

M. H. VAN H. BATTENBERG.

SEAL.

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925,416.

Patented June 15, 1909.

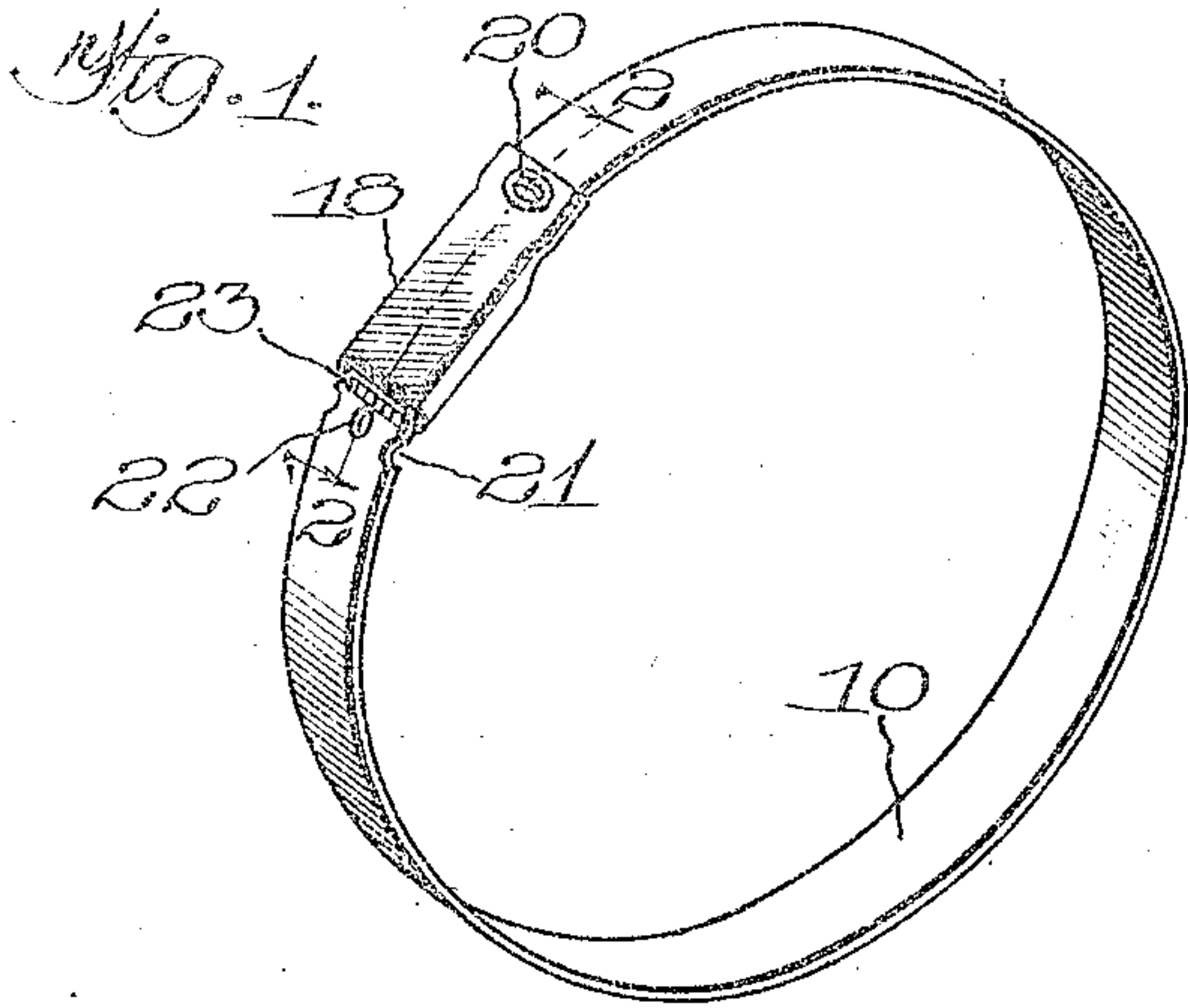


Fig. 2.

