

No. 689,172.

Patented Dec. 17, 1901.

S. F. ESTELL.
CAR SEAL.

(Application filed May 31, 1901.)

(No Model.)

Fig. 1.

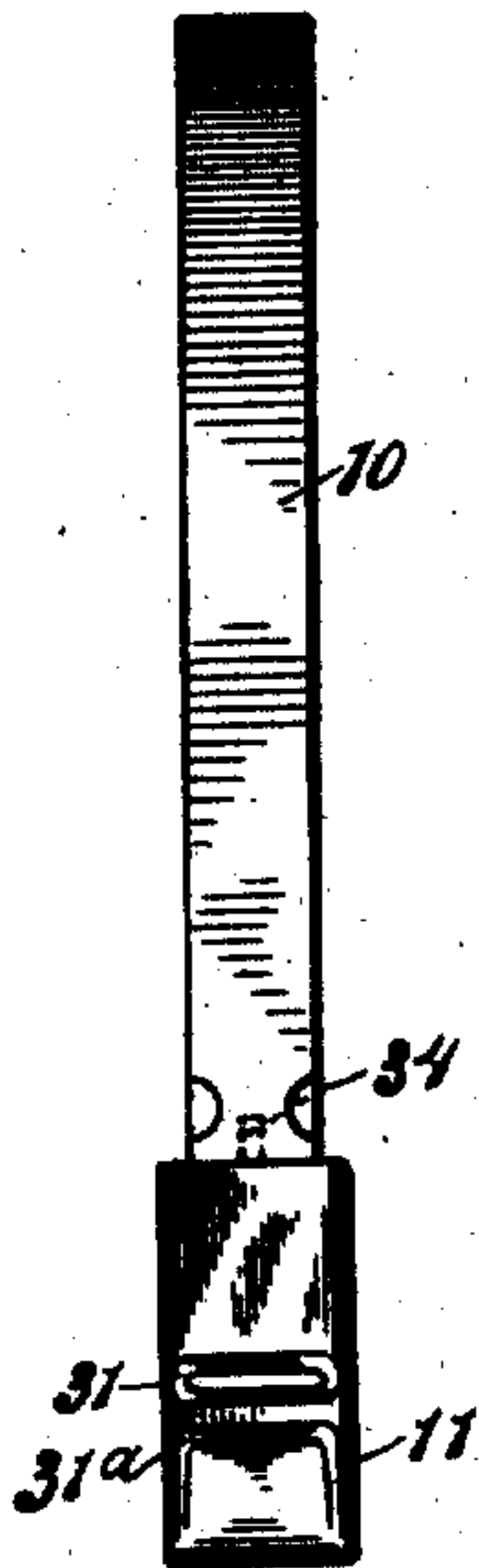


Fig. 2.



Fig. 3.

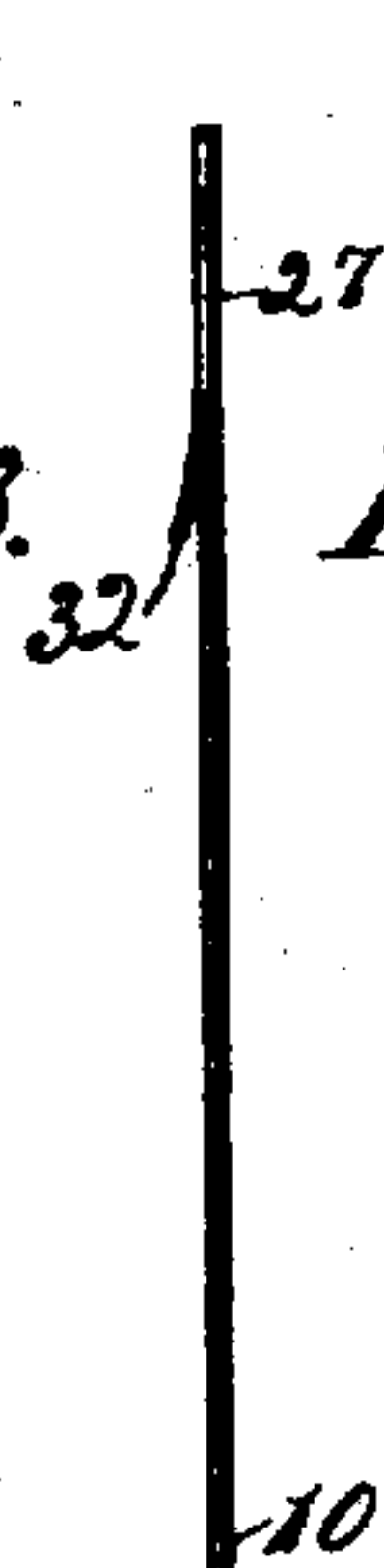


Fig. 4.

