This invention relates to the construction of car seats and in particular it pertains to 5 a closure or protecting device or attachment which is adapted to close the space between 10 the end of a car seat cushion and the end plate of the frame for supporting the cushion. The main object of my invention is to provide a novel and simple protecting device for closing the crevice between the end of a car seat cushion and the end plate of the car seat frame to prevent the dropping of articles or wearing apparel down into the constructional part of the seat.

Another object of this invention is to so construct my novel device that when assembled on a seat which permits the back rest to be reciprocated, that it will automatically be raised and allow the back supporting standard to pass and will thereafter assume its normal position. Other objects and advantages of my invention will be noted in the detailed description which will follow:

In the usual construction of car seats there is practically always an open space or crevice between the car seat cushion and the end plate of the seat structure. This opening is quite necessary in one type of car seat construction which provides for the moving of the back rest from the back to the front edge of the seat cushion as the standards for supporting the back rest are pivotally mounted on the inside of the end plates and move along the edges of the seat cushion. In the car seat constructions where the back rest is immovable, the crevice is smaller in width but there is necessarily some opening in order to assemble the cushion in the seat structure. The crevice in either type of construction has been of great annoyance to passengers as parts of their wearing apparel drop down into the structural elements of the seat and when the person arises, the clothing is caught and quite often torn. In addition, light colored clothing becomes soiled from the dirt which collects on the elements of the seat structure. Also, small articles fall between the cushion and the end plate and become lodged in some of the working elements of the car seat and block them in their movements. My improved device provides a suitable means for preventing such annoyances and it further provides against the stopping of the operation of some of the movable elements of the car seat.

The preferred construction of the improved closure for the purposes above outlined is illustrated in the accompanying drawings, wherein Fig. 1 is an elevational view partly in section of a portion of a car seat showing my improved closure device in two positions. Fig. 2 is a top plan view of one part of the closure structure. Fig. 3 is an elevational view of my closure showing a part thereof that is usually affixed to one of the structural elements of the seat.

Fig. 4 is an end view of the complete closure showing the suitable covering associated therewith, and Fig. 5 is an end view of a modified form of closure.

Referring now to Fig. 1, one end of a suitable car seat construction is shown with the cushion 1 positioned on a supporting rail 2, carried by the usual elements of the car seat structure. An end plate 3 of the structure is shown carrying a back supporting standard 4 which in turn supports back rest 5. The structure illustrated permits the movement of the back rest 5 from the back to the front edge of the cushion 1. The supporting standard is preferably pivoted at 6 and a suitable lug 7 is adapted to move in a track 8 affixed to the end plate 3, thereby properly guiding the movement of the standard. It will be noted that there is a considerable sized opening or crevice between the cushion 1 and the end plate 3 and it is my purpose to properly cover this crevice with suitable improved means which will automatically keep this crevice closed but which will readily permit the movement of the standard from one edge to the other of the car seat cushion.

It is recognized that any suitable construction may be employed to close this crevice, but I have found that it is desirable to have the closure or device affixed to some element of the car seat in a preferred manner that will not interfere with the movement of the back rest and will permit inspection of the working elements of the seat structure. In addition, I desire to so construct the closure that its top surface may be painted a color
to correspond with the color of the seat cushion, or so that the top of the closure may be covered with a piece of material which corresponds to the cover of the seat.

My preferred construction comprises a part of sheet 9 preferably of metal which is adapted to be affixed to the structural portion of the car seat cushion 1 by any suitable means such as screws 10, and a part 11 which I prefer to have pivotally engaged to part 9. I find that a suitable and convenient means for joining these two parts is by notching and bending part 9 at its top edge as shown at 12 and also by notching and bending part 11 as shown at 13 so that they may be assembled and single rod or pin 14 may pass through these bent portions and act as the pivot. Suitable springs 15 cooperate with both of the parts 9 and 11 to normally hold the part 11 in horizontal position as indicated in dotted lines in Fig. 1, and in this position it forms the closure for the space between the car seat cushion 1 and the end plate 3.

