(No Model.) 2 Sheets—Sheet 1.

J. McINTYRE.

HATCH COVER.

No. 282,100. Patented July 31, 1883.

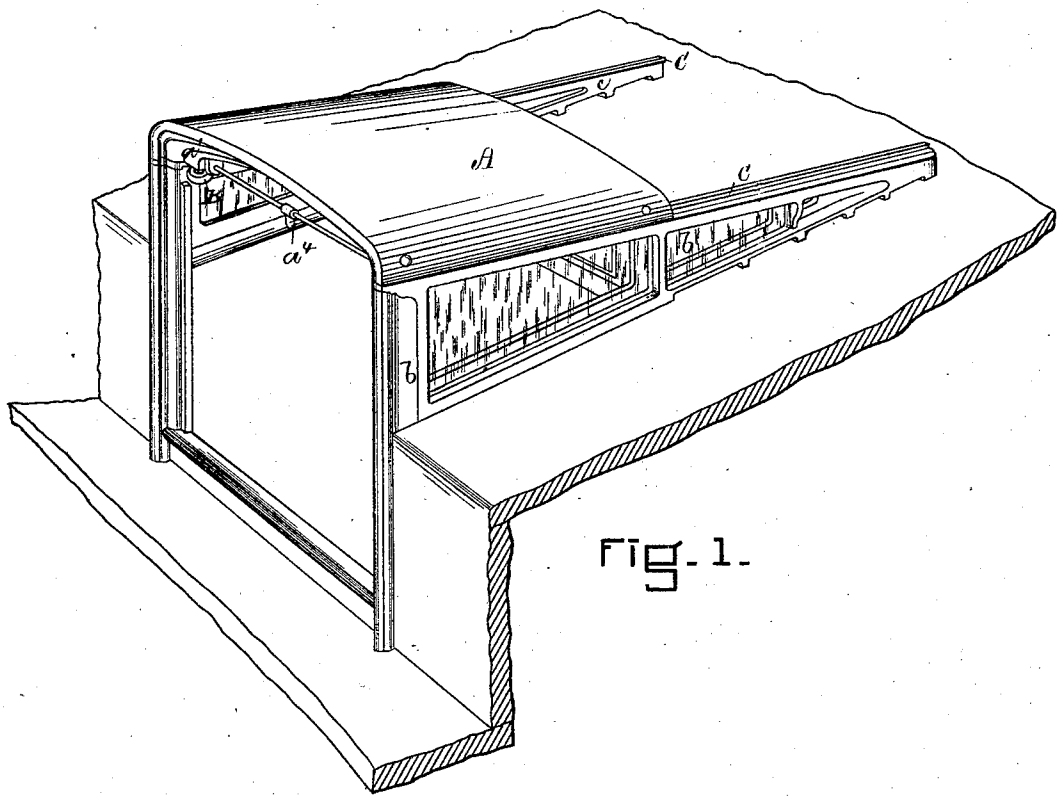


Fig. 1.

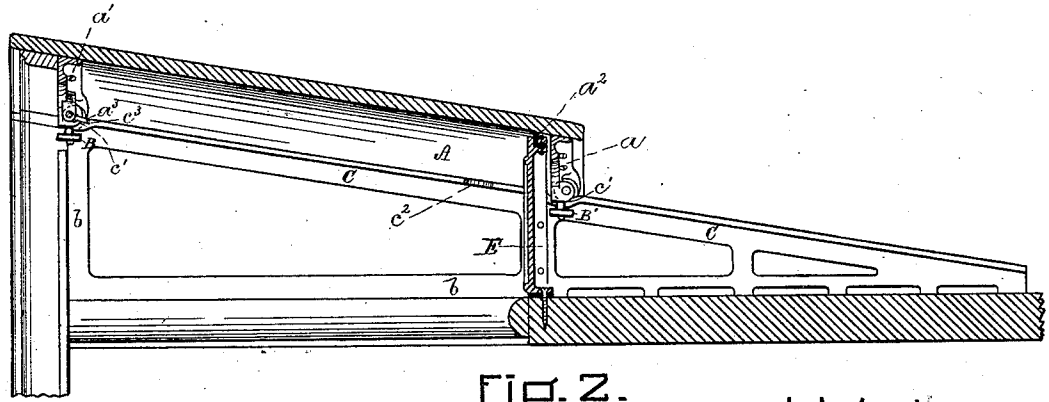


Fig. 2.