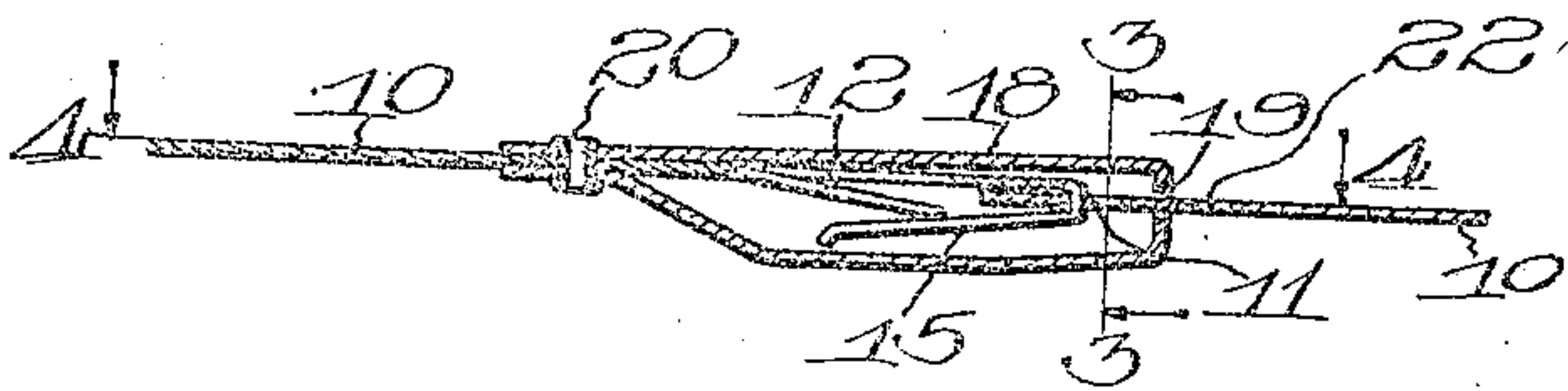


Fig. 3.

