Jan. 7, 1958 G. C. REDMON 2,819,110

ARTICLE HANDLING IMPLEMENT FOR MAIL CARRIERS

Filed Nov. 23, 1953

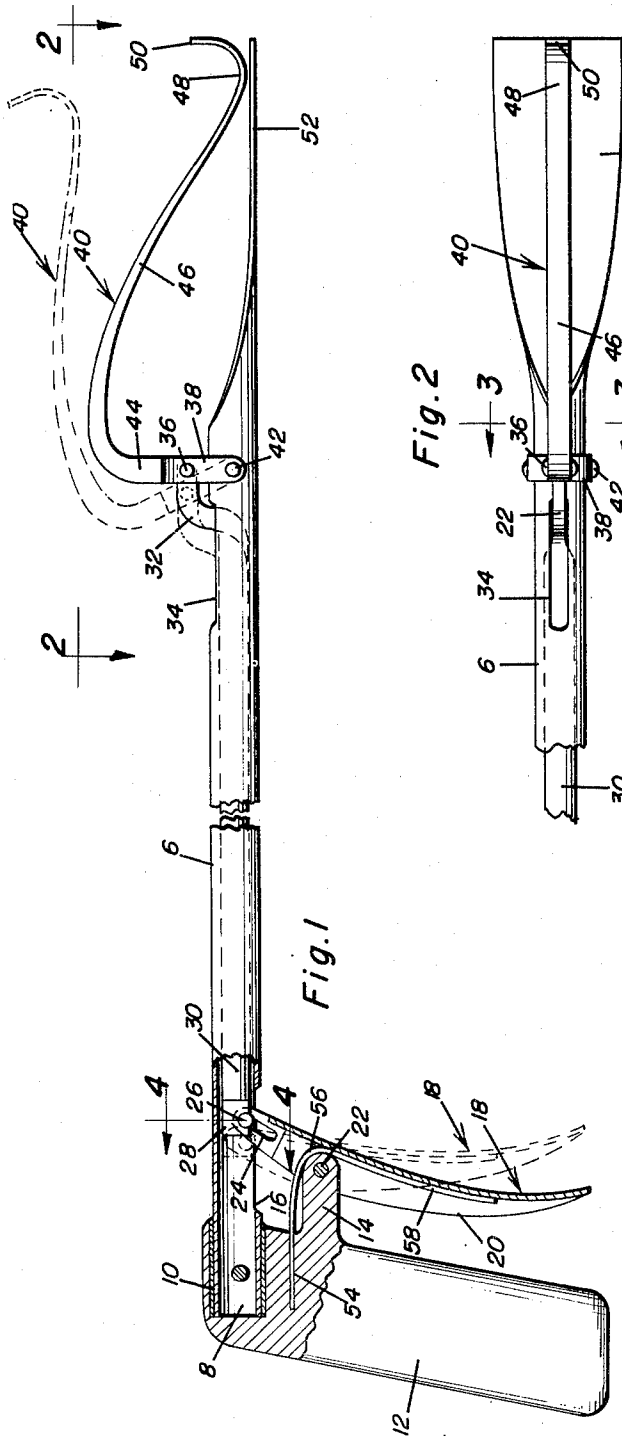


Fig. 1

Fig. 2

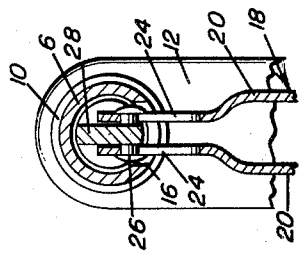


Fig. 4

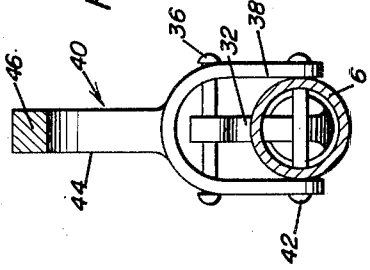


Fig. 3

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United States Patent Office 2,819,110 Patented Jan. 7, 1958

2,819,110

ARTICLE HANDLING IMPLEMENT FOR MAIL CARRIERS

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Application November 23, 1953, Serial No. 393,719

3 Claims. (Cl. 294—19)

The present invention relates to miscellaneous small article handling implements referred to in the prior art as grapples, long-handled tongs and so on, and has reference in particular to a comparatively lengthy implement which is expressly, but not necessarily, adapted to be used to advantage by rural mail carriers, newspaper delivery boys and the like.

