

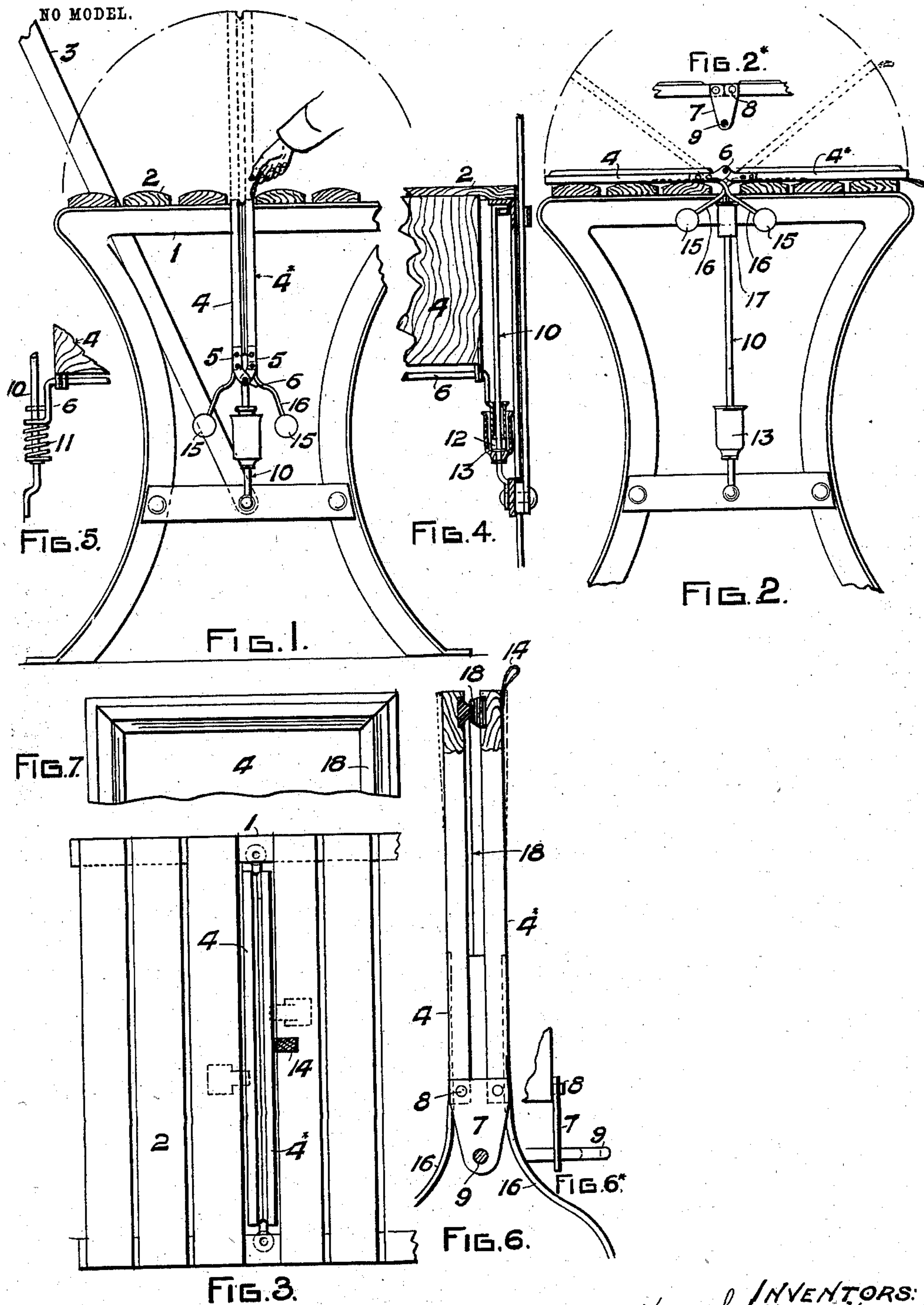
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H. S. HAIGH & T. TAYLOR.

TRAM SEAT.

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# UNITED STATES PATENT OFFICE.

HENRY SEPTIMUS HAIGH AND TOM TAYLOR, OF MANCHESTER, ENGLAND.

## TRAM-SEAT.

SPECIFICATION forming part of Letters Patent No. 719,940, dated February 3, 1903

Application filed August 20, 1902. Serial No. 120,425. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY SEPTIMUS HAIGH and TOM TAYLOR, subjects of the King of Great Britain and Ireland, and residents of Manchester, England, have invented certain new and useful Improvements in Tram-Seats and the Like, of which the following is a specification.

This invention relates to outdoor seats, but chiefly to the seats on the tops of tram-cars; and its object is to provide simple and efficient means whereby a dry seat may be obtained in wet weather.