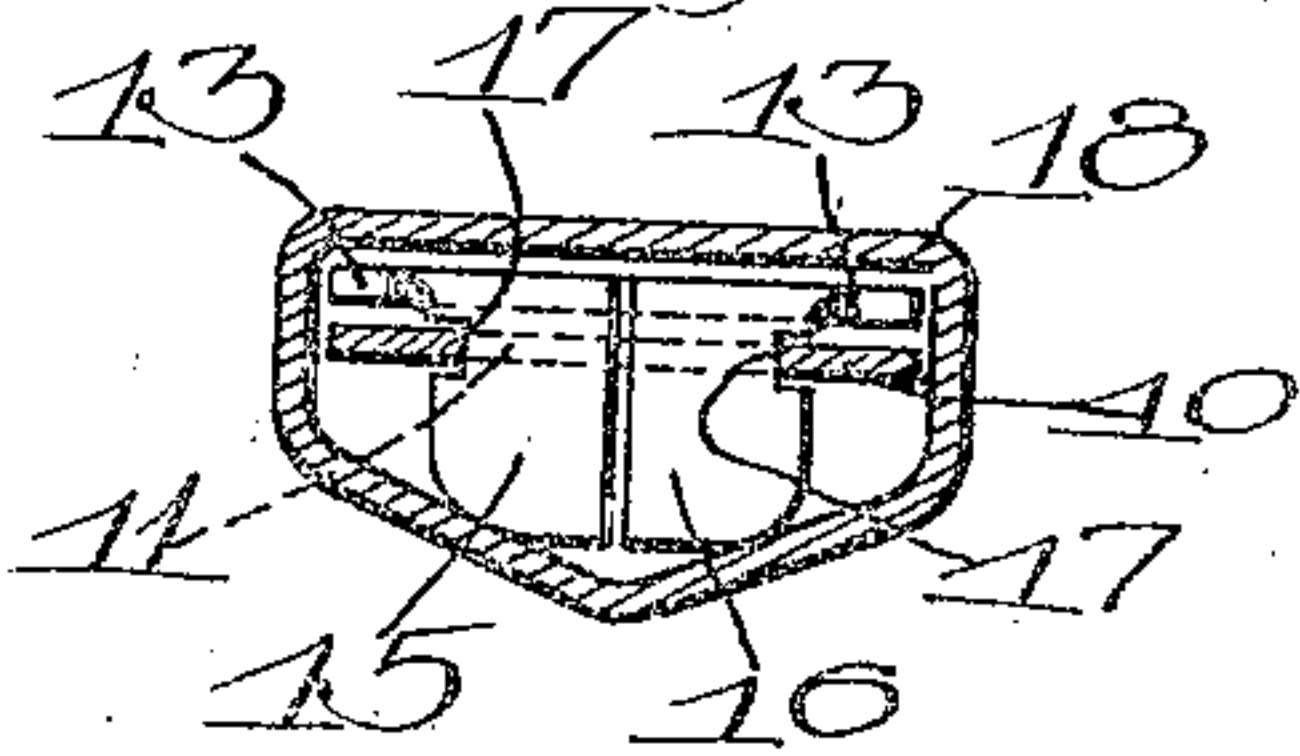


Fig. 4.

