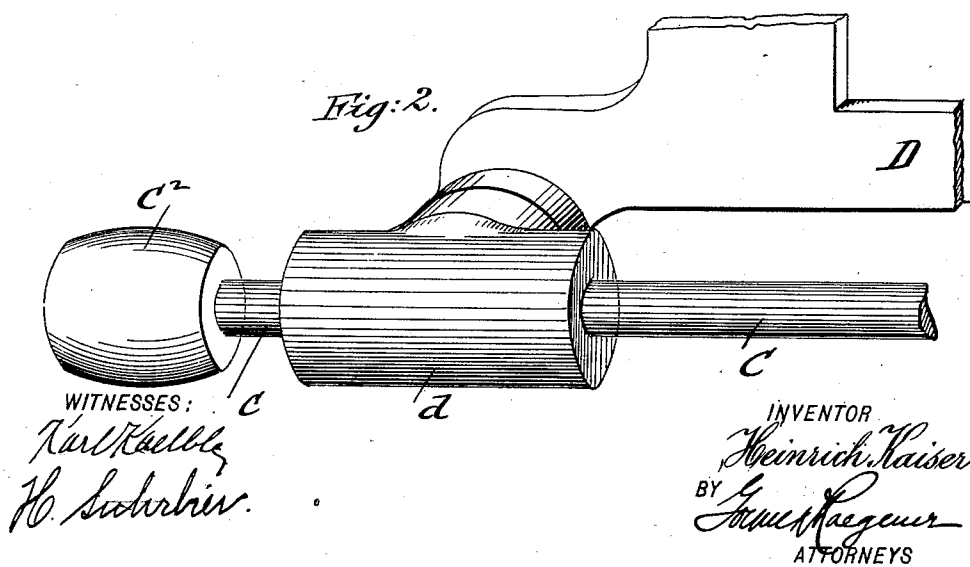
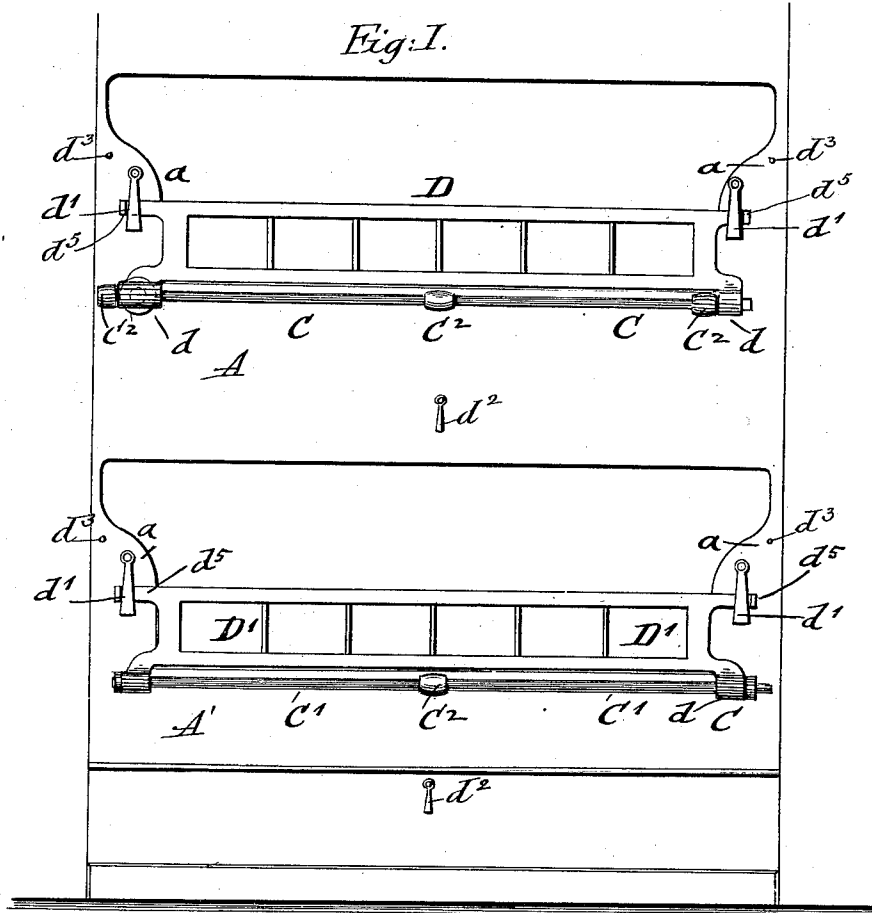


H. KAISER.
BERTH FOR SHIPS.

(Application filed Nov. 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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(Application filed Nov. 28, 1900.)

(No Model.)

2 Sheets—Sheet 2.

Fig:3.