As the title of the invention clearly implies, the invention, more specifically, appertains to an elongate handle-equipped implement characterized at its outer pick-up end by a pair of appropriately designed cooperating stationary and movable jaws which are trigger-controlled from a handle at the inner end of the implement, whereby to thus provide a satisfactory structural device which may be used to advantage to open and close mail boxes, pick up cards, letters and small packages, and which may likewise be employed for depositing letters, cards and the like in the mail box without requiring the carrier to dismount from his vehicle or to climb from behind the wheel in an attempt to take care of required activities from awkward and tiring positions.

An equally important object of the invention is to structurally, functionally and otherwise improve upon similarly constructed and performing prior art tongs and grapples of the so-called long handled variety and, in doing so, to provide a simple, economical and practical instrumentality wherein manufacturers and the users will find their respective requirements and needs effectually met.

Briefly summarized, the preferred embodiment of the invention has to do with a multipurpose small article handling implement which is characterized by an elongate tubular shank having a pistol-grip rigidly secured to one end and a broad flat-faced stationary jaw at the other end, a rod reciprocable in the bore of said shank, a movable jaw pivotally mounted on said shank and swingable toward and from said stationary jaw, the end of said rod adjacent to said movable jaw being pivotally connected to said latter jaw, and a spring biased trigger pivotally mounted on said pistol grip and pivotally joined to an adjacent end of said rod.

Another object has to do with the construction stated wherein the first named jaw is in the form of a blade and is, therefore, spatula-like in configuration, the movable jaw embodying a flexibly resilient finger having a special J-shaped terminal end which cooperates with the adjacent terminal end of the stationary jaw in enabling the user to employ the device with skill and dexterity.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheet of illustrative drawings.

In the drawings:

Figure 1 is a side elevation with portions broken away and shown in section of a multipurpose small article pick-up and handling implement constructed in accordance with the principles of the present invention and showing, by way of full and phantom lines, the construction and operation;

Figure 2 is a fragmentary plan view on the approximate line 2—2 of Figure 1, looking in the direction of the arrows;

Figure 3 is an enlarged section on the line 3—3 of Figure 2, looking in the direction of the arrows; and

Figure 4 is an exaggerated fragmentary sectional and elevational view on the line 4—4 of Figure 1, looking in the direction of the arrows.

Referring now to the drawings, the tubular, rigid linearly straight elongate shank is denoted by the numeral 6. One end portion 8 fits into a suitably lined socket 10 formed in the forward upper end portion of the lateral pistol-grip 12. The pistol-grip is provided beneath the shank with an outstanding lug 14 and above this, the shank is provided with an accommodation slot 16. The lug serves to accommodate a trigger 18 in the form of a small lever which is preferably channel-shaped in cross-section. The side walls or flanges 20 straddle the lug and are hingedly joined thereto, as at 22. The upper end of the trigger may be said to be formed with slotted ears 24 which pass through the slot 16 and which are pivotally connected to operating pins 26 on the adjacent flattened ends 28 of a reciprocable push-pull rod 30. The rod is of a length suitable to operate or slide back and forth in the bore of the shank and it has an offset end portion 32 at the outer end passing through a clearance slot 34 and pivotally connected at 36 to a yoke 38 on one end of the movable jaw 40. The yoke straddles the shank and is hinged thereto, as at 42. The jaw 40 in side elevation is generally L-shaped and has a rigid end portion 44 which joins with the yoke and has a flexibly resilient limb portion 46 which terminates in a J-shaped terminal comprising the first and second bends 48 and 50, respectively. The bend 50 is directed laterally away from the spatula-shaped stationary blade 52. The convex portion 48 is opposed to the adjacent flat face of the jaw 52. These thus shaped rigid and resilient jaws provide a skillful device which, as a result of experience, will enable the user to not only open and close the mail box, but to actually use the device as a long handled artificial hand, so to speak. This enables a mail carrier or other user to remove small articles, such as letters and cards, by scooping the same out of the box and it also serves to enable the user to reach out from his automobile, without removing himself from behind the wheel, and to place small articles in the mail box. Likewise, the device will serve the needs and purposes of newspaper boys whose delivery service involves the use of an automobile or the like.

