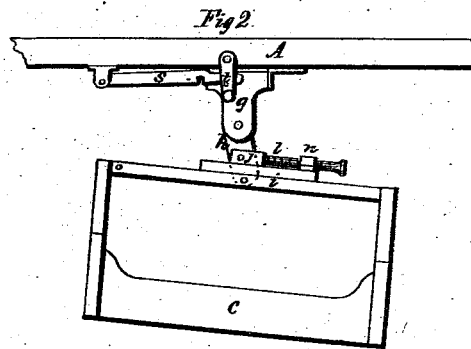
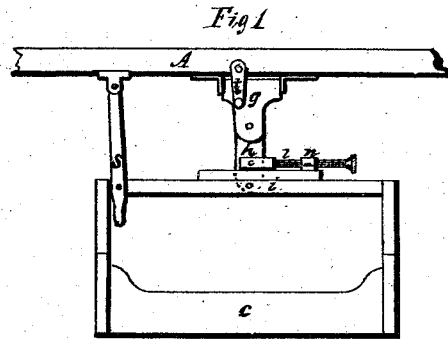


J. MICHEL.  
Swinging-Berth.

No. 161,051.

Patented March 23, 1875.



WITNESSES.

*J. W. Larned,*  
*Chas. W. Leonard*

INVENTOR  
*Jacob Michel*  
per *F. A. Lehmann*

# UNITED STATES PATENT OFFICE.

JACOB MICHEL, OF NEW YORK, N. Y.

## IMPROVEMENT IN SWINGING BERTHS.

Specification forming part of Letters Patent No. **161,051**, dated March 23, 1875; application filed February 24, 1875.

*To all whom it may concern:*

Be it known that I, JACOB MICHEL, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Beds or Berths on Board of Ships; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings which form part of this specification.

My invention relates to an improvement in beds or berths on board of ships; and consists in suspending the bed from the ceiling of a room, or from a beam overhead in a ship, in such a manner that, however much the ship may roll or pitch, the bed will preserve its horizontal position, so that its occupant is not incommoded by the motion of the ship, as will be more fully described hereafter.

The accompanying drawing represents my invention.

A represents either the ceiling of a sleeping-room on board of a vessel or a beam extending across the ceiling. Fastened to this beam or ceiling is a hinge made in two parts so as to have a universal motion, and from which the cot or bed *c* is suspended. The upper part of the hinge *g* swings only laterally, while the lower part *h*, which is pivoted to the lower part of *g*, can swing only at right angles thereto. Through the top rail *i* of the cot or bed is cut a mortise in which the lower end of the part *h* is pivoted. Just above the rail there is made a slot, *o*, in the part *h*, and in this slot is fastened a clasp, *j*, which clasp has the inner end of the screw-rod *l* swiveled to it. This screw-rod passes through a suitable bearing, *n*, and has a milled head or handle, so that it can be readily operated. By turning this screw the lower part of the hinge is

either drawn toward the bearing *n* or forced away from it, and by this movement either raises or lowers either one of the ends of the bed, as may be desired. If the bed were left free to swing, the moment a person got into it, the head and body being much heavier than the feet, the bed would instantly tip downward, and consequently could not be used. By moving the lower part of the hinge back and forth, as shown, one end is raised upward to any desired extent, so that the heavier part of the body will sink the raised-up end down only on a level with the other.

In order to hold the bed perfectly rigid and prevent it from swaying around when a person is getting into it, or when the bed is not in use, a notched lever, *s*, is pivoted to the ceiling, which catches over a pin or projection on the bed and holds it perfectly still. After the person has gotten in, the lever is loosed from the pin, so as to leave the bed free to swing back and forth, and the lever is raised upward so that its end will catch over the pivoted stop *t*, where it will be held out of the way. By lowering the lever the motion of the bed may at once be stopped.

Having thus described my invention, I claim—

1. In combination with the hinge and swinging bed, the screw-rod *l*, substantially as shown.

2. The combination of the swinging bed *c*, hinge *g h*, screw-rod *l*, and holding-lever *s*, substantially as shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand this 18th day of February, 1875.

JACOB MICHEL.

Witnesses:

C. W. C. DREHER,  
JOSEPH G. MICHEL.