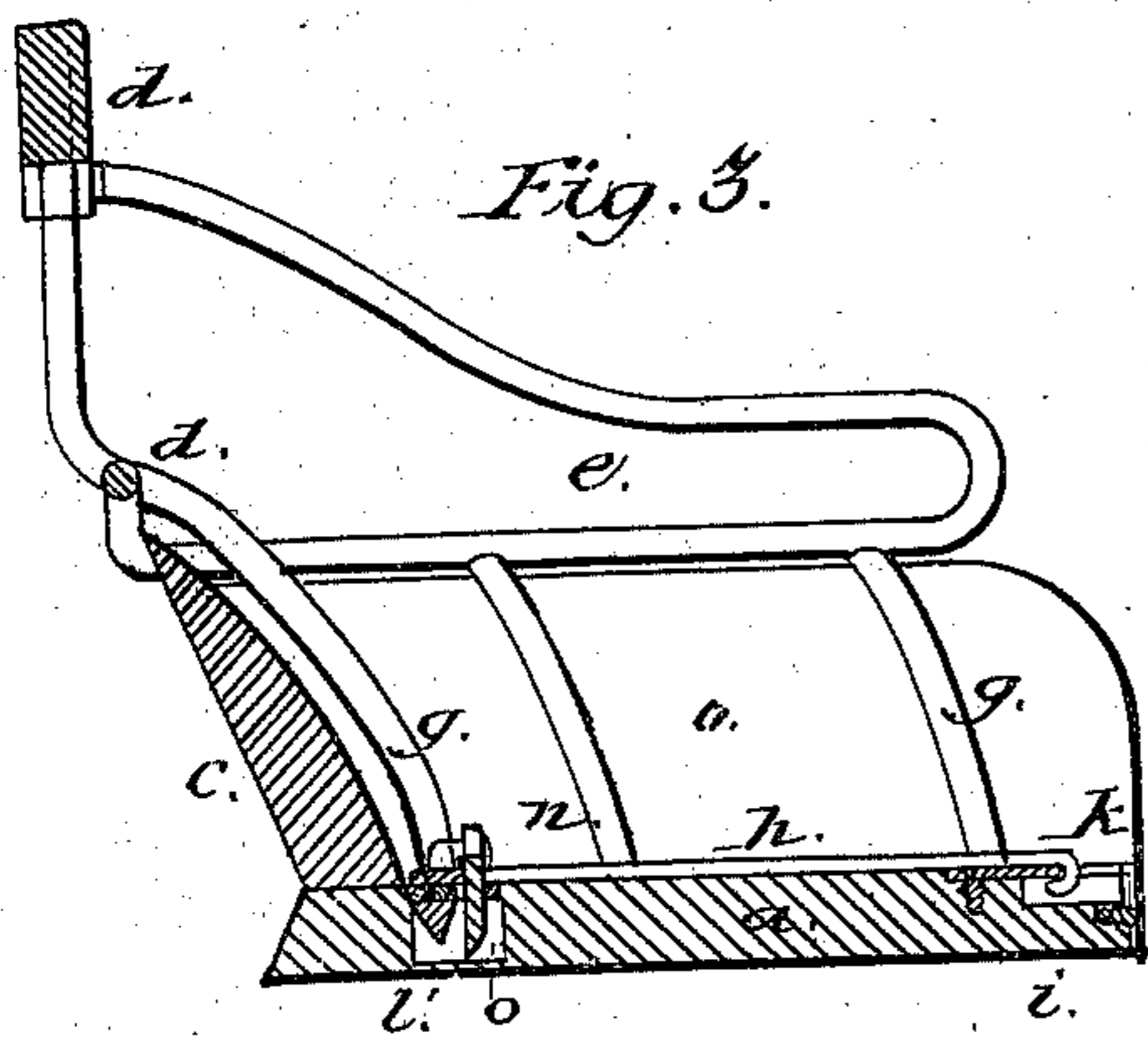
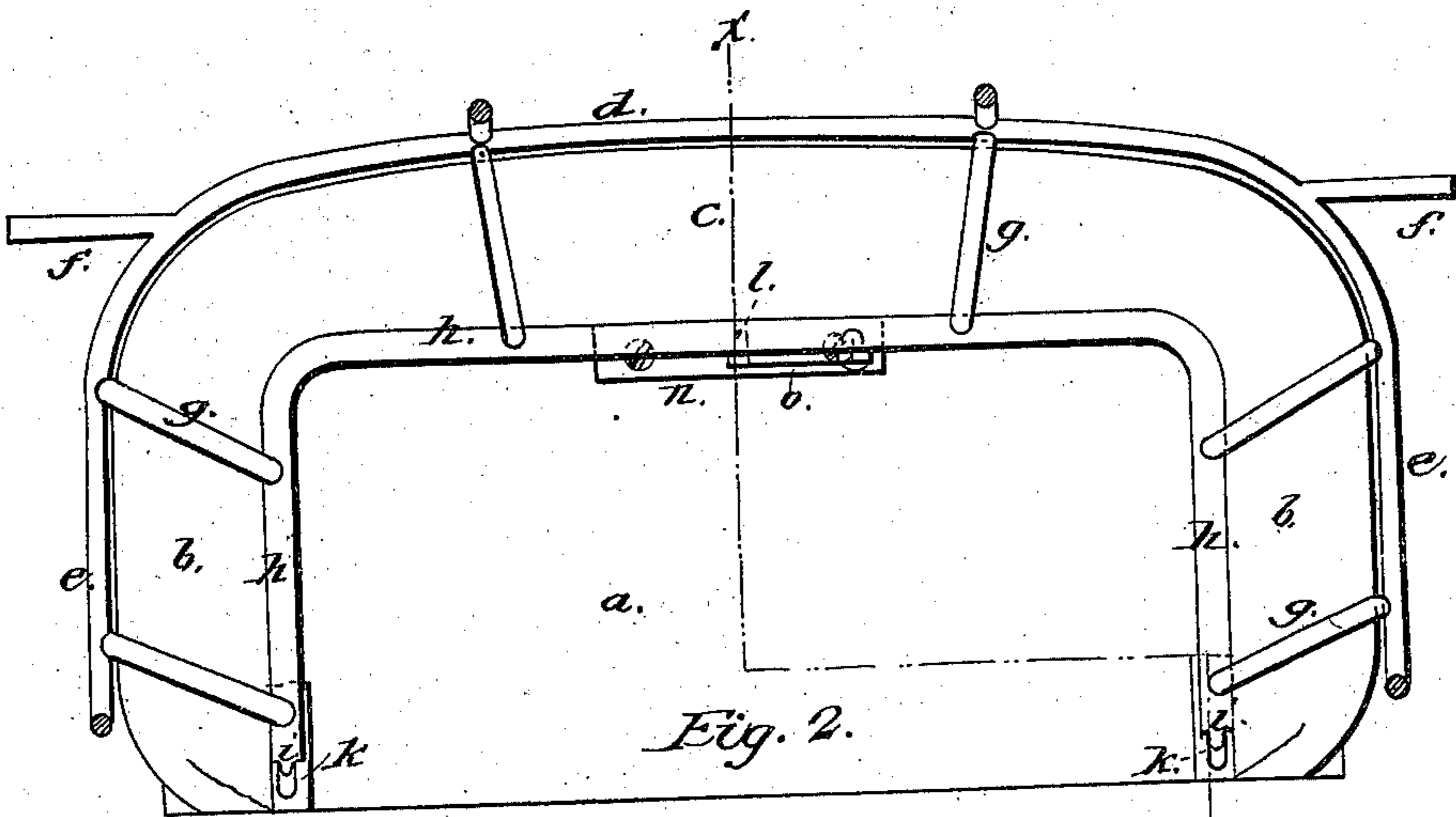