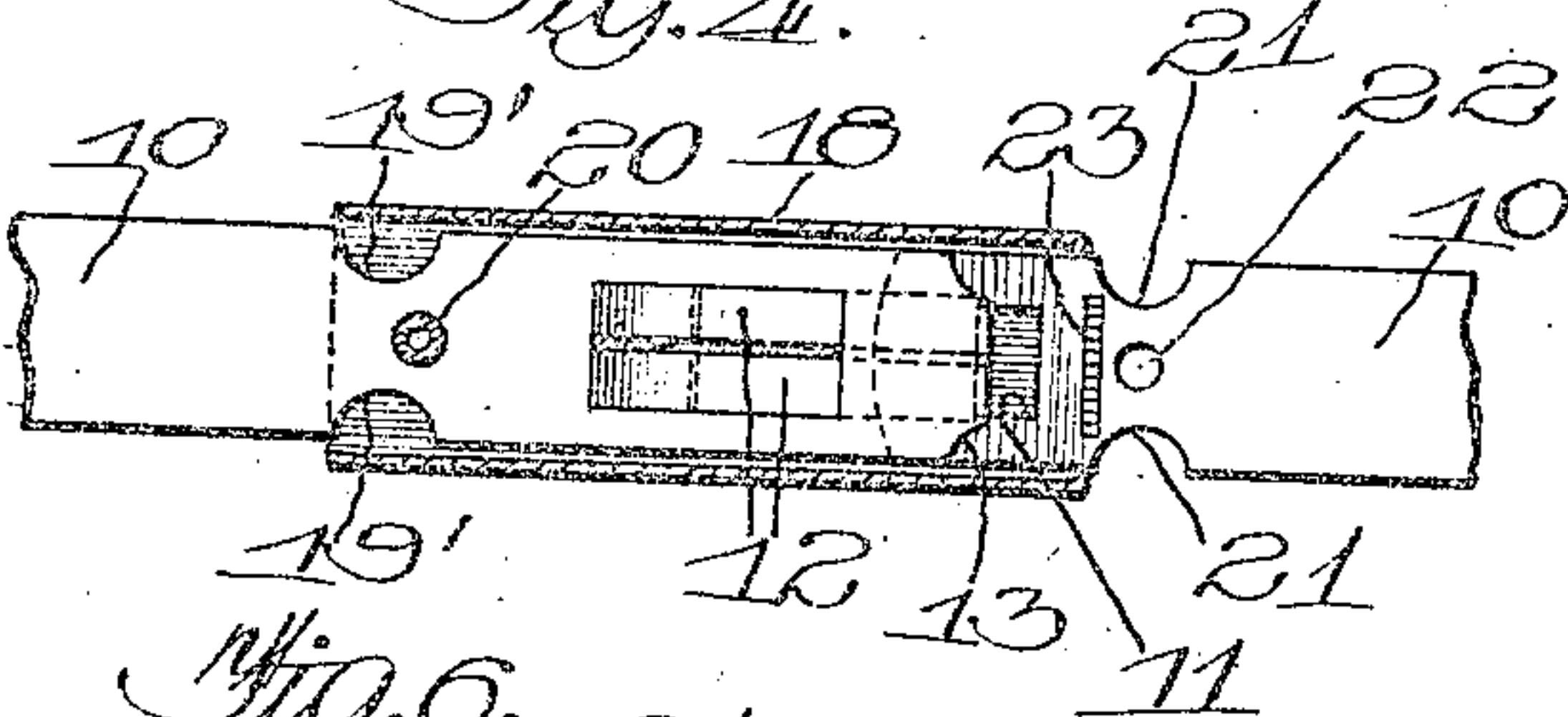


Fig. 5.

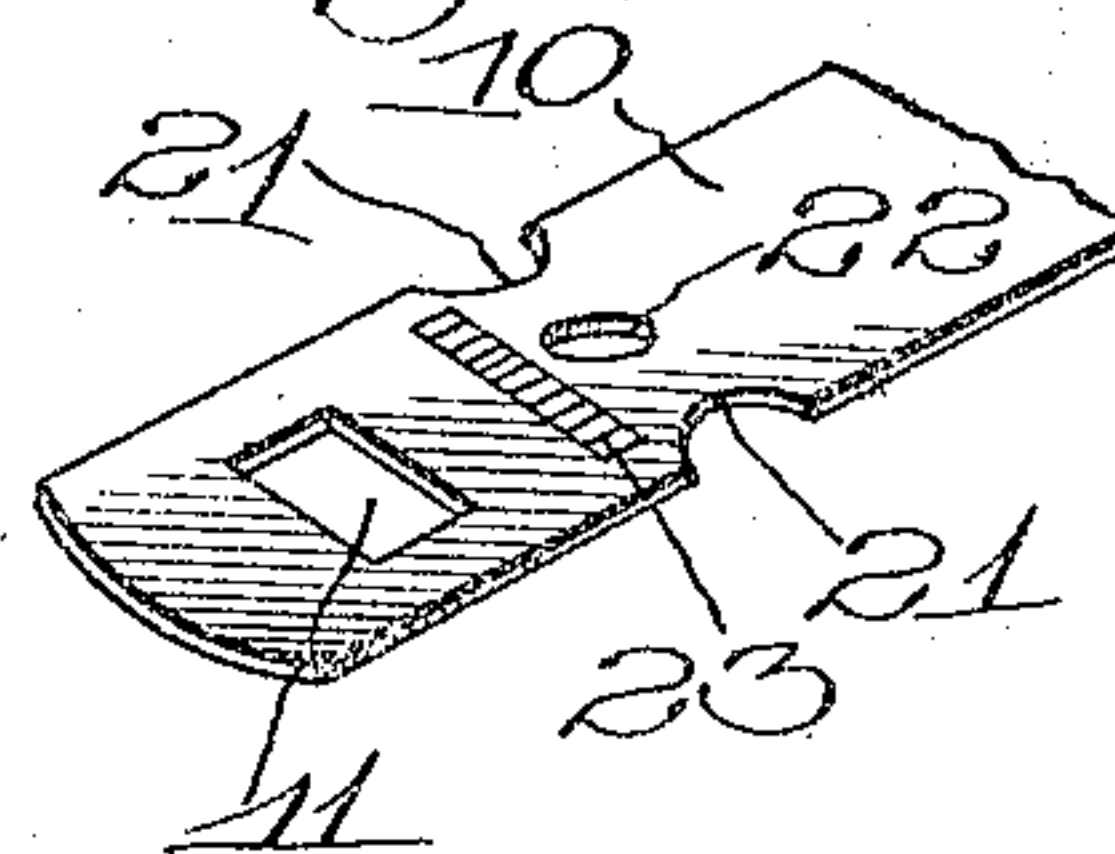


Fig. 6.

