L. D. GREGG.

STAKE POCKET.

APPLICATION FILED APR. 14, 1910.

1,036,221. Patented Aug. 20, 1912.

Fig. 1.

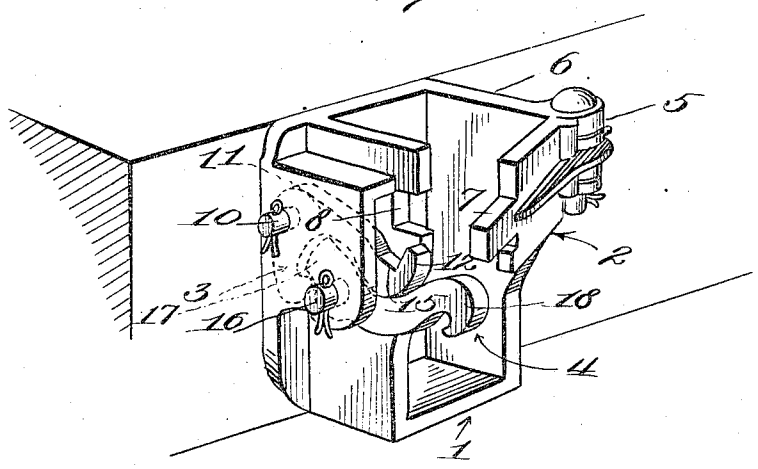


Fig. 2.

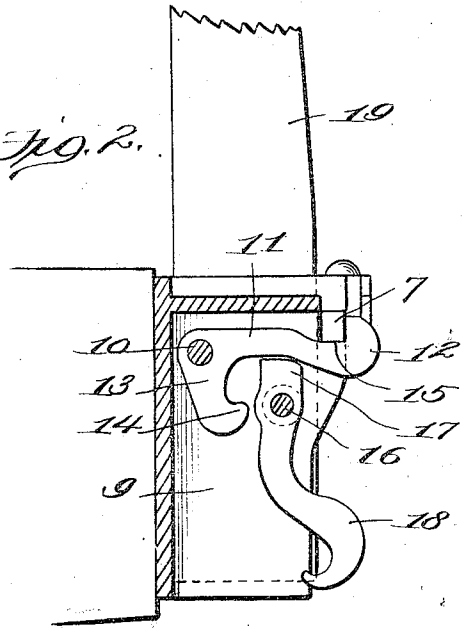
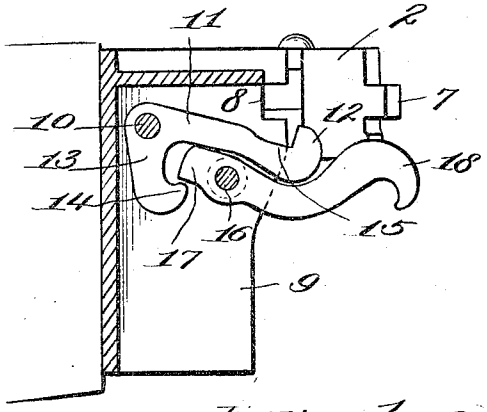


Fig. 3.



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UNITED STATES PATENT OFFICE.

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STAKE-POCKET.

1,036,221. Specification of Letters Patent. Patented Aug. 20, 1912.

Application filed April 14, 1910. Serial No. 555,533.

To all whom it may concern:

Be it known that I, LOUIS D. GREGG, a citizen of the United States, residing at Newburgh, in the county of Orange and State of New York, have invented certain new and useful Improvements in Stake-Pockets; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The present invention, which relates to improvements in stake pockets, has for its object the production of an article of that class wherein the principal defect, heretofore common to the conventional and generally accepted type of such articles, is overcome. As ordinarily constructed, these so-called pockets are provided with a swinging gate adapted to be locked in closed position by a latch operated by a lever or equivalent device. The latch is designed to fall by gravity into inoperative position when the lever or other operating device is out of engagement therewith, to permit the opening of the gate and the subsequent removal of the stake. This gravital movement, however, does not always take place, and in such instance the release of the gate by the latch is frequently attained only with appreciable difficulty, occasioning considerable delay in the removal of the stake and the unloading of the freight from the car.

To offset the defect above mentioned and thus insure the disengagement of the latch from the gate and its movement into inoperative position, this invention contemplates the provision of a latch and an operating device therefor so constructed that the release movement of the latter will not only forcibly disengage the former from the gate but will also effect its movement into inoperative position, whereupon the gate may be readily opened.

The accompanying drawings illustrate a practical embodiment of the invention, but it is to be understood that no limitation to the precise construction shown therein is intended, since modifications may be made within the scope of the appended claims, and equivalent elements substituted for the corresponding parts in the illustrated structure.

In said drawings, Figure 1 is a perspective view of the complete invention, showing the gate open; and Figs. 2 and 3 are vertical sectional views showing the two positions of the latch and locking device.

Reference being had to the drawings, and to the numerals marked thereon, 1 designates in a general manner the pocket, 2 the gate for closing the open side thereof, 3 the latch for locking the gate in closed position, and 4 the operating device associated with the latch.