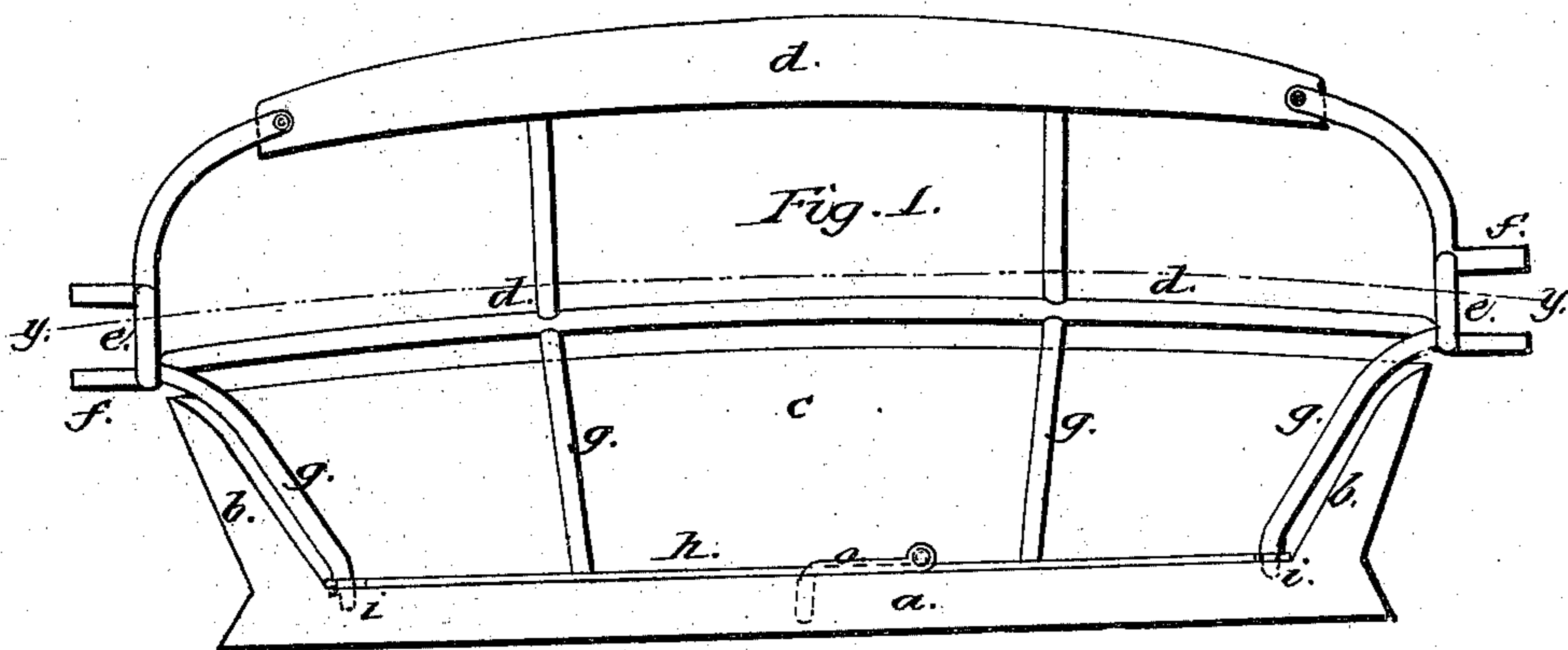