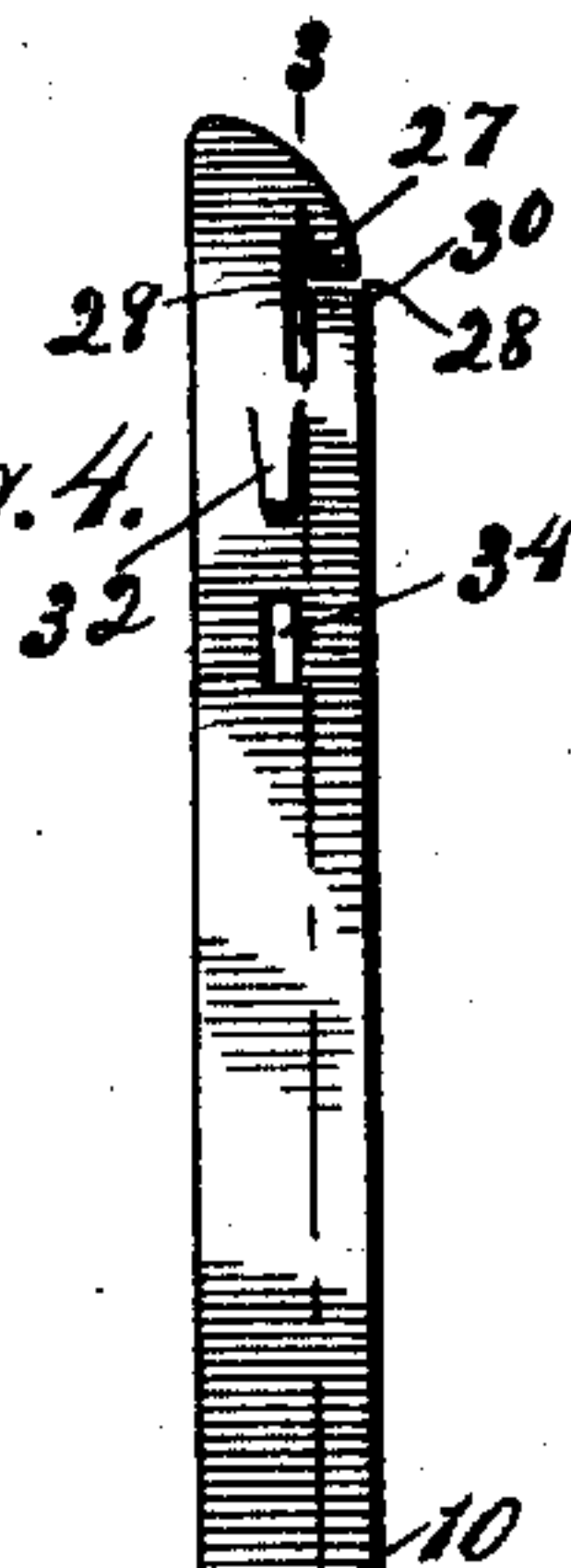


Fig. 7.

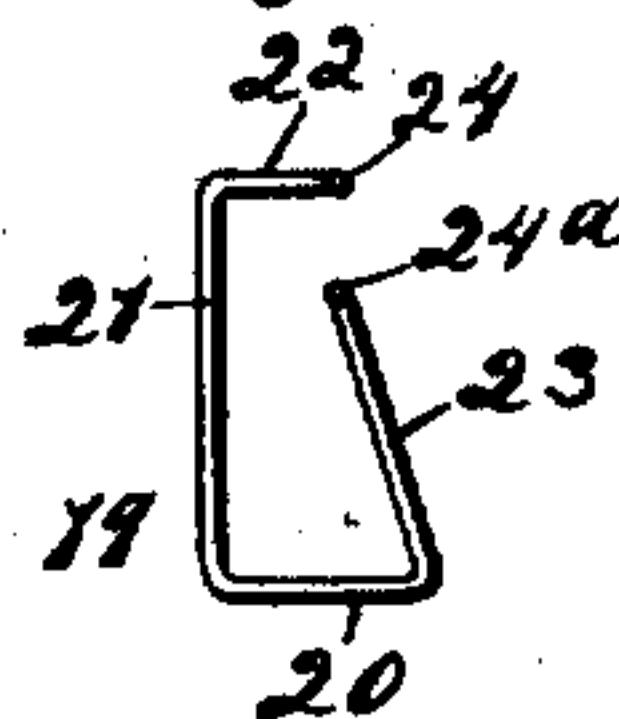


Fig. 5.