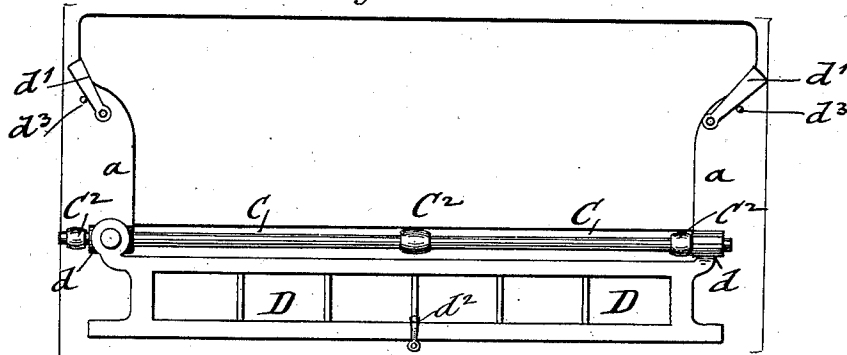
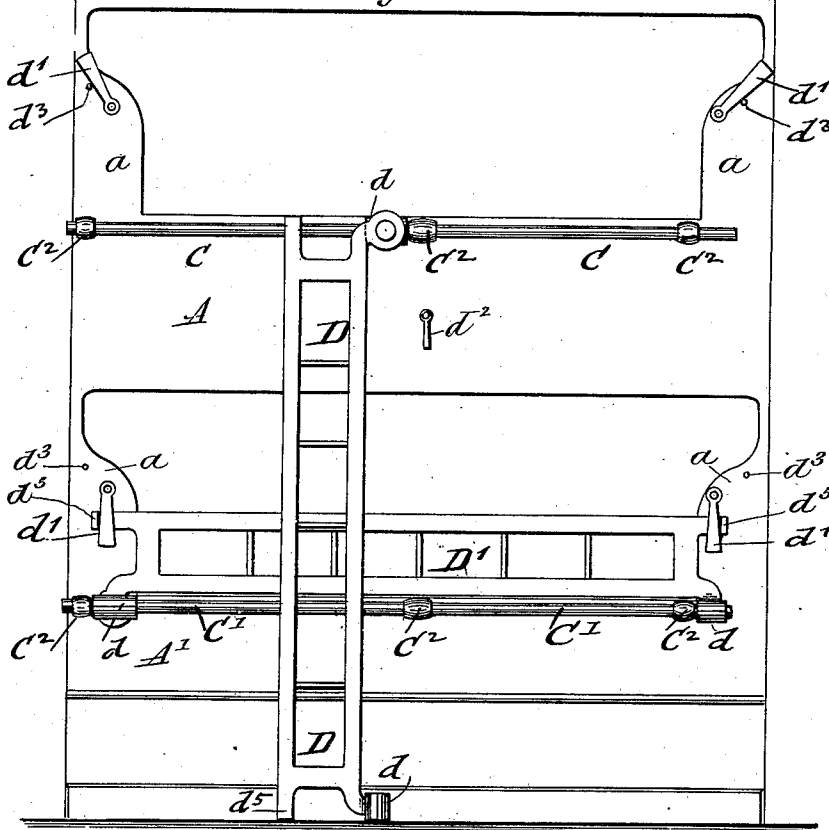


Fig:4.



WITNESSES:

Max Kautz
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UNITED STATES PATENT OFFICE.

HEINRICH KAISER, OF HOBOKEN, NEW JERSEY, ASSIGNOR OF ONE-HALF TO
MAX MOELLER, OF SAME PLACE.

BERTH FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 671,767, dated April 9, 1901.

Application filed November 28, 1900. Serial No. 37,985. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH KAISER, a citizen of the United States, residing in Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Berths for Ships, &c., of which the following is a specification.

This invention has reference to an improved berth for ships, sleeping-cars, and other applications, in which the front of the berth is provided with a railing that can be used as a ladder for giving convenient ingress to and egress from the berth and security against falling out of the berth in stormy weather; and the invention consists in the combination, with a ship's or other berth, of a supporting-rod attached to the front wall of the same and a railing hinged and swiveled to said supporting-rod and adapted to be placed in position as a railing for the berth or in position as a ladder for getting in or out of the same; and the invention consists, further, in certain details of construction and combinations of parts, which will be fully described hereinafter and finally claimed.

In the accompanying drawings, Figure 1 represents a front elevation of a ship's berth, showing my improved railing in raised position on the same. Fig. 2 is a perspective view showing the swivel connection of the railing with the supporting front bar of the berth, so as to permit its use as a ladder. Fig. 3 is a front view of the berth, showing the railing lowered; and Fig. 4 is a front view showing the railing in position as a step-ladder.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the front wall of the upper and A' the front wall of the lower berth of a steamship or other vessel, sleeping-car, or similar structure. The front walls A A' of the berth are provided at the ends with inwardly-projecting bracket-shaped portions a for the purpose of reducing the length of the open front of the berth. The height of that portion of the front wall between the brackets a a is made approximately equal with the height of the spring-bottom mattress in the berth, so as not to extend above the mattress. To the front walls A A' of the upper and lower berths are applied hori-

