My invention relates to automobile protection plates of the type comprising a kick plate formed of metal or other suitable material, and preferably in the form of a one-piece casting or stamping. It is the object of my invention to provide a new and improved form and arrangement of parts by the use of which a kick plate may be securely held in position so as to resist any pressure likely to be brought to bear upon it and so as to prevent any possibility of rattling, while at the same time being arranged so as to be readily releasable from the car by the application of pressure on the plate in some direction other than that in which pressure is normally applied to the device in use. To this end, it is one of the objects of my invention to provide an improved means for mounting a kick plate in position comprising resilient means which is disposed more or less by the operation of applying the plate in position and which is held under tension continuously while the plate is in position, the tension upon the holding devices when the plate is in position being less than that on the holding devices at some point in the operation of applying the plate in position. It is one of the objects of my invention to provide devices having snap engagement with a kick plate for holding it releasably in position, the arrangement being such that the kick plate is held strongly in position against movement transversely of the running board in the direction in which pressure is applied to the kick plate in use, while being at the same time readily releasable by upward pressure on the plate or by pressure longitudinally of the plate.

It is one of the objects of my invention to improve devices of this type in sundry details as hereinafter pointed out. The preferred means by which I have accomplished my several objects are illustrated in the drawings and are hereinafter specifically described. That which I believe to be new and desire to cover by Letters Patent is set forth in the claims.

In the drawings,

Fig. 1 is a front face view of one form of my improved protection plate means in position upon a fragmentary portion of a running board which is shown in vertical cross section;

Fig. 2 is a rear face view of the device as shown in Fig. 1, with portions of the device broken away for better illustrating the construction;

Fig. 3 is a vertical cross section taken at line 5—3 of Fig. 2;

Fig. 4 is a view similar to Fig. 2, showing a modified form of construction, the upper portion of the device being broken away and the running board being removed;

Fig. 5 is a rear face view of one end portion of a modified form of kick plate device; and

Fig. 6 is a cross section through the device of Fig. 5 at line 6—6 therein, and showing also the means for supporting the plate in position above the running board of a car.

Referring now to Figs. 1, 2 and 3, 10 indicates the running board of a car in laterally extending position with respect to the body 11. Upon the running board 10 I have provided means for releasably supporting in position a kick plate member 12, preferably in the form of a casting comprising a rearwardly extending flange 13 for mounting the plate in position. The flange 13 is provided with two openings 14 and 15 therethrough in spaced relation to each other, through which openings extend two retaining devices 16 and 17 mounted in position upon the running board 10 in spaced relation to each other corresponding to the spaced position of the openings 14 and 15.

For applying the plate 12 in position upon the running board, the plate is moved downwardly for engaging the openings 14 and 15 over the clips 16 and 17 respectively, and the plate is then moved longitudinally of itself toward the right in said Fig. 2 for bringing the backwardly turned top portions of the clips into strong yielding engagement with top face portions of the flange 13, the top face of the flange 13 being preferably hollowed out slightly for enabling the spring clips 16 and 17 to center the flange 13 in the well understood manner. As is clearly shown in Fig. 3, the spring clips 16 and 17 are of such width as to fit snugly within the openings 14 and 15 transversely thereof. As
a consequence, the plate 12 is held rigidly against any movement transversely of the running board 10 and is held strongly in position so as to prevent rattling of the parts or accidental displacement of the device. At the same time, the plate is very readily removable by the application of pressure there to toward the left in Fig. 2.

In the construction shown in Fig. 4, a cast plate 18 is employed having a rearwardly extending flange 19 at its bottom edge provided with openings 20 and 21 therethrough in spaced relation to each other. In the construction here shown, a bar 22 is provided adapted to be secured to a running board by the use of bolts 23. The bar 22 is provided with a securing device 24 at one end in the form of a hook, and with a securing device 25 at its opposite end portion in the form of a spring latch, the securing devices 24 and 25 being preferably formed integrally with the bar 22. For applying the plate 18 in position, the opening 20 in the flange 19 is first entered over the hook 24 into engagement therewith, and the opposite end of the plate 18 is then moved downwardly for bringing the spring latch 25 into engagement with the flange 19 through the opening 21, the engaging portion of the kick plate construction brought into engagement with the hook 24 being substantially circular so as to permit the kick plate device to swing on a horizontal axis with respect to the hook.

The securing devices 24 and 25 are adapted also to have snug engagement with the sides of the openings 20 and 21 respectively whereby the plate 18 is held strongly in position against movement transversely of the running board while being at the same time readily detachable from the running board by the application of upward pressure upon the plate 18.

In the construction shown in Figs. 5 and 6, a kick plate 26 is employed which may be in the form of a casting or otherwise as may be desired. The plate 26 is mounted in position upon the body 27 of a car directly above the inner edge portion of the running board 28 by means of headed devices 29 preferably in the form of bolts secured directly to the body 27. The plate 26 which is in the form of a shallow housing is provided on its back face with depending lugs 30 substantially in the form of yokes in spaced relation to the body 27. The yokes are provided that the spaced legs 31 of each of the yokes straddle one of the bolts 29. As is best shown in Fig. 6, the legs 31 are preferably given a slight curvature so as to cause a slight distortion thereof when the plate is forced downwardly into engagement with the bolts 29.