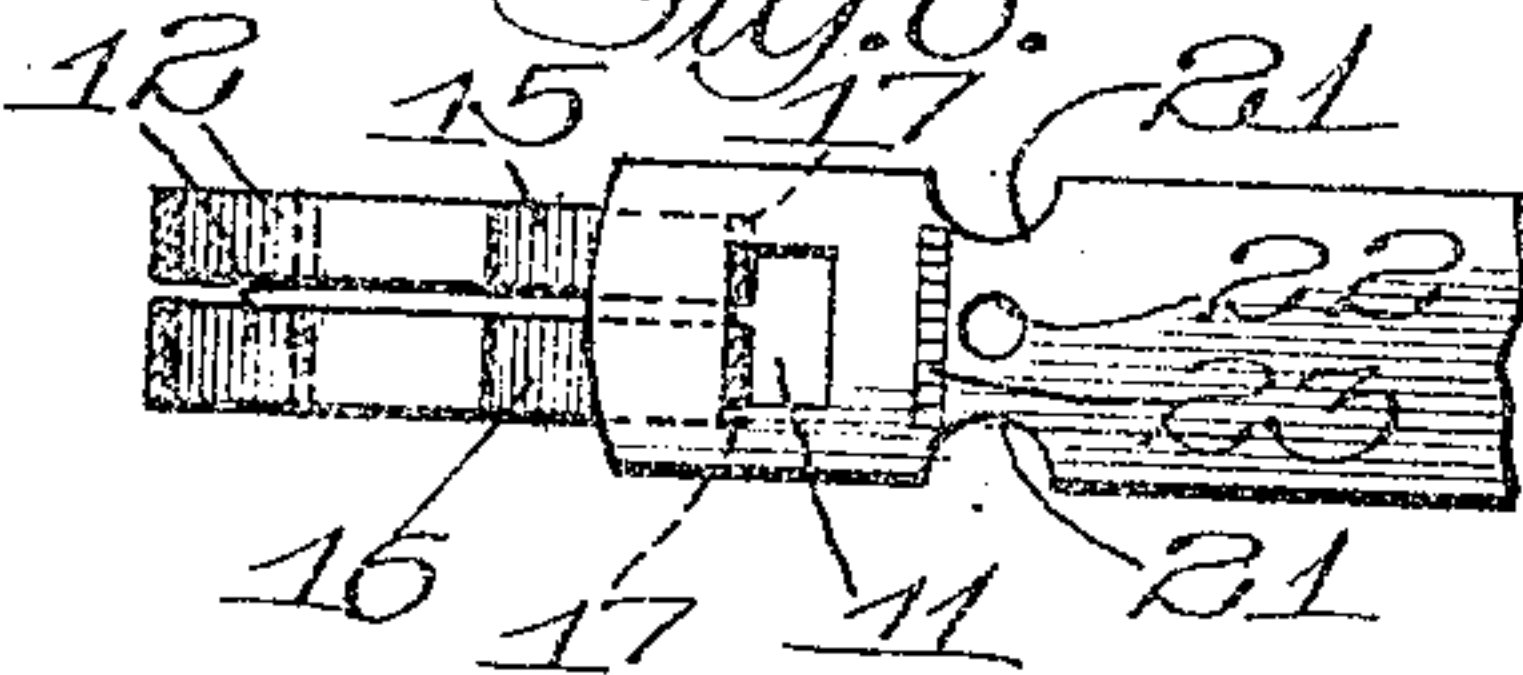
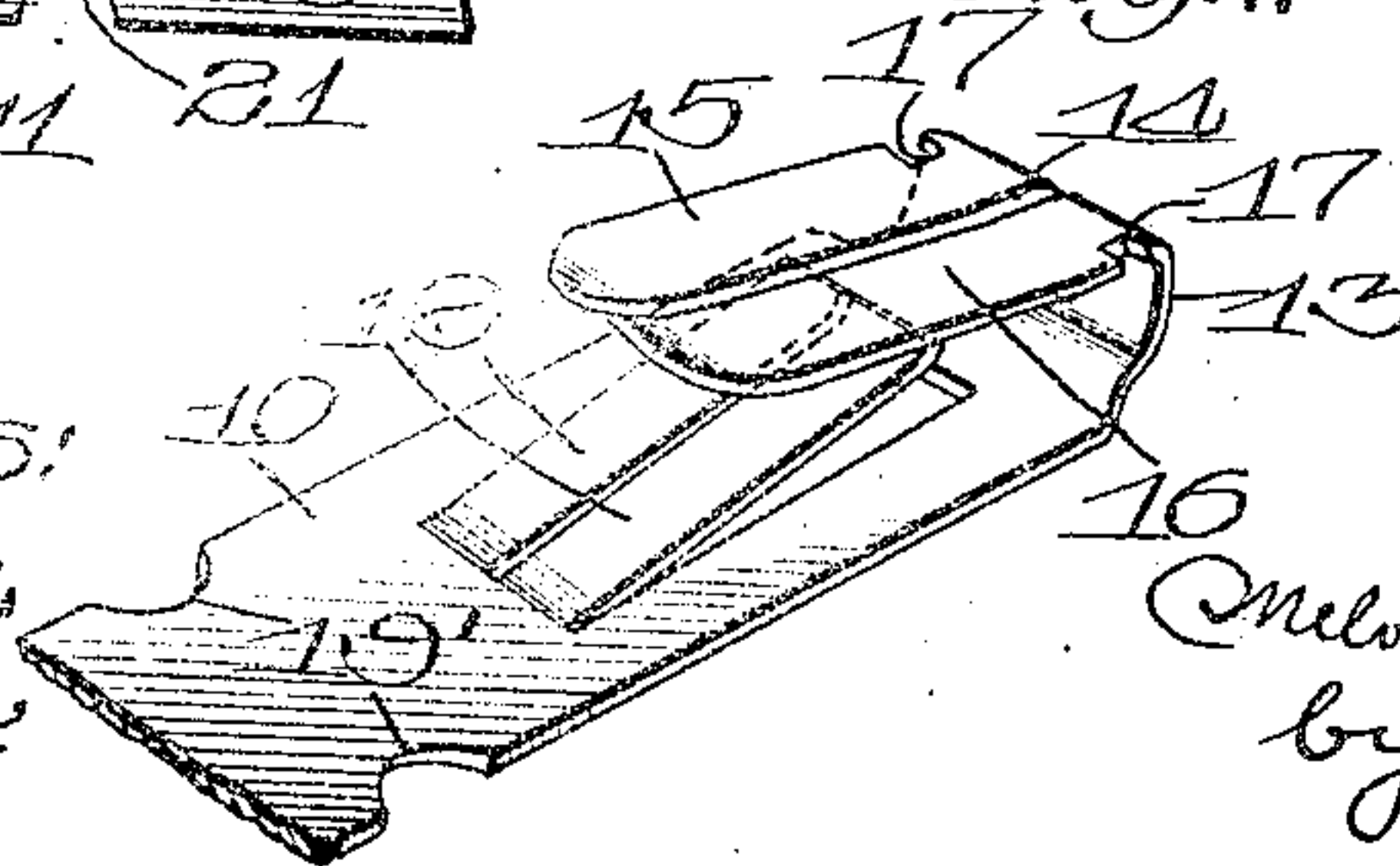


