

L. FOSSATI.

LOCK.

APPLICATION FILED OCT. 12, 1910.

994,143.

Patented June 6, 1911.

2 SHEETS—SHEET 1.

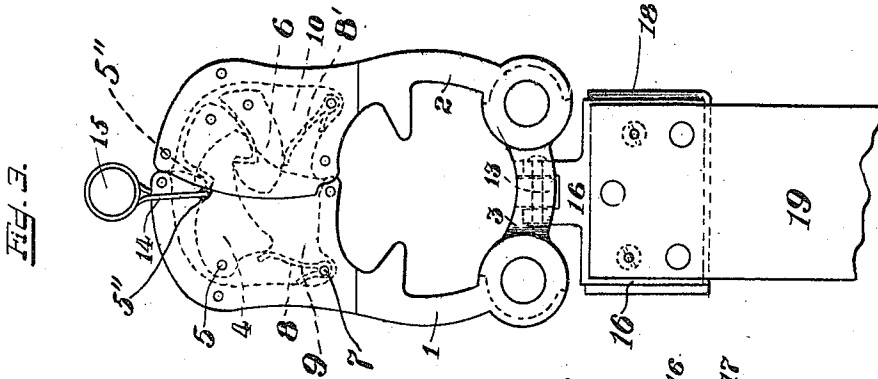


Fig. 5.

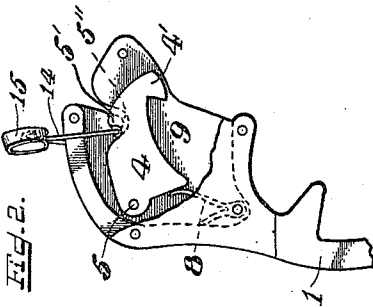
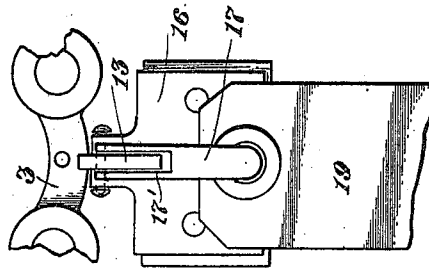
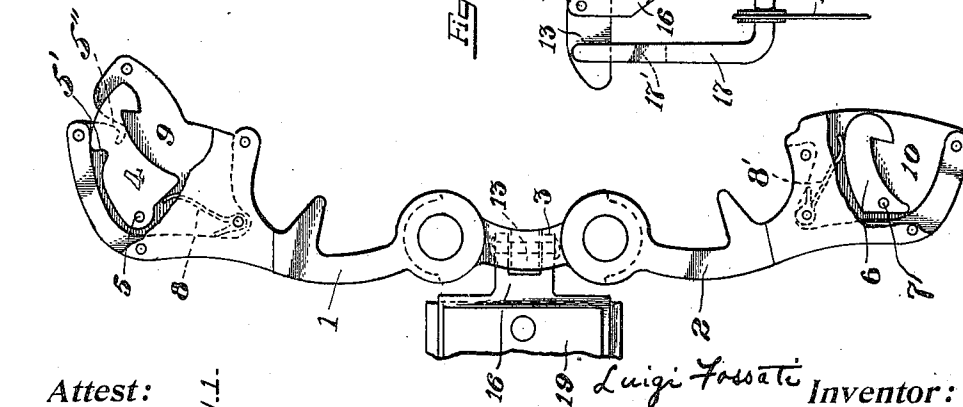
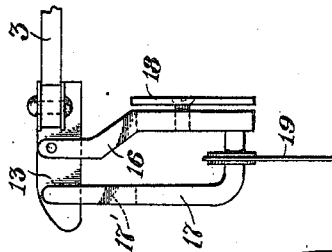


Fig. 4.



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2 SHEETS—SHEET 2.

FIG. 8.

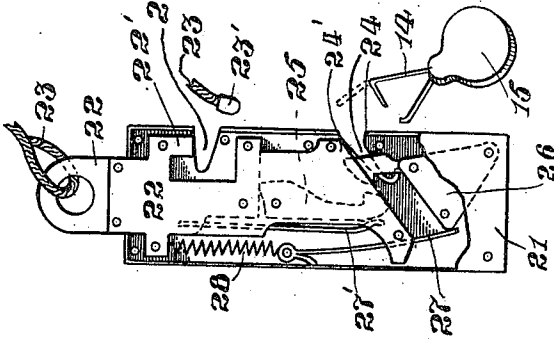


FIG. 7.