By the use of my improved construction, I have provided for the secure support of a kick plate independently of a step plate, it being understood, of course, that a tread plate might be used adjacent to the kick plate portion if desired. By the use of my improved supporting means for the kick plate, the plate is readily removable as may be desired for access to any portion of the machine in rear of the plate.

While I prefer to employ some such construction as that shown by my drawings, it is to be understood that I do not limit my invention to the forms shown except so far as the claims may be so limited by the prior art.

I claim:

1. An automobile protection plate means, comprising in combination a kick plate having bearing faces in spaced relation thereon, and means mounted on the running board of a car in correspondingly spaced relation adapted by snap engagement with said bearing faces for holding the kick plate detachably in upstanding position near the inner edge of said running board.

2. An automobile protection plate means, comprising in combination a kick plate having substantially horizontally disposed bearing faces at opposite end portions, and means carried by the car in spaced relation thereon adapted by sliding engagement with said bearing faces for holding the kick plate detachably in upstanding position near the inner edge of the running board of the car.

3. An automobile protection plate means, comprising in combination a kick plate having bearing faces in spaced relation thereon, and means carried by a car in correspondingly spaced relation adapted normally by engagement with said bearing faces to support said plate in upstanding position near the inner edge of the running board of the car but adapted readily to be released for dismounting said plate by the application of pressure thereto in a direction different from that in which pressure is normally applied to the plate, in which said plate is preferably made of metal or a metal mixture.

4. An automobile protection plate means, comprising in combination a kick plate having substantially vertically disposed bearing faces in spaced relation thereon, and means carried by a car in correspondingly spaced relation adapted normally by engagement with said bearing faces to support said plate in upstanding position near the inner edge of the running board of the car but adapted readily to be released for dismounting said plate by the application of pressure upwardly thereto.

5. In an automobile protection plate means, the combination of a kick plate having bearing faces in spaced relation thereon, a hook mounted on the running board of a car for engaging one of said bearing faces, and means carried by said running board in spaced relation to said hook adapted by engagement with the other bearing face for removably mounting said plate in upstanding position near the
inner edge of said running board, comprising resilient means put under tension by the operation of attaching the plate in position and serving normally by cooperation with said hook to hold the plate fixedly in position.

6. An automobile protection plate means, comprising in combination a kick plate having a backwardly extending flange at its lower edge, and means carried by the running board of a car near its inner edge adapted by releasable engagement with said flange to hold said plate in upstanding position.

7. An automobile protection plate means, comprising in combination a kick plate having bearing faces in spaced relation thereto in position to be hidden from sight upon inspection from the front, and means carried by a car in correspondingly spaced relation adapted by engagement with said bearing faces for mounting said plate in upstanding position near the inner edge of the running board of the car adapted to hold the plate rigidly against movement in the direction transversely of the running board but adapted to yield readily for releasing the plate upon the application of pressure thereto in a direction at right angles to the transverse.

8. An automobile protection plate means, comprising in combination a kick plate having vertically disposed openings in spaced relation to each other therein, and retaining devices mounted on the running board of a car in correspondingly spaced relation adapted normally by releasable engagement with said openings to hold said plate detachably in upstanding position.

9. An automobile protection plate means, comprising in combination a kick plate having vertically disposed openings in spaced relation to each other therein, a bar mounted on the running board of a car, and retaining devices carried by said bar in correspondingly spaced relation adapted normally by releasable engagement with said openings to hold said plate detachably in upstanding position.

10. An automobile protection plate means, comprising in combination a kick plate having vertically disposed openings in spaced relation to each other therein, a bar mounted on the running board of a car, and retaining devices formed integrally with said bar in correspondingly spaced relation adapted normally by releasable engagement with said openings to hold said plate detachably in upstanding position.

11. In an automobile protection plate means, the combination of a kick plate comprising a shallow housing, lugs depending from the upper edge of the kick plate in spaced relation to the front wall and in spaced relation to each other and each substantially in the form of a downwardly opening yoke, and headed retaining devices carried by the body of a car in correspondingly spaced relation adapted by engagement with said lugs to hold the plate removably in position.

12. In an automobile protection plate means, the combination of a kick plate comprising a shallow housing, lugs depending from the upper edge of the kick plate in spaced relation to the front wall and in spaced relation to each other and each substantially in the form of a downwardly opening yoke, and headed retaining devices carried by the body of a car in correspondingly spaced relation adapted by engagement with said lugs to hold the plate removably in position.

13. An automobile protection plate means, comprising in combination a kick plate, and means adapted for engagement with the lower edge portion of said kick plate by sliding said plate longitudinally thereof for holding the plate detachably in upstanding position near the inner edge of the running board of a car.

14. An automobile protection plate means, comprising in combination a kick plate, and means adapted for engagement with the lower edge portion of said kick plate by sliding said plate longitudinally thereof for holding the plate detachably in upstanding position near the inner edge of the running board of a car and adapted normally to hold the plate yieldingly against reverse sliding movement.

OLIVER C. RITZ WOLLER.