Fig. 7.



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UNITED STATES PATENT OFFICE

MELVIN H. VAN H. BATTENBERG, OF CHICAGO, ILLINOIS.

SEAL.

No. 925,416.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed October 10, 1908. Serial No. 457,092.

To all whom it may concern:

Be it known that I, MELVIN H. VAN HORN BATTENBERG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Seals, of which the following is a specification.

This invention relates to improvements in seals and more particularly car seals and the primary object of the invention is to provide an improved simple, durable and efficient locking device of this character which, when locked, cannot be opened or unlocked without leaving evidence of the fact that it has been tampered with.

To the attainment of these ends and the accomplishment of other new and useful objects, as will appear, the invention consists in the features of novelty in the construction, combination and arrangement of the several parts hereinafter more fully described and claimed and shown in the accompanying drawing illustrating an embodiment of the invention, and in which—

Figure 1 is a perspective of an improved device of this character constructed in accordance with the principles of this invention. Fig. 2 is a detail sectional view on line 2—2 of Fig. 1. Fig. 3 is a sectional view on the line 3—3 of Fig. 2. Fig. 4 is a sectional view on the line 4—4 of Fig. 2. Fig. 5 is a detail perspective view of one end of the band. Fig. 6 is a detail plan view partly in section showing the manner in which the extremities of the band are secured together. Fig. 7 is a detail perspective view of the other extremity of the band.