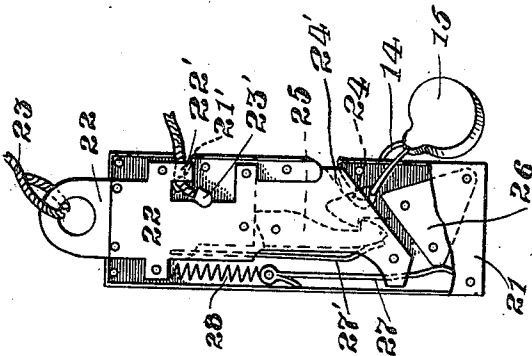
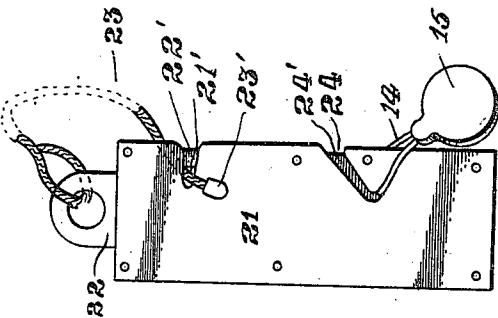


FIG. 6.



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UNITED STATES PATENT OFFICE.

LUIGI FOSSATI, OF MILAN, ITALY.

LOCK.

994,143.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed October 12, 1910. Serial No. 586,674.

To all whom it may concern:

Be it known that I, LUIGI FOSSATI, a subject of the King of Italy, residing at Milan, Italy, have invented a certain new and useful Lock, of which the following is a specification.

My present invention relates to a lock and, more particularly, to that class of locks known as seal-locks; and it has for its object the production of a simple and efficient lock, for mail and other bags, railway cars, express boxes, and, in general, for receptacles of articles the safety of which it may be desirable to secure by a seal, which can be quickly sealed in advance by means of an inexpensive sealing element and when required instantly applied by simple manipulation.

With this end in view the invention consists, broadly stated, in a lock comprising two relatively movable parts one of which parts carries a locking member adapted to be sealed in locking position and the other part carries a second locking member yieldingly held in locking position so as to allow it to slide past and then snap it into locking engagement with the first locking member when the two parts of the lock are brought together and incapable of being moved out of such engagement when the lock has thus been closed.

It also comprises the parts and features and combinations of parts hereinafter described and specifically set forth in the claims.

Two forms of locks embodying the invention, as adapted to certain specific uses, are illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a lock for mail and other bags in open position and unsealed, with portions of its sides cut away to show the locking members; Fig. 2, a similar view of the outer end of one of the parts showing the locking member sealed in locking position; Fig. 3, a side view of the lock sealed and closed, with the locking members shown only by dotted lines; Figs. 4 and 5, side and back views, respectively, of means for detachably securing an address tag to the lock; Fig. 6, a side view of a modified form of lock, for railway cars, express boxes, etc., sealed and in closed position; Fig. 7, the same view as Fig. 6, with a portion of the side cut away; and Fig. 8, a view similar

to Fig. 7, but showing the seal broken and the lock in open position.

The annular lock for bags, shown in Figs. 1, 2, and 3, comprises two principal parts, the curved arms 1 and 2, which are hinged together at one end by a short curved link 3 and at the other end terminate in flat locking heads having chambered recesses in their inner faces and forming, when the two heads are brought together with the edges of one recess overlapping those of the other, a closed casing for the locking mechanism mounted therein. The hooked jaws 4 and 6, pivoted on pins 5 and 7 within the chambered recess 9 of the arm 1 and the corresponding recess 10 of the arm 2, respectively, constitute cooperating locking members. The locking jaw 4, which is normally pressed back against the inner edge of the recess and out of locking position by the spring 8, is sealed in locking position, preparatory to the use of the lock, by pushing the middle section of a looped wire 14 the ends of which are embedded in a lead seal 15 down into the curved slot 5' cut through the side walls of the recess until the wire, pressing forward the locking jaw against the action of its spring, reaches the bottom of the slot and rests in the notch 5' in the back of the locking jaw. The locking jaw 6 is pressed forward to and yieldingly held in locking position by the spring 8'. After the lock has been sealed it is closed by simply pressing together the two locking heads, the spring yielding to allow the locking jaw 6 to slide past the jaw 4 and then pressing it forward into locking engagement therewith. When once locked the jaw 6 cannot be moved, and the lock can be opened only by cutting the sealed wire and withdrawing the wire so as to permit the jaw 4 to spring back out of engagement with the jaw 6.

The lock is preferably attached to the bag with which it is to be used. Convenient means for such attachment are provided by the plate 16 which is hinged to a lug 13 projecting from one side of the curved link 3 and which is secured in proper place on the outside of the bag by being riveted directly thereto or by means of a second plate 18 placed on the inside of the bag.

An address tag 19 may be permanently riveted to the plate 16; or, where it is necessary to change the address from time to time, the tag may be removably secured to

the lock, as shown in Figs. 4 and 5, by means of a hook 17 mounted upon the back of the plate 16 and upon which the tag may be hung and a rearward extension of the lug 13 so that it will pass through the forked upper end 17' of the hook when the lock is closed around the mouth of the bag and will be withdrawn therefrom and permit a change of tag when the lock is opened and swung up to a position substantially parallel to that of the plate 16.

