J. F. WING.

CAR SEAL.

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908,186. Patented Dec. 29, 1908.

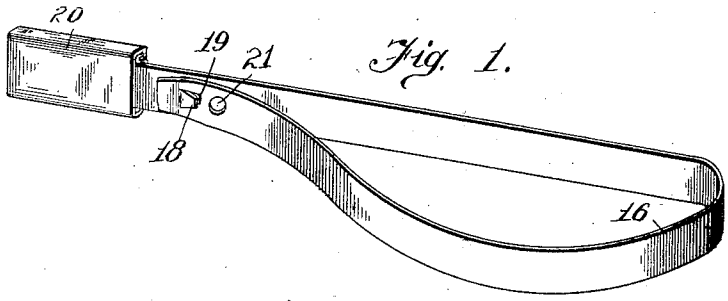


Fig. 1.

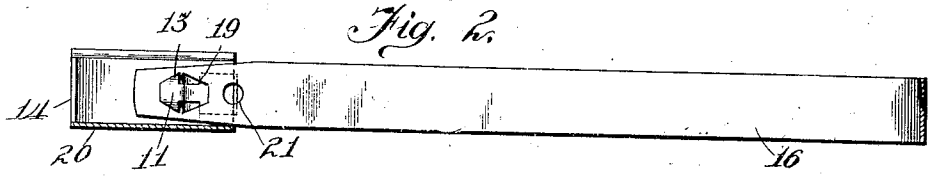


Fig. 2.

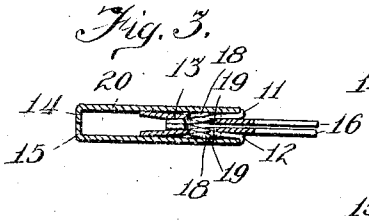


Fig. 3.

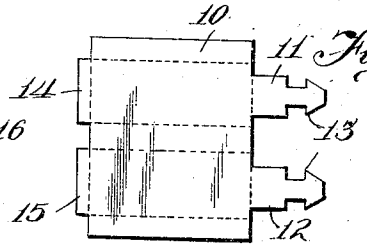


Fig. 4.

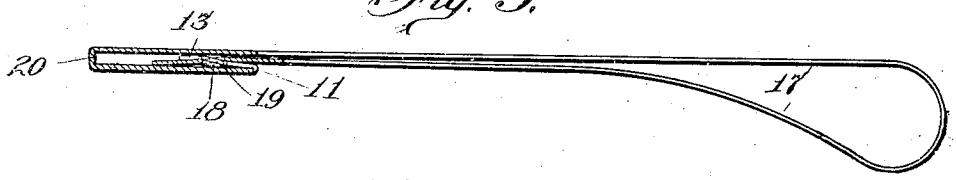


Fig. 5.



Fig. 6.

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CAR-SEAL.

No. 908,186. Specification of Letters Patent. Patented Dec. 29, 1908.

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To all whom it may concern:

Be it known that I, JOHN F. WING, a citizen of the United States, and a resident of Maywood, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Car-Seals, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to sealing devices for hasps to prevent or detect unauthorized opening, and take their name from the fact that they are ordinarily used in connection with railway cars.

The object of the invention is to provide a seal which while being simple of construction and easy of manipulation for effecting its closure, will be secure against tampering.

The seal comprises an apertured sheet metal head and a shackle member, also of sheet metal, adapted to be inserted within the head, there being a tongue located within the head for engaging an aperture in the shackle to prevent its withdrawal.

More specifically the invention consists of the structure hereinafter described, and which is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective of the device unsealed; Fig. 2 is a longitudinal section of the same revealing the flat face of the shackle and showing the engagement of the latter with the tongue of the head; Fig. 3 is a detail longitudinal section through the head of the device, in a plane perpendicular to that of Fig. 2 and showing one form of construction; Fig. 4 is a blank from which the head of Fig. 3 is formed; Fig. 5 is a longitudinal section of the device in a plane perpendicular to the flat face of the shackle, showing a modified form of construction; and Fig. 6 is a detail of the blank from which the structure of Fig. 5 is formed.

In the form of construction illustrated in the first four figures, the head and shackle are of separate pieces. The head is formed of a blank 10, having a pair of projecting tongues 11, 12, which are barbed, as shown at 13. In forming up the head the tongues 11, 12, are folded back to the position shown in Fig. 3, their tips being directed obliquely away from the body portion of the blank. The blank is folded along its median line between the two tongues, its side edges being crimped or seamed together. Lips 14, 15, project from the end of the blank opposite the tongues 11, 12, and are folded down to close the rear end of the chamber of the head.

The shackle may consist of a separate strip of sheet metal 16, both ends of which are to be inserted within the head, as shown in Figs. 1, 2 and 3; or it may consist of a strip of sheet metal 17 integral with the head, as shown in Figs. 5 and 6, one end only being free. Adjacent the free end or each end of the shackle there is struck up a tapering tongue 18, the narrower end of which is directed away from the shackle end. In striking up this tongue there is, of course, left an aperture 19 of corresponding shape. The base of this aperture is of such width as to permit the entry of the barbs of the tongue 11 or 12. The tongue 18 is struck up so as to project from the outer face of the shackle. When the shackle end is inserted into the throat of the head 20, it encounters and deflects the tongue, as 11, of the head, with which it cooperates, the tongue 18 being also deflected sufficiently to pass the former tongue. The shackle being now partially withdrawn, the tongue 18 having assumed its normal position bears upon the opposite face of the tongue 11 and forces it into the aperture 19. The parts are now locked against disengagement without mutilation. The shackle cannot, of course, be further withdrawn, nor can it be disengaged from the tongue 11 by inward movement, as the barbs 13 will slide along the lower surface (reference being had to Fig. 3 of the drawings) of the shackle to or towards the contracted end of the aperture 19. This action is to be depended upon because of the oblique position of the tongue 11, but any possible uncertainty of it can be removed by bending the tips of the barbs 13 slightly to cause them to incline away from the face of the shackle with which they are intended to coöperate in this movement. The action is the same whether one or both ends of the shackle be insertible. The throat of the head is so constructed that no space is left for the insertion of a blade, and even if inserted it could not control the engaging elements. There is shown the usual telltale mark or aperture 21 in the shackle to indicate that the seal has not been tampered with by cutting the shackle and then insert-

ing its newly formed end into the head to give the device the appearance of being sealed.

I claim as my invention—

1. In a car seal, in combination, a chambered head having an open throat and a barbed tongue projecting backwardly from the throat and obliquely across the chamber of the head, a shackle adapted to have its end inserted in the throat and having a barb-receiving aperture adjacent its end, such aperture being tapered, the base of the aperture being adjacent the shackle end and of sufficient width to permit the passage of the barbed tongue.

2. In a car seal, in combination, a chambered head having an open throat and a barbed tongue projecting backwardly from the throat and obliquely across the chamber of the head, a shackle adapted to have its end inserted in the throat and having a tapered tongue struck up adjacent its end and directed backwardly therefrom, providing an aperture of similar shape, the base of which is of sufficient width to receive the barbed tongue.

3. In a car seal, in combination, a chambered head having an open throat and a barbed tongue projecting backwardly from the throat and obliquely across the chamber of the head, and a shackle integral with the head and having an end adapted to enter the throat thereof and having a barb-receiving aperture adjacent its end, such aperture being tapered, the base of the aperture being adjacent the shackle end and of sufficient width to permit the passage of the barbed tongue.

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Witnesses:

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