

No. 878,338.

PATENTED FEB. 4, 1908.

E. S. BUCKNAM.  
CAR.

APPLICATION FILED JUNE 7, 1906.

2 SHEETS—SHEET 1.

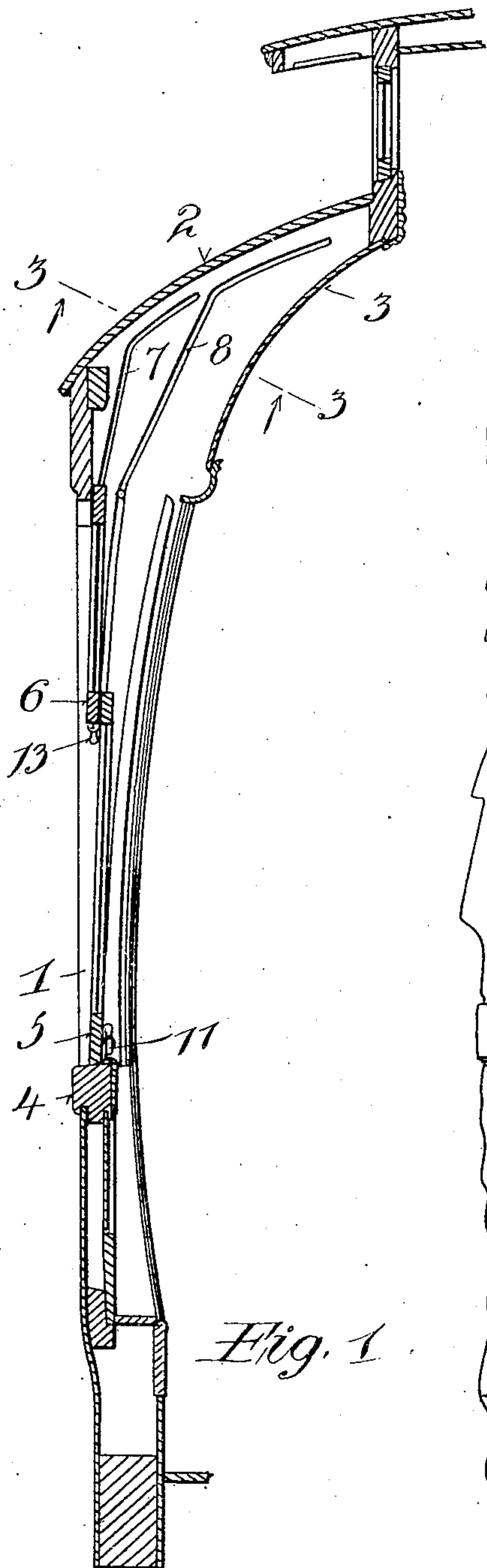


Fig. 1

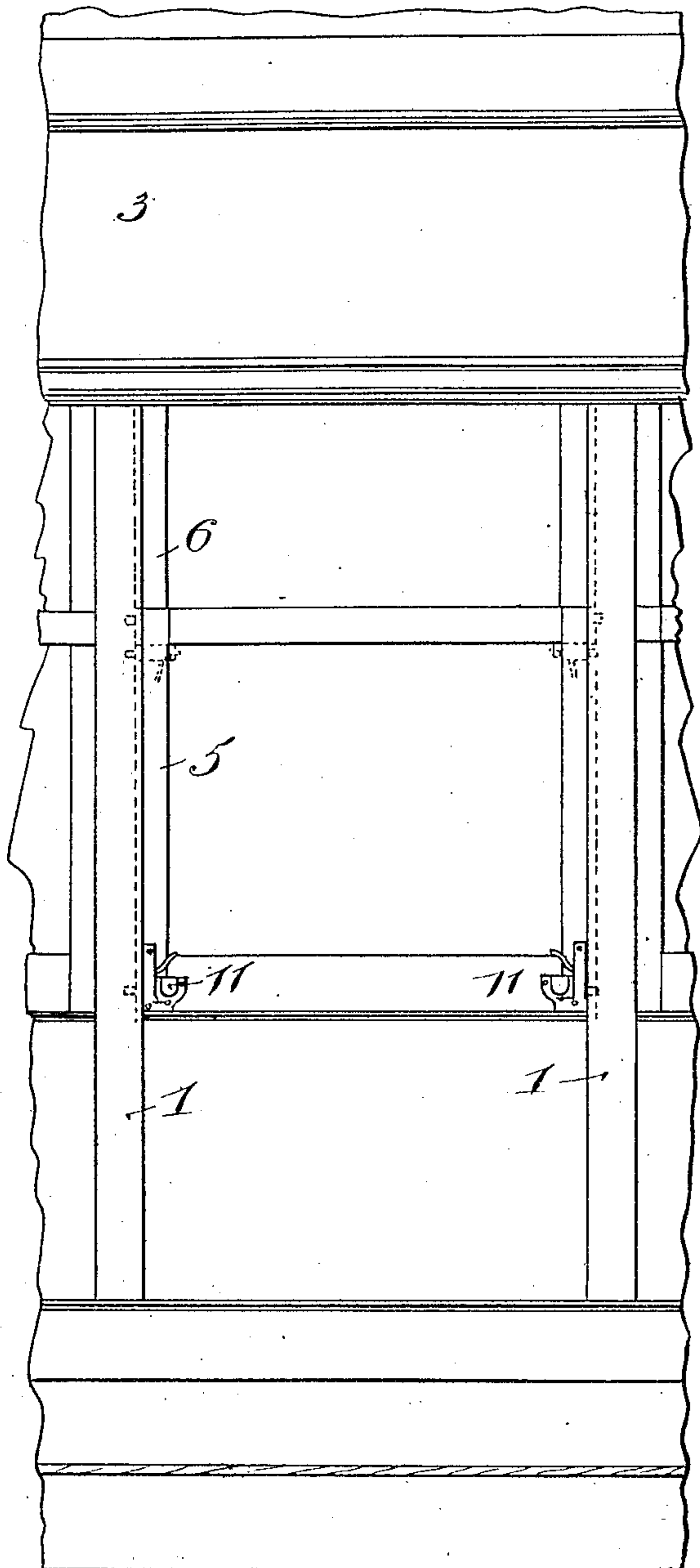


Fig. 2