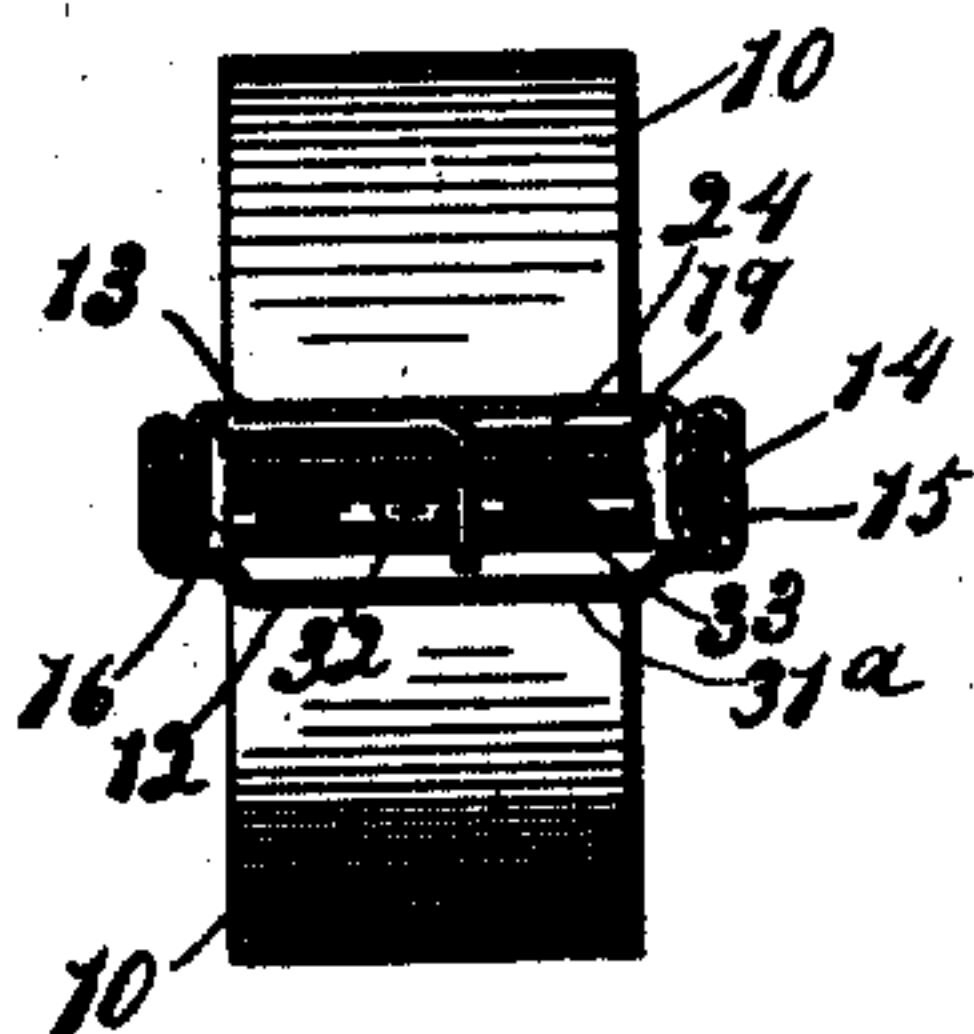
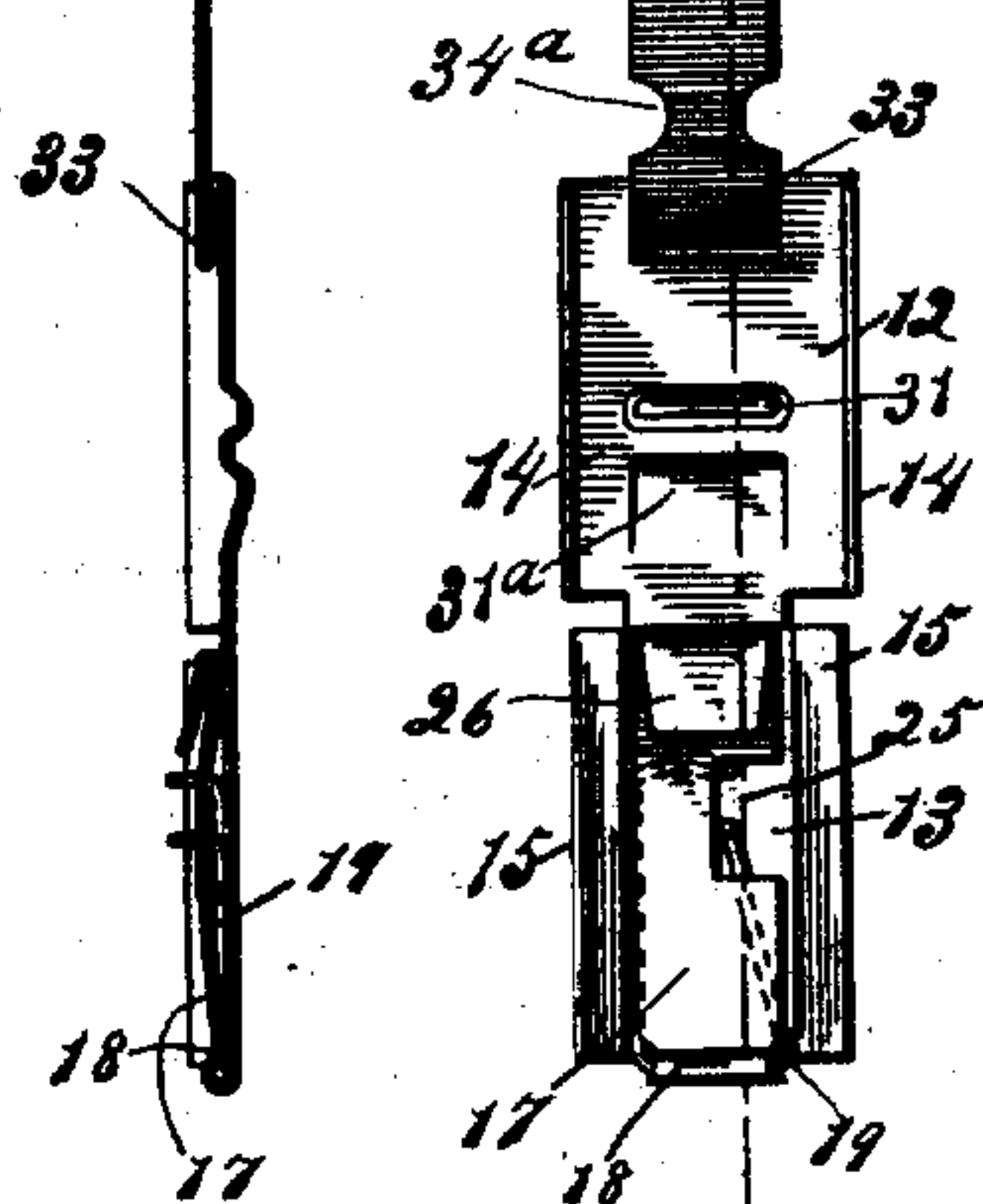