The pocket 1 is of the conventional type, or of any type preferred or in more or less common use. Its open side, in the present instance the front, is designed to be closed, as above stated, by the gate 2 which element in the construction illustrated is hinged at one end as indicated by the numeral 5 to the adjacent side wall 6 of the pocket. The other end of this element is formed with a reduced lateral projection or tongue 7 adapted for reception in an inwardly extending notch 8 or seat with which the front edge of the opposite side wall 9 of said pocket is provided. To hold the gate in closed position, the latch 3 is provided. This element is, as shown, preferably in the form of a bell-crank lever pivoted at its apex on a pin 10 set laterally into the pocket wall 9, the longer arm 11 of the lever being provided with an up-turned terminal bill 12 while its shorter arm 13 is provided with an out-turned or lateral lug or finger 14. The first-mentioned arm of said latch lever is cut away at its upper edge directly adjacent the terminal 12, the inner face or edge of which latter is plane, thereby providing a seat 15, wherein the gate projection 7 is designed to be received when said gate is closed and the latch raised into operative position. This movement of the latch is effected by means of the operating device 4 which is likewise in the form of a lever and is pivoted adjacent its inner end to a second lateral pin 16 arranged below and in advance of pin 10. The said inner end of the lever 4 is preferably rounded or plane-faced, as indicated by the numeral 17 while its outer and longer arm 18 is preferably curved or bent to constitute an operative handle.

In the operation of the invention, the lower end of the stake 19 is inserted in the pocket, after which the gate is closed and its projection 7 seated in the recess 8. The gate is then locked in this position by the

application of downward pressure upon the handle end 18 of lever 4, such pressure causing its rounded end 17 to move upwardly and force the longer latch arm 11 in the same direction until the gate projection 7 is received in seat 15, said end binding against the lower surface of the latch arm and preventing displacement of the same. When the gate is to be opened, pressure is applied in the opposite direction upon the lever handle, thereby effecting a movement of its end 17 forcibly against the lug or finger 14 upon the shorter latch arm 13. When this takes place, said arm 13 will be moved inwardly of the pocket, and the longer latch arm 11, in consequence, will be forced to swing downwardly, away from the gate projection, which latter will be thus disengaged. The gate may then be readily swung open and the stake subsequently removed from the pocket. It will be observed, therefore, that one arm of the latch thus constitutes a locking means, and the other arm a releasing means, and that the operating lever or equivalent device is designed to engage one arm when moved in one direction and the other arm when moved in the opposite direction. These terms are employed in this connection in the appended claims. It will also be observed that the short arm 13 of the latch hangs below the fulcrum pin 10 and somewhat forward of the same so as to serve as a gravitating weight which tends to lower or assist in lowering the long arm of the latch into unlocking position when released by the locking lever.

I claim as my invention:

1. The combination, with a pocket and a closure therefor, of a movable latch associated with the closure, and a member arranged to engage and move said latch in one direction for locking said closure in operative position, and to engage and move said latch in the opposite direction for releasing said closure, said latch and member being so disposed in relation to each other that when the latch is in locking position said member will lie substantially in a vertical plane at right angles to the horizontal plane of the latch.

2. The combination, with a pocket and a closure therefor, of a pivoted latch associated with the closure and having a locking arm and a releasing arm, and a member for operating said latch adapted to engage the first-mentioned arm for locking said closure in operative position, and to engage the last mentioned arm for releasing said closure.

3. The combination with a pocket and a closure therefor, of a latch arranged to engage and lock the closure in operative position, and means arranged in relation to the latch to be brought into contact with a portion of the latch, with which it is normally out of contact, for positively disengaging the latch from said closure.

4. The combination, with a pocket and a closure therefor, of a latch arranged for movement into position to engage said closure to retain the latter in one position and a lever arranged to be moved into contact with the latch for shifting said latch out of such position in releasing said closure, said lever having its short arm bearing against the latch in its locked position and its long arm depending below the short arm when in such position and serving as a handle for its manipulation.

5. The combination, with a pocket and a closure therefor, of a latch associated with the closure for locking the latter in one position, a movable member for operating said latch, and an arm extending from said latch and normally out of contact with said member and arranged in the path of movement of said member for contact in releasing said latch.

6. The combination, with a pocket and a closure therefor, of a bell-crank latch associated with the closure, and an operating member arranged for contact with one arm of the latch for engaging the latter with said closure, to lock the same in one position, and for contact with the other arm to release said latch from such engagement.

7. The combination, with a pocket and a closure therefor, of a pivotally-mounted bell-crank latch associated with the closure, and a pivotally-mounted operating lever arranged for swinging movement in one direction into contact with one arm of said latch, for engaging the latter with said closure to lock the same in operative position, and for swinging movement in the opposite direction into contact with the other arm, to release said latch from such engagement.

8. The combination with a pocket and a closure therefor, of a pivoted latch arranged to engage the closure and having at its rear a weight portion so disposed as to tend to lower the forward portion of the latch, and a locking lever so disposed in relation to the latch as to bear against the lower side to lock it in position to hold the closure.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS DAMARIN GREGG.

Witnesses:
G. W. KITTRIDGE,
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