Reverting to the trigger, attention is called to a leaf spring, one end 54 of which is secured to the hand-grip and the intermediate portion 56 being trained over the blunt end of the lug with the terminal portion seated in the channel of the trigger and secured in place suitably, as at 58.

As is the situation with all tools, implements, grapples and pick-up tongs, one has to employ the same over and over under varying circumstances, whereupon he will gradually learn the knack of using the instrument to best advantage. In the circumstances, it is thought unnecessary to dwell at length upon the mode of use. As to the construction and operation, it is believed that this is clear from the description taken in conjunction with the accompanying drawings. A more lengthy description is therefore believed to be unnecessary.

What is claimed as new is as follows:

1. A multipurpose small article pick-up and handling implement comprising an elongate tubular shank having a pistol-grip rigidly secured to one end and having its other end fashioned into a broad flat-face stationary jaw, a snug-fitting rod reciprocable in the bore of said shank, a movable jaw pivotally mounted on said shank and

swingable toward and from said stationary jaw, the end of said rod adjacent to said movable jaw being pivotally connected to said latter jaw, and a spring biased trigger pivotally mounted on said grip and pivotally joined to an adjacent end of said rod, said first jaw being rigid and spatula-like and substantially flat in plan, said movable jaw embodying a flexibly resilient finger having a terminal portion movable toward and from the free end portion of said first named jaw and embodying an integral yoke at one end having its arms straddling and pivotally connected to an intermediate portion of said shank, said shank, adjacent said yoke, being provided with a slot, and the end of the rod adjacent to said slot being laterally offset and extending outwardly through and beyond the slot and being pivotally connected to said yoke.

2. A multipurpose small article handling implement comprising an elongate tubular shank, a pistol-grip having a socket, one end of said shank telescoping into and being secured in said socket, said grip being provided adjacent to and beneath said shank with an outstanding lug and being provided above said lug with a slot, a trigger pivotally mounted intermediate its ends on said lug and having an end portion extending through the slot into the bore of the shank, spring means cooperating with said grip, lug and trigger to maintain the trigger in a predetermined position, the outer end of said shank having a flat jaw, a rod reciprocable in the bore of said shank, one end of said trigger being pivotally connected to an adjacent end of said rod, a movable jaw having a resilient flexible finger and a yoke, said yoke being pivotally connected to said shank, said shank having a second slot and said rod having an offset end portion extending through said second slot and connected operatively with said yoke.

3. A multi-purpose small article pick-up and handling implement comprising an elongate tubular shank, a pistol-grip having a socket, one end of said shank telescoping into and being secured in said socket, a snug-fitting rod reciprocable in the bore of said shank, a lug carried by

and projecting laterally from one edge portion of said pistol-grip in spaced parallelism to said shank, that portion of the shank directly above the lug being provided with a trigger accommodating slot, one end of said rod being movably cooperatable with said slot and serving to substantially close an end portion of said slot in a valve-like manner, a trigger pivotally mounted between its ends on said lug and having one end portion opposed to and movable toward and from the pistol-grip and the other end portion projecting through said slot and having pin and slot connection with said rod, spring means cooperable with the pistol-grip, lug and trigger, that end of said shank remote from said pistol-grip having a broad flat faced stationary jaw, said shank inwardly of said jaw being provided with a second slot diametrically opposite to said first named slot, the end portion of the rod adjacent said second slot being laterally offset and extending outwardly through and beyond said slot, and a movable jaw embodying a flexible resilient finger having a terminal portion movable toward and from the free end portion of the first named jaw and embodying a yoke at one end having arms straddling and pivotally connected to said shank between the first named jaw and second named slot, the offset end of said rod being pivotally connected to the arms of said yoke.

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