In the lock shown in Figs. 6, 7, and 8 an outer hollow part or casing 21 incloses the sliding member 22 which, with one of its ends extending out through an opening in the end of the casing, has a limited sliding movement with respect thereto. A twisted wire or other suitable cord 23 is permanently secured at one end to the outer end of the part 22 and its free headed end 23' is adapted to be locked to the outer casing in the manner hereinafter described. The member 26 having a hooked jaw is pivotally mounted within the casing 21, and is normally pressed back against the edge of the casing and out of locking position by the spring 27. It is sealed in locking position, as in the case of the bag lock already described, by pressing the sealed wire loop 14 down into the inclined curved slot 24 cut from one edge back into the sides of the casing until it has pushed the jaw forward and rests in the bottom of the slot and in the notch at the back of the jaw. The sliding member 22 is normally pressed out to the limit of its outward movement in the casing by the spring 28, and within its forked inner end there is pivotally mounted the hooked jaw 25 which is normally pressed forward to and yieldingly held in locking position by the spring 27'. A second slot 21' cut back into the sides of the casing 21 is adapted to receive the free end of the cord 23 and its mouth is closed so that the head at the end of the cord cannot be withdrawn therefrom by the bolt-like projection 22' of the sliding member 22 when that part is pressed down into and locked within the outer casing, the slot 24 being at the same time closed by the inward movement of the inclined inner end of the part 22. The lock is sealed in advance, and is applied by passing the cord through rings in the fastenings to be secured and drawing it down into the bottom of the slot provided therefor and then pressing together the parts of the lock, which will remain closed until the seal is broken so as to allow the locking jaw 26 to spring back out of locking position.

The following are among the advantages of the lock described. The seals are cheap and may be made in quantities and distributed to agents complete and ready for use. The seal is easily and quickly applied to a lock and the sealing may be done at leisure.

The lock thus sealed in advance can be closed instantly, thus making it possible, for example, in post offices where a large number of mail bags are despatched at a given hour, to keep the bags open to receive mail much later than is possible where the ordinary forms of closure are employed.

While I have shown and described my invention as specially designed for certain specific uses and in what I now regard as the best forms of its embodiment for the purposes in view, it will be understood that it is well adapted for many other uses and that, within the scope of the appended claims, the several parts can be variously modified or replaced by equivalents or omitted entirely without departing from the spirit or sacrificing the advantages thereof.

What I claim as new, and desire to secure by Letters Patent, is—

1. A lock comprising two cooperating locking members one of which is normally held out of the path of the other and is adapted to be secured by a sealing element in position to be engaged by the other member.

2. A lock comprising two cooperating locking members and means by which one of said members may, prior to the closing of the lock, be secured by a sealing element in position to engage the other member and cannot be moved from such position when the lock is closed without breaking the sealing element.

3. A lock comprising as an element a hooked locking member which is normally and yieldingly held in position to make locking engagement with a cooperating member and which is so inclosed by the lock when closed that it cannot be reached by any member by which it can be moved from its said locking position.

4. A lock comprising, in combination, two detachably movable parts within each of which is mounted one of two cooperating locking members, one of said locking members being normally held out of the path and adapted to be sealed in position to be engaged by the other member and the other of said locking members being yieldingly held in the path of the first member and so protected that when the lock is closed it cannot be moved from such position.

5. A lock comprising, in combination, two relatively movable parts each carrying one of two cooperating hooked locking jaws which hooked jaws are adapted to make locking engagement when the two parts of the lock are brought together by the movement of one of said jaws and to be disengaged only by the movement of the second of said jaws and a renewable sealing element adapted to secure the said second jaw from disengagement with the said first jaw.

6. A lock comprising, in combination, two

relatively movable parts one of which carries a locking member adapted to be secured in locking position by a sealing element and the other a second locking member adapted to move into locking engagement with the first member when the two parts of the lock are brought together and incapable of being moved out of said locking position when the said parts are locked together and a flexible member having one of its ends permanently attached to one part of the lock while its other end is adapted to be locked within the other part thereof.

7. A lock comprising two substantially semi-annular arms hinged at one end and provided at the other end with chambered recesses open at their inner edges and adapted to close each other when the outer ends of the arms are brought together, a hooked jaw pivotally mounted within the chambered recess of one arm and normally pressed back out of locking position, a slot cut in the side walls of said chambered recess the bottom of which registers directly behind the said hooked jaw when in locking position, and a second hooked jaw pivotally mounted within the chambered recess of the other arm and yieldingly pressed forward to locking position so as to permit it to slide

past and into engagement with said first hooked jaw when the said arms are brought together.

8. The combination, with a lock comprising two curved arms hinged at one end and adapted to be locked together at the other end to form a substantially annular lock for the mouth of a bag, of a lug mounted upon the lock at the hinged end of its arms and extended outwardly in the plane of said arms, a plate pivoted to said lug and adapted to be attached to the bag to secure the lock in position for use, and a hooked member mounted upon the back of said plate and having a slotted outer end which is adapted to embrace the outer end of the lug when the arms of the lock are in position substantially at right angles with the plate and from which the outer end of the lug will be withdrawn when the arms of the lock are moved to a position substantially parallel to the plate.

In witness whereof I have signed my name in the presence of two witnesses.

LUIGI FOSSATI.

Witnesses:

CARLO GIANOLIO,
FEDERICO CAPELLARO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."