zontal supporting-rods C C', which are supported in suitable bracket-sleeves C², that are attached to the front wall. To the supporting-rods C C' are applied railings D D', which correspond in length to the space between the brackets a a, said railings being provided with sleeves d d, that fit on the supporting-rods C C', and are arranged in such manner that they can be readily placed on the projecting ends of the horizontal bars or removed therefrom. The sleeves d d of the railings D D' form with the projecting ends of the horizontal bars a hinge connection, so that the railings D D' can be moved from the raised position (shown in Fig. 1) to the lowered position. (Shown in Fig. 3.) When the railings are in raised position, they are retained, by means of pivoted catches d' d', on the front wall of the berth, while when they are in lowermost position they are retained by a suitable spring or gravity catch d². The catches d' and d² hold the railing on the front walls and prevent the getting loose of the same. Alongside of the pivoted fastening devices d' are arranged stop-pins d³, on which the pivoted fastening-pieces d' are supported when the railing is to be lowered, as shown in the upper part of Fig. 3. The railings are provided at their upper corners with hooks d⁵ for preventing disengagement of the fastening devices d².

One sleeve d is connected by a swivel-joint with the railing. For using the railing as a ladder the sleeve d is shifted along the horizontal supporting-rod C until it arrives about midway on the same, while it is simultaneously turned on its swivel into inclined and lowered position until it arrives on the floor, when it is placed at the proper inclination toward the front wall of the berth, so that it can be used as a ladder for getting into the upper berth.

The railing is intended to be used for the lower as well as for the upper berth of a ship, sleeping-car, &c., only with the difference that the lower railing is not required to be lowered for use as a ladder, being only used as a railing. For this purpose it is provided with sleeves d, by which it swings on the lower supporting-rod C', and is locked in raised or uppermost position by the pivot-catches d'.

The use of the railing for the lower berth facilitates the entering or leaving of the lower berth, for the reason that the front wall of the same can be lowered to a level with the top, or nearly so, of the mattress, while heretofore the front walls of the lower and upper berths were extended considerably above the level of the mattress, and rendered thereby the ingress and egress to the berth less convenient, as one had to get over the front walls of the berths. When it is desired to get into the lower berth, the railing is placed in its lowermost position. After the person has entered the berth the railing is raised and locked in raised position by the gravity-catches. In this position the railing forms a safety device for the berth and prevents falling out of the berth in rough weather.

The manipulation of the railing when used in connection with an upper berth can be readily acquired, as it requires only a few motions to place the same in position either as a railing or as a ladder. When the railing is desired to be used as a ladder, the catches *d' d'* are first removed from the ends of the railing. It is then shifted toward the left, so that the sleeve at that end clears the bar, the sleeve of the swiveled end being moved along the rod until it arrives midway of the berth, upon which the railing is turned on the swivel-joint of the sleeve in downwardly-inclined direction until the free end arrives on the floor and the hook *d''* at the upper end engages the supporting-rod, in which position the railing is used as a ladder. A combined railing and ladder for the upper berth and a safety-railing for the lower berth is thus provided, by which especially the more convenient ingress to and egress from the upper berth is obtained, which was in the construction of the berths heretofore in use attended with considerable inconvenience.

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

1. The combination, with the front wall of a ship's or other berth, of a supporting-rod attached to the same, a railing hinged and swiveled to said rod and shiftable longitudinally out of engagement at one end with the same,

and means for locking the railing in position on the front wall of the berth, substantially as set forth.

2. The combination with the front wall of a ship's or other berth, of a supporting-rod attached to the same, and a railing provided with a sleeve applied to said rod, and capable of turning thereon, said railing being pivoted to said sleeve, substantially as set forth.

3. The combination, with the front wall of a ship's or other berth, of a horizontal supporting-rod attached to the front wall below the edge of the same, a railing provided with sleeves for being placed on said supporting-rod, one of the sleeves being connected by a swivel-joint with the railing, and a hook at the corner of the railing opposite to the swivel-sleeve, so that the railing can be shifted on the supporting-rod and then swung into position as a ladder for giving convenient ingress to and egress from the berth, substantially as set forth.

4. The combination, with a ship's or other berth, of a supporting-rod attached to the front wall of the same, and a railing hinged and swiveled to said supporting-rod, and adapted to be placed in position as a railing for the berth or as a ladder for getting in or out of the same, substantially as set forth.

5. The combination, with the front wall of a ship's or other berth, of a supporting-rod attached to the same, brackets at opposite ends of the berth, a railing provided with sleeves at its lower part for being placed on the supporting-rod, and swung into raised and lowered position thereon, fastening devices pivoted to the end brackets of the berth, said fastening devices being adapted to engage the ends of the railing, and means at one end of said railing for engaging the supporting-rod when the railing is lowered for use, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HEINRICH KAISER.

Witnesses:

PAUL GOEPEL,
GEORGE GEIBEL.