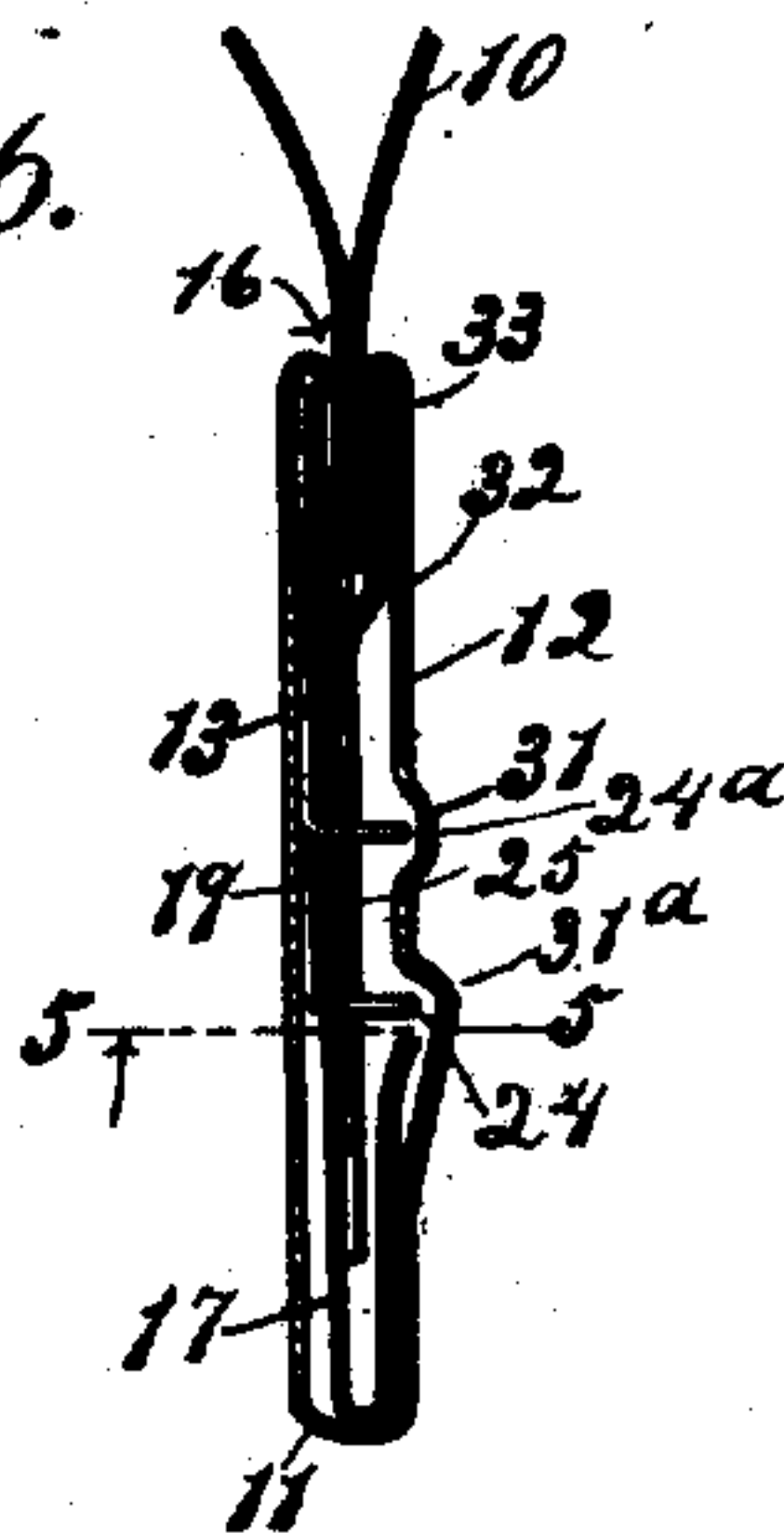