WITNESSES

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(No Model.) 2 Sheets—Sheet 2.

J. McINTYRE.

HATCH COVER.

No. 282,100. Patented July 31, 1883.

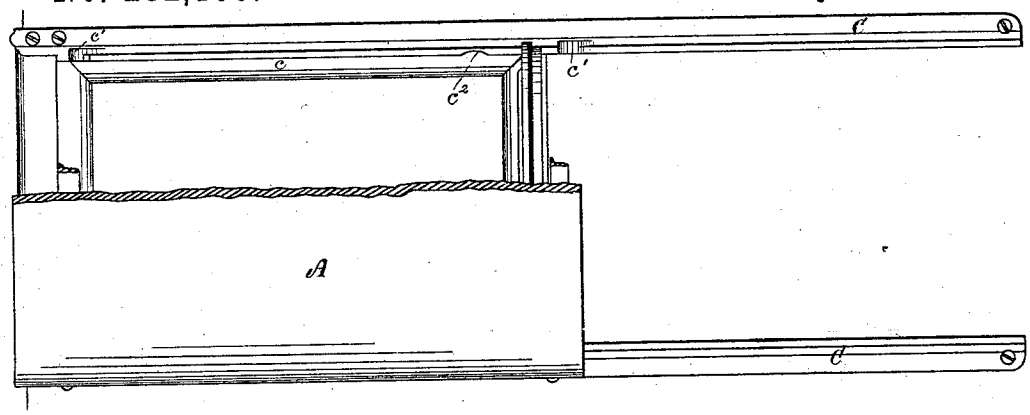


Fig. 3.

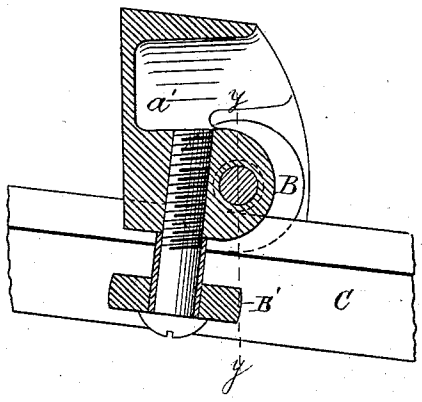


Fig. 4.

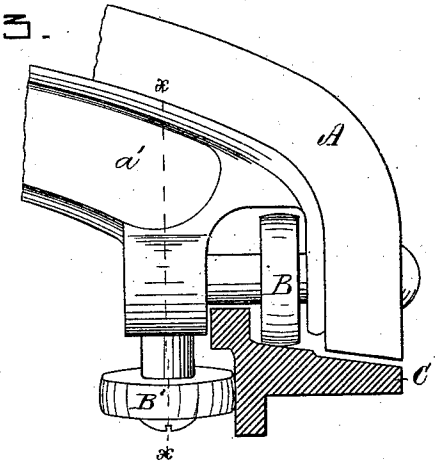


Fig. 5.

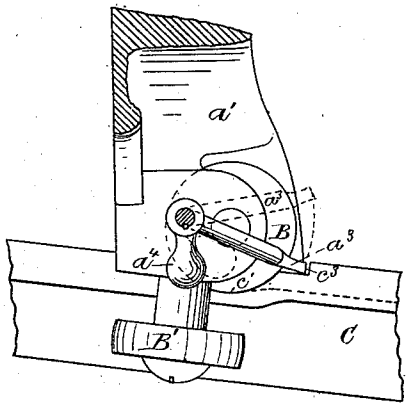


Fig. 6.