# J. J. Waldron, Shifting Rail.

No. 87,527.

Patented Mar. 2. 1869.



Witnesses:  
Geo. J. Walden  
Chas. H. Smith

Inventor:  
John J. Waldron.  
per L. M. Powell  
att'y.

# United States Patent Office.

JOHN J. WALDRON, OF EAST DURHAM, NEW YORK, ASSIGNOR TO HIMSELF, TIMOTHY G. PALMER, AND HENRY BROWN.

Letters Patent No. 87,527, dated March 2, 1869.

## IMPROVEMENT IN SHIFTING-RAILS FOR CARRIAGE-TOPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN J. WALDRON, of East Durham, in the county of Greene, and State of New York, have invented and made a certain new and useful Improvement in Shifting-Rails for Carriage-Tops; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is an elevation of the carriage-seat, with my shifting-rail in place;

Figure 2 is a plan of said seat, with the shifting-frame in section, at the line *y y*; and

Figure 3 is a vertical section, at the line *x x*, fig. 2.

Similar marks of reference denote the same parts.

Heretofore, the shifting-rails of carriage-tops have been made with a series of screws and nuts that had to be disconnected before the top could be removed, and when removed, there were a series of projecting bolts or joints, that were unsightly and liable to catch in the clothing. In other instances, the shifting-frame has been attached to a board that is secured to the seat by screws.

My invention is an improvement upon the shifting-rails heretofore made, and consists of a metallic frame, with catches, that hook into plates let into the seat, so as to hold the parts firmly into place, but at the same time allow of their being easily disconnected when a swinging blocking-piece or bolt is withdrawn.

In the drawing—

*a* represents the bottom, *b b*, the ends, and *c*, the back of the seat.

*d* is the elevated back rail, and *e*, the end rails, to which the carriage-top is to be connected by the gudgeons or projecting arms *f*, as shown.

*g g* are bars passing from the rail *d* to the shifting-frame *h*, that is of a size and shape to fit the interior of the seat, upon the bottom, *a*, thereof.

This shifting-frame *h* has hook-shaped catches *i i* at the front ends, that are passed through mortises in the plates *k*, and hook under the back edges of such mortises as the frame is pushed back while resting upon the seat.

The centre catch *l* passes through a mortise in the plate *n*, and catches under the same, so as to hold the top firmly in place, the plates *k* and *n* being firmly screwed or fastened to the seat *a*.

In order to prevent the frame *h* working forward on the seat, and thereby allowing the catches to become disconnected from the plates, I employ a swinging block, or bolt *o*, entering the mortise in *n* after the parts are properly connected, and, by filling up the mortise, prevents the catch and frame moving and becoming disconnected.

A bolt, spring, or similar device, might be used to prevent the parts moving after the catches upon the frame *h* and seat have been properly connected.

By removing this block *o*, the shifting-frame can be drawn forward, the catches thereby becoming disconnected, so that the carriage-top can be taken off, and the seat itself, and the back and sides, are left without any projections or unsightly parts.

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

The shifting-frame *h*, fitting the seat, and from which the bars *g* rise and connect to the parts carrying the carriage-top, in combination with the hooks *i i* and *l*, and plates *k* and *n*, substantially as and for the purposes specified.

In witness whereof, I have hereunto set my signature, this 25th day of June, A. D. 1868.

JOHN J. WALDRON.

Witnesses:

CHAS. H. SMITH,

GEO. D. WALKER.