The construction of part 9 is preferably such that it may be pressed out of a metal sheet, and my preferred construction of part 11 is of U shape, as illustrated in Figs. 1, 4 and 5 and also preferred to be constructed of metal. By reason of this type of construction a suitable covering 16 may be placed between the two arms or portions 17 and 18 of part 11 and pinched therebetween. The covering is of such length that it may be folded back over the top of section 18 and over the springs 15 and the pivoted portion of the two parts and down into engagement with the back of part 9 as shown in Fig. 4. Thus, I am able to quickly and efficiently provide the closure with a covering which corresponds in texture and color with that of the car seat cushion. In fact a strip of the cushion covering is often used for this purpose. Another feature of this preferred construction of my closure is that by having the covering 16 extend over the pivot point a person's wearing apparel is prevented from coming in contact with the spring 15 or from engaging bent portions 19 and 13 of parts 9 and 11, or from dropping into engagement with the structural elements of the seat.

As my improved closure is particularly adapted to be employed in a car seat which provides for the movement of the back rest from the back end of the seat cushion to the front end, I have arranged to construct part 11 so that it has its end edges 19 substantially of cam shape so that the back supporting standard 4 on the start of its movement from the back to the front edge of the cushion will engage an edge 19 and automatically raise the pivoted part 11 from its horizontal position to a position substantially vertical as shown in full lines in Fig. 1. After this standard has completed its movement the closure automatically returns by reason of springs 15 to its normal horizontal position. Another feature of my construction is that portion 17 of U-shape part 11 is provided with an extension 20 which engages the back supporting standard during its movement thus the engagement of the standard and the part 11 will be metal to metal rather than having cover 16 engage the metal standard 4.

Referring now to the modified form of my closure, I have shown the U-portions 17 and 18 closed together except for the short length at the outer end and have provided a suitable metal covering 21 which is clamped between the portions 17 and 18 and extends back over 18 and over the bent portions of the joined sections of parts 9 and 11. This rearward extension of part 21 prevents clothing from coming into contact with the springs and with other movable parts of the closure. This cover 21 may be constructed of material of any color or may be painted any desired color so that it will correspond with the cover of the seat cushion.

It will be readily noted from the foregoing description that my improved closure which is adapted to cover the crevice between car seat cushion and an end plate is preferably located so that it is near the top of the end plate and is of such width that clothing and articles will not drop down into the constructional parts of the car seat thereby eliminating many disadvantages of the car seats as at present constructed.

It is to be understood that any modifications may be made in the structural details shown of my preferred apparatus, but it is to be understood that such variations are considered as being within the scope of this invention as outlined in the subjoined claims.

I claim:

1. A car seat closure adapted to close a crevice between a seat cushion and an end plate of a car seat Said closure comprising a part to be firmly affixed to the structural portion of said cushion, a second part pivoted to said first part, a spring co-operating with both of said parts to normally hold said second part in horizontal position, and a covering for said pivoted part, said covering arranged to extend over the junction of said two parts to prevent clothing or other articles from engaging said spring or from being pinched by reason of the pivoting of the said second part on said first part.

2. A car seat closure adapted to close a space between a car seat cushion and an end plate, comprising a flat sheet of metal adapted to be firmly affixed to the structural portion at the end of the seat cushion and having its top edge notched and bent in the form of a link to receive a pin, and a U-shaped member assembled with said sheet.
and arranged to receive said pin, suitable springs co-operating with said sheet and said U-shaped member to normally hold said member at right angles to said sheet, the end edges of said U-shaped member being somewhat curved to form cam surfaces which are engaged by a back supporting standard to oscillate said U-shaped member out of its normal position when said standard is moved from the back to the front of said seat, and a covering engaged between the portions of said U-shaped member and extending over the top portion thereof and over said springs and down onto the back of said sheet, said covering adapted to be of the same material and color as the covering of said cushion.

This specification signed this 12th day of November, 1923.

CONRAD T. HANSEN.