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UNITED STATES PATENT OFFICE.

JAMES McINTYRE, OF BOSTON, ASSIGNOR OF ONE-HALF TO HARRISON LORING, OF SOUTH BOSTON, MASSACHUSETTS.

HATCH-COVER.

SPECIFICATION forming part of Letters Patent No. 282,100, dated July 31, 1883.

Application filed November 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES McINTYRE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Covers for Companion-Hatches, of which the following is a specification.

In many vessels the stairs leading from the upper deck to the cabin, and known as the "companion-way," are provided with a porch or the like on the upper deck, called the "companion-hatch," having a sliding cover, which can be opened or closed at pleasure.

My invention relates to improvements in covers of this class; and it consists in a cover guided by suitable tracks when it is moved, and so arranged that when the cover is brought over the companion-way it can be lowered, so as to bring the sides of the cover in close contact with the ledges of the companion-way.

In the accompanying drawings, which illustrate my invention embodied in the best way now known to me, Figure 1 is a perspective view, and Fig. 2 a longitudinal section. Fig. 3 is a plan or top view, with part of the cover broken away. Fig. 4 is a section on line *x x* of Fig. 5, showing the manner of attaching the guide-rollers. Fig. 5 is an elevation of the rollers and a section through the track on line *y y* of Fig. 4, and Fig. 6 is a view showing the locking device.

The cover A is secured to the cross-pieces or carlines *a a'*, which are adapted to receive at each side the axles of two sets of rollers, B B', as shown in Figs. 4 and 5. The rollers B, run on rails C, secured to the inclined coamings or ledges *b* of the companion-way, support the weight of the cover A, and permit it to be readily moved back and forth. The rollers B' run close to the sides of the rails C, serve to guide the cover and prevent it from turning from its course, thereby effectually obviating the difficulty heretofore experienced in moving the usual sliding cover, on account of its liability to slew and bind.

Depressions *c'* are made in the rails C at the places where the rollers B come when the cover A is over the companion-way, as in Figs. 1 and 2. The object of these depressions is to allow the cover to drop onto the ledges *b* and form a tight joint. It is obvious that the cover and the ledges *b* will be separated as soon as the cover is moved, and thereby bring all the weight on the rollers B. (See Figure 5.)

A water-tight joint is made between the head-block E of the companion-way and the cover by means of a strip of rubber, a^2, attached to the head-block E, one edge of this strip projecting vertically the other horizontally from the head-block E, so that the forward carline *a* is brought against one edge of the rubber a^2 and the cover against its other edge when the cover is in position over the companion-way. (See Fig. 2.)

The cover is removed, when required, by taking off the after pair of rollers B', when it can be readily lifted off, or niches c^2 may be made in the rails C, to allow the after pair of the rollers B' to pass, the other pair being then run out beyond the lower ends of the rails. The first way is preferable when the cover is large.

To lock the cover over the companion-way, latches a^3 are used, with notches c^3 in the rails C. The arm a^4 serves as a handle for withdrawing the latches from the notches when it is desired to remove the cover.

The carlines shown are also new with me. They are of metal, with a flange along the upper edge, as shown in Figs. 4 and 6, to which the cover proper is secured. They are forked at each end to receive the axles of the rollers B, and have a stud at each end to carry rollers B', as is fully shown in Figs. 4, 5, and 6.

I claim as my invention—

1. The combination of the cover A, provided with two sets of rollers, B B', with the ledges *b* and rails C, provided with depressions, as described, to allow the cover to drop and rest upon the ledges *b*, substantially as described.

2. In a hatch-cover, the cross-piece or carline having a flange along its upper edge, to which the cover is secured, forked at each end to receive the supporting-rollers, and provided at each end with a stud to carry the guide-rollers, substantially as and for the purposes set forth.

JAMES McINTYRE.

Witnesses:
J. E. MAYNADIER,
JOHN R. SNOW.