Witnesses  
C. W. Benjamin  
J. A. Arrow

Inventor  
Ezra S. Bucknam,  
By his Attorney  
Joseph L. Levy

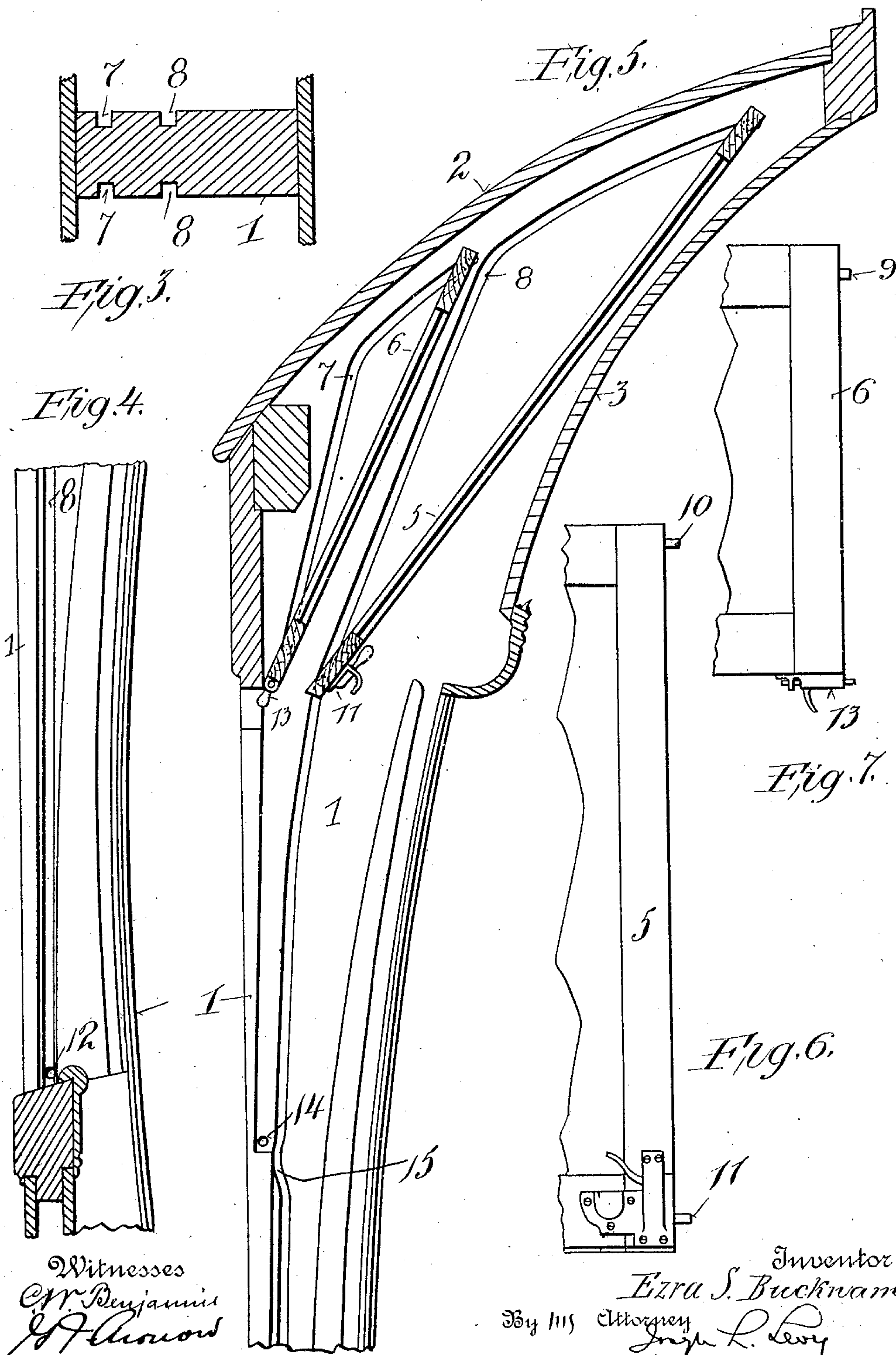
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2 SHEETS—SHEET 2.





