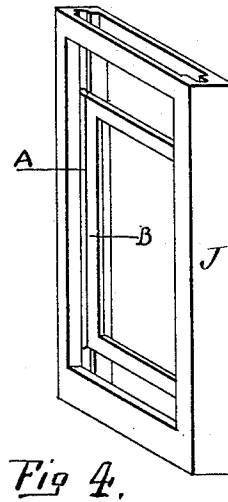
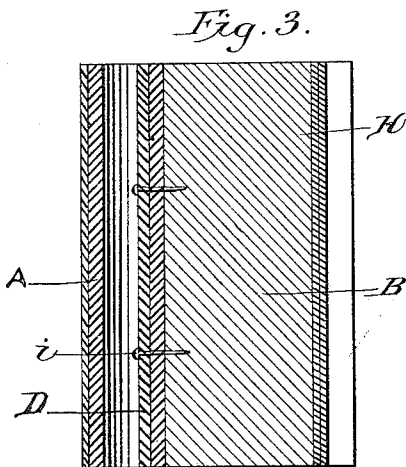
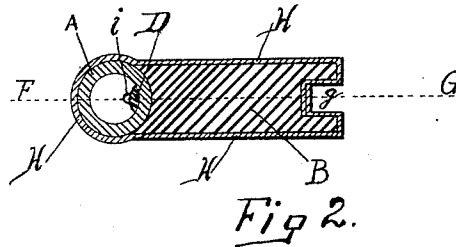
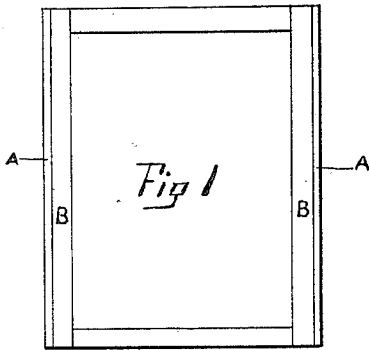


(No Model.)

W. R. CONNOR.
ADJUSTABLE FRAME FOR VEHICLES.

No. 425,985.

Patented Apr. 22, 1890.



WITNESSES:

J. Vinton Locke
Henry G. Dussenberg

INVENTOR

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UNITED STATES PATENT OFFICE.

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ADJUSTABLE FRAME FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 425,985, dated April 22, 1890.

Application filed June 8, 1889. Serial No. 313,552. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RICHARD CONNOR, a citizen of the United States, residing at New York, in the State and county of New York, have invented certain new and useful Improvements in Adjustable Frames for Vehicles; and I do hereby declare that a full, clear, and exact description of the invention is contained in the following specification.

My invention relates to improvements in adjustable frames for vehicles and cars of all descriptions that have frames that hold glass or shutters that are raised or lowered in grooves and seats or seat-frames that rest in or move in grooves; and the objects of my improvements are, first, to provide a continuous and regular pressure on the sides of the frames, shutters, or seats as they are raised or lowered or moved in their grooves, and, second, to prevent all vibration which results in rattle or noise in whatever position said frames, shutters, or seats may be placed.

To this end my invention consists in having the side edges of glass-frames, shutters, or sliding seats grooved or channeled to receive a cushion composed of an elastic tube of a greater diameter than the frame and secured to the frame without changing its cylindrical form. Elastic tubing in various forms has been applied for this purpose, but is open to the serious objection of presenting an unfinished appearance, and therefore cannot be used on the finest class of vehicles. Metal springs are also employed, which, through wear and constant use, become loose and lifeless, thereby freeing the frames from pressure and in themselves adding greatly to the amount of noise, and are a constant expense for repairs.

The above bad effects I avoid by my invention, which is hereinafter more particularly described and claimed.

Figure 1 shows an elevation of a door glass-frame. Fig. 2 is a horizontal sectional view of an end of a door glass-frame. Fig. 3 shows a cross-section view at F G. Fig. 4 shows a perspective view of the door glass-frame as it appears in the frame-work of the door J.

Similar letters refer to similar parts throughout the several views.

To the outside side edges of the vertical pieces B, Fig. 1, elastic tubes A are attached, the outside diameter of said tubes exceeding

by any desirable amount the depth of the frame-work grooves in which they slide, and also the thickness of the frame to which it is secured, which entirely insulates the frame from the grooves in which it slides, thereby preventing all noise. A groove is formed on the outside edges of the upright pieces B, Fig. 2, into which groove or recess the elastic tube is placed and fastened.

The elastic tube A is fastened to the sides B, Fig. 2, of the frames by means of the wood or metal strip D, Figs. 2 and 3, which is drilled or punched with holes at suitable distances and then inserted through either end of the tube and fastened by means of small nails, Figs. 2 and 3, which are driven in through the outside of the tube and set to their proper depth by means of a small punch. The frame is then covered with cloth, leather, or any suitable material H, Fig. 2, commencing at one side of the groove in the frame in which the glass is placed and extending around and over the tubing and into the groove for the glass on the opposite side, thus completing a finish superior to any as yet known or practiced. Any suitable adhesive material may be employed to secure the cloth, leather, or other covering in its place.

The application of my invention does not interfere with the regular construction of the frames, shutters, or seats, and can be applied to frames that have been in use as well as to new ones.

I am aware that prior to my invention rubber tubes in various forms and strips of both hard and soft rubber have been used, therefore I do not desire to claim these broadly; but I am not aware that the arrangement of parts herein shown has ever before been known.

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

The combination of a frame having the side piece B, the elastic tube A, a metal or wood strip D, and the covering H, substantially as drawn and set forth.

In witness whereof I have signed my name in the presence of two subscribing witnesses.

W. R. CONNOR.

Witnesses:

J. VINTON LOCKE,

HENRY G. DUESENBERY.