Fig. 6.



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CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 689,172, dated December 17, 1901.

Application filed May 31, 1901. Serial No. 62,572. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL F. ESTELL, a citizen of the United States, and a resident of Chicago, 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.

10 This invention relates to car-seals, and has for its objects to simplify the construction thereof, reduce the cost of manufacture, and provide an effective seal and one which must be mutilated in removing it from the car.

15 The invention comprises a sheet-metal strap having at one end a chambered head provided with an opening for the reception of the other end of the strap and within which is located a pair of spring-detents arranged in line and having play transversely thereto, the free end of the strap being provided with a longitudinal slot opening laterally through the strap edge for receiving the detents, whereby the strap is held against removal from the car-door hasp except by breaking the strap or rupturing the seal.

25 The invention consists in the arrangement of parts hereinafter fully described and which are illustrated in the accompanying drawings, in which—

30 Figure 1 is a front view of the seal assembled. Fig. 2 is a side view of the same. Fig. 3 is a section on the line 3 3 of Fig. 4. Fig. 4 is a plan of the seal partially assembled. Fig. 5 is a section on the line 5 5 of Fig. 6. Fig. 6 is a longitudinal section of the seal on an enlarged scale, and Fig. 7 is a detail of the locking-spring or detent.

40 The seal, as illustrated in the drawings, is preferably made of a sheet-metal strap or band 10, one end of which is provided with a chambered head 11. This head comprises the two members 12 and 13, provided with lateral flanges 14 and 15, respectively, and when the seal is assembled the section 13 is bent over on the section 12 and the parts secured together by interlocking the flanges, as illustrated in Fig. 5, an opening or passage 16 being provided between the free ends of the members.

50 A tongue or flap 17 of the member 13 is bent back upon the said member, and at its junction therewith is crimped, as at 18, so as to

clasp and hold a wire detent or locking-spring 19. This spring comprises the straight portion 20, having a right-angle arm 21, provided with a short end 22, parallel with the portion 20. The other arm 23 of the spring-detent is inclined inwardly toward the end 22, and the extreme ends 24 and 24^a of both arms are bent so as to extend substantially perpendicular to the tongue 17 and in a line parallel with the sides of the head 11, the arm 23 being shorter than the arm 21, as shown in Fig. 7. As assembled the arms of the detent are held by and under the tongue or flap 17, the perpendicular ends 24 and 24^a projecting up through a slot 25, cut in the side of the tongue 17.