Referring more particularly to the drawing and in the present exemplification of the invention, the numeral 10 designates a strip or band of thin steel or other suitable flexible material which is provided at one end with an aperture 11 located in close proximity to the extremity of the strip. The other end of the strip 10 adjacent its extremity is cut away to form tongues 12 which are deflected beyond the plane of the body portion of the strip and extend in a direction toward the adjacent extremity of the strip. A portion of the strip beyond the free extremities of the tongues 12 is preferably reduced slightly as at 13 and the extremity of the strip beyond the free extremity of the tongues 12 is bent back upon itself so as to form a hook-shaped portion, the bill of which is split longitudinally as at 14 to form spring tongues

15, 16, which stand in close proximity to the free extremities of the tongues 12 when the latter are in normal positions, and extend for a short distance beyond the free extremities of the tongues 12 toward the opposite end of the strip so that the tongues 12, 15 and 16 cooperate with each other, one set serving as a guard for the other to form locking tongues or beards. The tongues 15, 16 are cut away or notched as at 17 at points adjacent the base of the tongues for a purpose to be set forth. The tongues 15 and 16 are normally spaced laterally from each other for a short distance but when the tongues 15 and 16 are pressed toward each other so that the adjacent edges will contact, the combined width of the tongues 15 and 16 will be slightly less than the width of the aperture 11.

In use the tongues 15 and 16 are adapted to be passed through the aperture 11 and when these tongues are being inserted into the aperture 11 the adjacent extremity of the body portion 10 will deflect the tongues 12 to permit the extremity of the body portion to pass into the hook formed by the tongues 15 and 16. When the extremity of the body has passed out of engagement with the tongues 12, the latter will spring against the tongues 15, 16, and cooperate with the latter to prevent the extremity of the body portion containing the aperture from being disengaged from the hooked extremity. As the aperture 11 is passing over the tongues 15 and 16 the latter will be pressed together, but when opposite walls of the aperture 11 stand adjacent the notches or recesses 17, the elasticity of the tongues 15, 16 will cause the latter to separate and the notches 17 will engage over the walls of the aperture 11, as shown more clearly in Fig. 6 of the drawings.

A sheath or thimble 18 of any desired construction but preferably of a seamless construction, is provided with a slot 19 in its closed end, which slot is preferably of a width slightly larger than the width of the extremity of the body portion or shackle 10. This sheath surrounds the hook-shaped extremity of the shackle with the end containing the slot 19 adjacent and projecting beyond the hooked extremity of the shackle. The sheath may be secured to the shackle in any desired or suitable manner, preferably by pressing the sides thereof into suitable notches 19' in the edges of the shackle or strip and if desired, and as a further security,

a rivet or eyelet 20 may be driven through the sheath and the shackle and the sheath will then be ready to receive the apertured end of the shackle or strip through the slot 19 in the end thereof. When the sheath or thimble is thus secured to the shackle, the projecting extremities of the tongues 15, 16, will stand in close proximity to the wall of the thimble or sheath to prevent the apertured extremity of the shackle from being slipped out of engagement with the hooked end. When the apertured extremity is inserted in the slot 19 in the sheath or thimble, it will engage and deflect the tongues 15 and 16 until the aperture 11 passes by the extremities of the tongues 15 and 16, at which time the latter will spring into the aperture and by drawing the inserted end of the shackle in a direction to withdraw the end from the sheath or thimble, the end will ride upon the opposite faces of the tongues 15 and 16 to deflect the tongues 12 and when the extremity of the shackle has passed these tongues 12, they will assume their normal position in engagement or in close proximity to the faces of the tongues 15, 16.