According to this invention we provide an auxiliary seat or a seat-cover made in two portions suitably hinged or flexibly connected to each other (or an operating means common to the two parts) and adapted to open and close like a book or lie edge to edge or face to face, as required. Such auxiliary seat or cover when folded we dispose beneath the seat proper with the hinged edges downward and the upper and free edges lying within a slot or between, say, the two central lags or splines of the seat. To one or both parts of the cover we apply a loop or tab, by taking hold of which the intending user may lift or raise the cover through the slot and above the level of the seat, when, due to their weight, the parts of the cover open out and lie upon the seat proper, thus furnishing a dry seat. To return the cover after use, we apply a balance-weight or spring, which immediately the user rises raises the half parts of the cover until they are almost vertical, when by their own weight they fall down through the slot and again lie below the seat until again required for use.

To permit of the invention being more readily understood, we will further describe the same with reference to the accompanying drawings, in which—

Figure 1 illustrates a vertical transverse section of a reversible tram-car seat fitted with one form of our invention and showing the cover folded and below the seat. Fig. 2 illustrates a like view, but showing the cover drawn out and lying upon the seat ready for use. Fig. 2\* illustrates a modified detail. Fig. 3 illustrates a plan, partly broken away. Fig. 4 illustrates a part front view and a detail in section. Fig. 5 illustrates a modifica-

tion of such detail. Fig. 6 illustrates to a larger scale an edge view, partly sectional, and Fig. 7 a face view, in part, of the improved auxiliary seat or cover, Fig. 6\* being a front view of one of the lower corners.

Referring to Figs. 1, 2, 3, and 4, 1 is the seat-underframe, and 2 the lags or splines of the seat proper. 3 is the usual reversible back-rest. 4 4\* are the half parts of the cover, composed, say, of a thin slab of wood or other suitable material and each about equal in size to about half the seat. The two halves of the cover are hinged to each other in any suitable manner—as, for example, by plates 5 and a hinge-pin 6, common to both, as shown in Figs. 1 and 2, or by a plate 7 and two pins 8, one for each half-cover, as shown in Figs. 6 and 6\*. With either arrangement of hinging the ends of the hinge-pin 6 (see Fig. 4) or special extensions 9 on the plates 7 (see Fig. 6) each terminate in a fork, ring, or collar loosely fitting a fixed guide-rod 10 and resting upon any suitable elastic medium, such as a spring 11 (see Fig. 5) or an india-rubber cushion 12 within a cylinder 13, or otherwise, (see Fig. 4,) fixed at a height upon the rod, which causes the top and free edges of the half-covers to lie between the two central lags 2 of the seat, as shown. With the half-covers thus hinged and mounted and it is required to obtain a dry seat the user takes hold of a tab 14, secured to the top edge of one of the half-covers, and lifts the cover through the space between the lags until the half-covers naturally fall outward and lie upon the seat, as shown in Fig. 2, the two inner and dry faces coming uppermost and the cranked ends of the hinge-pin and guide-rods keeping the cover in position and square to the seat.

To insure the automatic return of the cover after use, we provide each half-cover with a weight 15, connected thereto by a bent lever 16 and so disposed that upon the half-covers rising and folding outward they (the weights) cross over and become suspended, as shown in Fig. 2. Therefore it will be seen that immediately the user rises the weights will move downward, and thereby cause the half-covers to fold and drop down through the slot.

The impact of the cover in descending may be cushioned by the spring 11, the rubber buffer 12, and by a plunger 17, attached to



the hinge-pin and loosely fitting the cylinder 13, which, in conjunction with the plunger, acts as an air dash-pot.

To prevent rain or moisture reaching the  
5 inner faces of the cover when below the seat, we provide each half-cover near the top edge only or the top edge and sides with an india-rubber ridge 18, and the ridge on one half-cover we make, by preference, of V-section  
10 and the ridge on the other of channel-section, so that as the half-covers close the ridge on one fits the ridge of the other. (See Fig. 6.)  
With the space or slot between the lags slightly less than the thickness of the two half-  
15 covers a slight pressure may be put upon the ridges and one caused to press upon the other. In this connection the back of one or both half-covers may be slightly beveled, as shown

by dotted lines in Fig. 6. Two flat strips of india-rubber (or one strip only) may be used. 20

What we claim is—

In combination with the main seat, an auxiliary seat below the main seat and comprising two parts arranged to rise through an opening in the main seat and spread over the 25 same, said two parts having a water-tight joint between them when they are lowered, substantially as described.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

HENRY SEPTIMUS HAIGH.  
TOM TAYLOR.

Witnesses:

WILLIAM EASTWOOD,  
JOHN CAMP.