60 The end of the strap or band 10 opposite to the head 11 is provided with a longitudinal slot 27, which opens through the side of the strap by a passage 28 at a right angle to the slot 27, thereby providing a hook end 29, which is beveled or rounded, as shown. To insure the latching of the strap, the outer lip of the opening 28 is made shorter than the inner lip, so that an abutment is formed to engage the detent ends.

70 In securing the seal the beveled or rounded hook end 29 of the strap is passed through the opening 16, between the ends of the members 12 and 13, and meeting the spring-detent 24^a pushes it laterally away, and the detent finally encountering the abutment or extended lower wall 30 of the passage 28 springs itself through the passage and into the slot 27. The movement of the strap being continued, the detent end 24 will also enter the slot 27, and the distance between the two detents being greater than the width of the passage 28 the strap end will be securely held against removal.

80 In order to permit of the lateral play of the detents 24 and 24^a and at the same time prevent longitudinal movement of the same in case an effort should be made to withdraw the end of the strap from the head 11, the member 12 is provided with transverse depressions or recesses 31 31^a, into which the detent ends project when the parts are assembled. It will be readily understood that a pull upon the strap when engaged by the detent ends would result only in binding the latter against the walls of the recesses 31 31^a. One of the said recesses is attenuated in order to seat the end

26 of the tongue 17, which is bent back upon itself and serves as a reinforcement at the junction of the two members 12 and 13 of the head 11 to prevent cutting through at that point for the purpose of manipulating the detents to release the strap.

Auxiliary means for securing the strap end may be provided, consisting of a tooth 32, stamped out from the strap 10, designed to engage a catch 33, formed by bending the strap 10 into the member 12 at its junction therewith and then back upon itself, as illustrated in Figs. 3 and 4.

A slot 34 near the end of the strap is designed to project beyond the end of the head 11 when the end 29 is in engagement with the detents, as illustrated in Fig. 1. This slot by the degree of its projection furnishes means for indicating to the inspectors at different points along the road whether or not the seal is locked and also if the strap has been broken off and then shoved back into the opening in the end of the head 11.

The strap 10 may be made thinner at a certain point or provided with slots, as at 34, in order to weaken the strap, so that it may be easily broken when it is desired to remove the seal.

I claim as my invention—

1. In a car-seal, in combination, a strap having a chambered head at one end, a tongue extending into the head and having a slot at one edge, a spring-wire detent held by the tongue and the ends of which extend through the slot and are arranged in line within the head, the end of the strap having a longitudinal slot opening laterally through the strap for receiving the detent ends.

2. In a car-seal, in combination, a strap having a chambered head at one end comprising two flanged members bent upon each other and having their flanges interlocked, a tongue integral with and bent back upon one of the members and having a slot at one edge, a spring-wire detent held by the tongue and having its ends projecting through the slot thereof, and in a line parallel with the sides

of the chambered head, and the free end of the strap being slotted longitudinally for receiving the detent ends.

3. In a car-seal, in combination, a strap having a chambered head at one end comprising two flanged members bent upon each other and having their flanges interlocked, a tongue integral with and bent back upon one of the members and having a slot at one edge, a spring-wire detent consisting of a straight portion clasped by the tongue and two arms each of which is provided with an end substantially perpendicular to the tongue and the said ends projecting through the slot in the tongue and in a line parallel with the sides of the head, the other member of the head being provided with transverse recesses into which the detent ends extend, and the free end of the strap being provided with a longitudinal slot having a lateral passage leading thereinto for engaging the detent ends, the distance between the detent ends being greater than the width of the passage.

4. In a car-seal, in combination, a strap having a chambered head at one end, a tongue extending into the head, a spring-wire detent held by the tongue and having its ends extending substantially perpendicular thereto, the strap at its juncture with the head being bent into the head and then back upon itself so as to provide a hook, and the free end of the strap being slotted to engage the detent ends and having a tooth or barb for engaging the hook.

5. In a car-seal, in combination, a strap, a chambered head secured to one end of the strap and having an aperture for receiving the other end thereof, and a pair of spring-detents arranged in line within the head and having play transverse thereto, the free end of the strap having a longitudinal slot opening laterally through the strap edge for receiving the detents.

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