With this improved construction, it will be apparent that in order to unlock the seal it will be necessary to cut the strip or shackle 10 and as a further security to prevent manipulation of the lock and to cause the shackle to become mutilated or broken the apertured extremity of the shackle may be provided with notches or recesses 21 in the edges thereof, which notches or recesses may be located in such a position as to stand in close proximity with the extremity of the sheath or thimble 18 when the shackle is locked to weaken the adjacent portion of the shackle so that a continued manipulation of the shackle to unlock the same will cause the strip or shackle to break at a point adjacent the sheath. If desired, an aperture 22 may be provided in the shackle between the recesses 21 to further weaken the shackle at this point.

If desired, a suitable indicator 23 may be provided, which may be in the form of marks upon the face of the shackle to indicate at a glance whether the shackle has been shortened, which would be necessary if it should be desired to re-lock the shackle after it has been once broken or cut. This indicator 23 is preferably located at a point to cooperate with the extremity of the sheath or thimble 18 so that the indicator will be normally exposed after the shackle has been locked properly. If the shackle has been cut, and an additional aperture made in the extremity thereof to re-lock the seal, it will be apparent that the indicator 23 will be located within the sheath or thimble, and would show at a glance that the seal has been tampered with.

In order that the invention might be fully understood, the details of the foregoing em-

bodiment thereof have been thus described, but

What I claim as new is:

1. A seal comprising a shackle, one extremity of which is bent back upon itself to form a hook, the bill of the hook being split longitudinally to form elastic and laterally yielding tongues, yielding means cooperating with the said bill to form a closure for the hook, the other extremity of the shackle being provided with an aperture of a width less than the normal width of the said bill of the hook and adapted to be engaged over the hook to force the tongues forming the hook together, means for permitting the tongues to separate when the apertured extremity of the shackle passes the closure for the hook, and a casing inclosing the said hooked extremity and into which the apertured extremity is adapted to be inserted.

2. A seal comprising a shackle, one extremity of which is bent back upon itself to form a hook, the bill of the hook being split longitudinally to form elastic and laterally yielding tongues, the other extremity of the shackle being provided with an aperture of a width less than the normal width of the said bill of the hook and adapted to be engaged over the hook to force the tongues forming the hook together, a portion of the shackle being cut out to form a pair of elastic tongues one for each of the tongues of the hook, said tongues being opposed to the first said tongues to form yielding closures for the hook, the apertured extremity of the shackle being adapted to be engaged over the hook to force the tongues of the hook together, means for permitting the tongues to separate laterally when the apertured end enters the hook, and a casing inclosing the engaged ends of the shackle.

3. A seal comprising a shackle, one extremity of which is bent back upon itself to form a hook, the bill of the hook being split longitudinally to form elastic and laterally yielding tongues, yielding means cooperating with the said bill to form a closure for the hook, the other extremity of the shackle being provided with an aperture of a width less than the normal width of the said bill of the hook and adapted to be engaged over the hook to force the tongues forming the hook together, the outer edges of said tongues being notched at points beyond the said closure for the hook, said notches being adapted to engage over the edges of the aperture when the respective end of the shackle passes the said closure to permit the tongue to separate, and a casing inclosing the said hooked extremity and into which the apertured end is adapted to be inserted.

4. A seal comprising a shackle, interengaging means on the extremities of the shackle for locking said extremities together, a seamless sheet metal casing inclosing the locked

extremities, said casing normally surrounding one extremity of the shackle and being contracted upon the shackle, and a fastening device passing through the contracted portion of the casing and the shackle for securing the casing to the shackle, said casing projecting beyond the extremity of the shackle and being provided with a restricted opening in the projecting portion into which opening the other extremity of the shackle is adapted to be inserted.

5. A seal comprising a shackle, interengaging means on the extremities of the shackle for locking said extremities together, a seamless sheet metal casing inclosing the locked extremities of the shackle, one end of the

casing being contracted around one extremity of the shackle to normally inclose said end, and means for securing the said end to the shackle to prevent displacement of the casing, the other end of the casing having a restricted opening for the reception of the other end of the shackle.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 7th day of October A. D. 1908.

MELVIN H. VAN H. BATTENBERG.

Witnesses:

J. H. JOCHUM, Jr.,

M. W. CANTWELL.