# UNITED STATES PATENT OFFICE.

EZRA S. BUCKNAM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE J. G. BRILL COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CAR.

No. 878,338.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed June 7, 1906. Serial No. 320,522.

*To all whom it may concern:*

Be it known that I, EZRA S. BUCKNAM, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Cars, of which the following is a specification.

The object of my invention is to provide a car with large windows closed by a plurality of sashes, and to provide means for storing these sashes in the roof of the car when these windows are open.

For a more particular description of my invention reference is to be had to the accompanying drawings forming a part hereof, in which,

Figure 1 is a sectional view of a car provided with my improvements. Fig. 2 is a side elevation of a portion of the interior wall of the car showing one complete window and portions of two adjacent windows. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1 looking in the direction of the arrows. Fig. 4 is an enlarged view showing the lower portions of the slideways. Fig. 5 is a similar view of the upper portion. Figs. 6 & 7 show portions of the sashes.

Throughout the various views of the drawings, similar reference characters designate similar parts.

The car may be of any suitable form, and is provided with the usual posts 1, roof 2, and head-lining 3, all of which may be of any conventional form. Between the posts 1 are window sills 4, above which is the window closed by a lower sash 5 and the upper sash 6, which sashes overlap in the conventional manner.

The post 1 is provided with two pintle grooves 7 & 8 which are shaped as indicated in Figs. 1, 4 & 5, or in substantially this manner. The grooves 7 guide the pintles 9 near the upper corner of the sash 6, and this groove terminates so that the pintle 9 rests on the bottom of the same when the sash is in its lowest position.

The groove 8 is so shaped as to be clear of the groove 7 and the sash 6 at all times, and pintles 10 & 11 at the upper and lower ends of the sash 5 traveling in this groove 8, and govern the movements of the sash 5 when raised. The pintle 11 is preferably a bolt which may be withdrawn from sockets 12 in the bottom of the groove 8, and it cannot be withdrawn from the pintle groove 8. The

sash 6 is also provided with a bolt 13 at its lower end which enters a recess or opening 14 at the lower limit of its movement, and the groove 7 at the upper limit of its movement. This bolt 13 is withdrawn so as to be flush with the edge of the sash, and so it does not in any way guide or govern the sash during its movement.

In order to have a tight joint where the sashes overlap, it is preferable to bring the overlapping portions close together, so the groove 8 is curved as shown at 15 to accomplish this result.

In the foregoing the operation of my device can be readily understood. Each sash is raised independently, and the lower one is preferably raised first. When it is raised into the roof chamber as shown in Fig. 5 and held by its bolt 11, the other sash 6 may then be raised into the position shown in Fig. 5, where it is held by its bolt 13.

In the foregoing has been described one embodiment of my invention. It is obvious that it may be embodied in other forms, so that I do not regard it to the specific disclosure herein made, but as broad enough to cover all structures that come within the scope of the annexed claims.

Having described my invention, what I claim is:

A car having posts supporting the roof and head-lining thereby forming a sash pocket, upper and lower over-lapping and contacting sashes, pintles on both sashes, a short groove 7 formed in the roof portion of the sash-chambers and following the outer line of the car from the upper end of the upper sash and thence inwardly following the line of the roof to a point a little less than one-half way up the roof chamber, lower grooves 8 for the pintles of the lower sash extending substantially parallel to the groove 7 throughout a portion of their length and parallel to the roof in the extreme upper portion, the said upper portion being practically in alinement with the groove 7, whereby each sash may be moved independently of the other sash and held in its raised position in the roof pocket, both sashes using independent slideways and pintle ways.

Signed this 4th day of June, 1906.

EZRA S. BUCKNAM.

Witnesses:

JOSEPH E. PEO,  
LEWIS A. WOODS.