J. R. FISH.

Suspension-Arms for Sleeping-Car Berths.

No. 207,861. Patented Sept. 10, 1878.

Fig. 1.

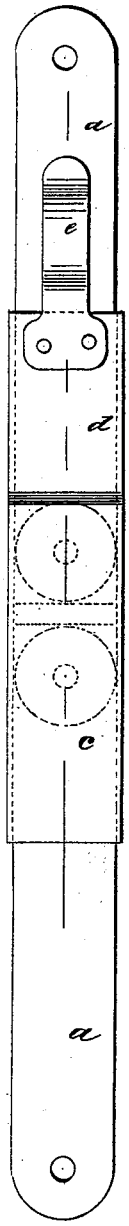
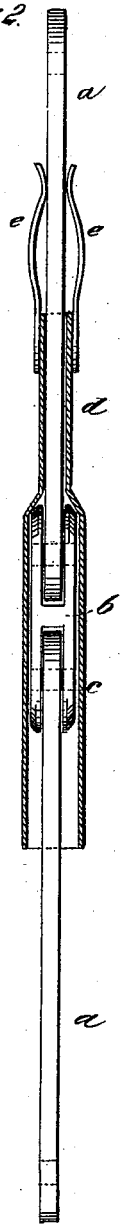


Fig. 2.



WITNESSES:

Francis McArdle.

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UNITED STATES PATENT OFFICE.

JOHN R. FISH, OF GRAND RAPIDS, MICHIGAN.

IMPROVEMENT IN SUSPENSION-ARMS FOR SLEEPING-CAR BERTHS.

Specification forming part of Letters Patent No. **207,861**, dated September 10, 1878; application filed July 10, 1878.

To all whom it may concern:

Be it known that I, JOHN R. FISH, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Fastening for the Joints of the Arms of Sleeping-Berths, of which the following is a specification:

The object of my invention is to provide a simple and convenient means for fastening or locking the joints of the swinging arms which support the berths in sleeping-cars, whereby the joint is made rigid after the berth is prepared for use, and the berth is prevented from closing in case the car tips over.

My invention consists in a shield or tube upon the berth-arm capable of being slid over the joint of the arm, and held in position by frictional springs bearing upon the arm.

In the drawing, Figure 1 is an elevation of a sleeping-berth arm with my improved fastening applied to the joint thereof, and Fig. 2 is a longitudinal section through the arm and fastening.

Similar letters of reference indicate corresponding parts.

a a are the two portions of an arm which supports the berth, which portions *a* are each jointed at one end to a plate, *b*, by passing into a mortise in the plate *b*, and by a pin passing through, so as to form a double joint and permit the berth to swing and be closed up. The parts are of any usual and desired construction.

The fastening consists of a tube or shield, *c*, of metal, preferably square, and of a size to pass tightly over the joint-plate *b*, and long enough to extend at each side of the joints over the ends of the arms *a*. The part *d* of the shield *c* is smaller, and fits tightly upon one portion, *a*, of the berth-arm, (which I prefer to be the upper part,) and the shield *c* will be carried by that part of the arm when the berth is closed. The offset formed between the two parts *c* and *d* forms a stop to prevent the shield from being pushed down too far.

e e are flat springs attached to the smaller end, *d*, of the shield, and projecting so as to bear upon the arm *a* at opposite sides, to hold the shield in place by friction.

In the position shown by the drawing the joint of the arm *a* is locked by the shield *c*, so that the arm is rigid and cannot fold, and the berth is thereby prevented from closing up and confining the occupant in case the car should be upset.

When the berth is to be closed the shield *c* is slid upward to free it from the joint, and the parts of the arm may then be folded, as usual.

I do not limit the application of my fastening to any particular form of arm, as it may be applied to lock the joint of any folding arm or support for sleeping-berths.

I am aware that a sliding sleeve having set-screw has been heretofore combined with a hinged suspension-rod; but

What I claim as new and of my invention is—

The sliding sleeve or shield of the jointed arm of a sleeping-berth, provided with the springs *e*, as shown and described, for the purpose specified.

JOHN RANDOLPH FISH.

Witnesses:

JOHN A. BOSSLER,

CHAS. D. NEAHR.