

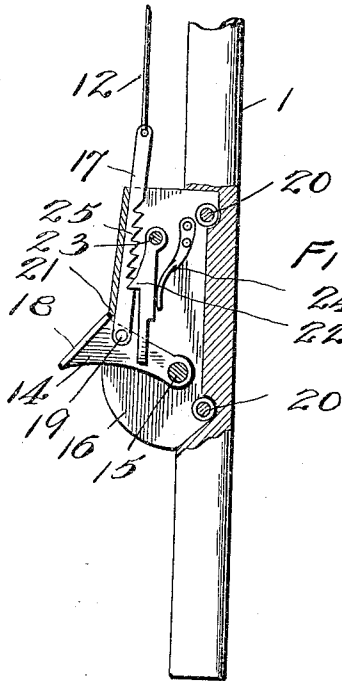
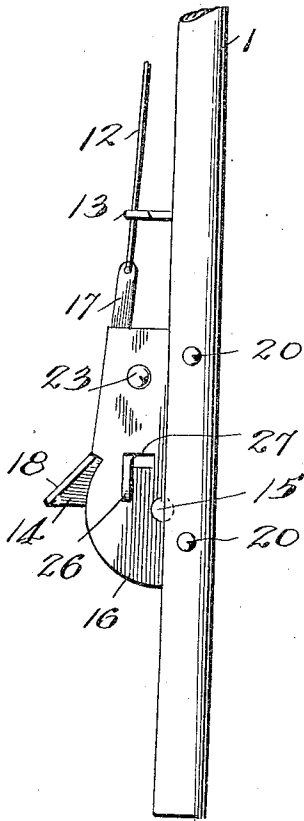
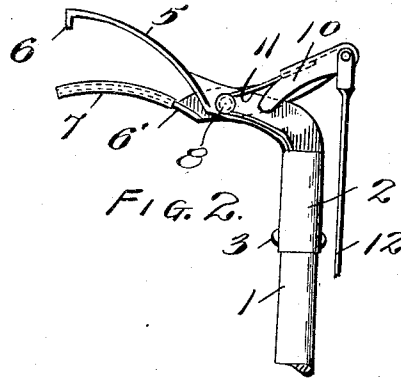
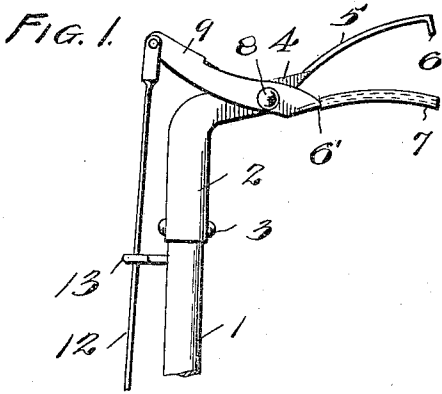
C. H. MOYER.

LIFTER.

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1,120,735.

Patented Dec. 15, 1914.



WITNESSES.

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LIFTER.

1,120,735.

Specification of Letters Patent.

Patented Dec. 15, 1914.

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To all whom it may concern:

Be it known that I, CHARLES H. MOYER, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Lifters, of which the following is a specification.

The present invention relates to improvements in lifters, and especially to that class known as "store lifters".

The primary object of the invention is to provide a device of this character which may be operated with facility, and can be manipulated in one hand by the use of the thumb only when grasping and releasing a package or other article.

The invention consists in certain novel features of construction and combinations and arrangements of parts whereby the device may be operated, as will be more fully pointed out and claimed.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles of my invention.

Figure 1 is a side elevation of my improved lifter, part broken away, showing the grasping jaws in open position. Fig. 2 is a view of the jaws at the upper end of the pole or stick, as seen from the reverse side of Fig. 1. Fig. 3 is a detailed sectional view of the operating parts of the device.

In the preferred embodiment of my invention the jaws are supported upon the stick 1 which is of suitable length and size, and of a weight adapted to be handled with facility. At the upper end of the stick a ferrule or sleeve 2, of metal, is secured by the pin 3 which passes through perforations in the ferrule and through the stick 1. The ferrule 2 has integral therewith an outward extension 4 from which the fixed jaw 5 projects. These integral parts, the ferrule, extension, and jaw, are made of suitable metal, and in Figs. 1 and 2 it will be seen that the extension 4 is flat and projects tangentially from the ferrule 2, and it will be further observed that the fixed jaw 5 has an overhang or lip 6 projecting therefrom. The jaw 5 is flat and curved, and is located in a plane at right angles to that of the extension 4. A similarly curved movable jaw 6 having a rubber covering 7 co-acts with the

immovable jaw 5, and the movable jaw 6' is pivoted on the extension 4, by means of the pin or bolt 8, which is passed through the lever portion 9 of the jaw 6' and also through the extension 4 of the ferrule 2. The lever 9 is provided with an arm 10 which extends backward and over the extension 4 of the fixed jaw, and acts as a guide for the movable jaw.

A spring 11 is wound about the pin 8, and one end of the spring is held under the lever 9 while the other end projects within the ferrule 2, and tends to urge the jaws and hold them in open position, as shown in Figs. 1 and 2.

The movable jaw 6' is operated through the medium of a draw rod or wire 12 which is guided in the screw eyes 13—13 fixed in the stick 1. A lever 14 pivoted at 15 in a casing 16 secured in the stick 1, connects by means of the rack bar 17, with the draw bar or draw rod or wire 12, and by means of the handle or thumb piece 18 on the lever 14, the rack bar 17, which is pivoted at 19 to the lever 14, is made to pull or draw on the bar 12 and thus close the movable jaw 6'. The casing 16 is fixed by means of pins 20—20 within a slot in the stick 1, and is rigid with the stick. The upper and lower ends of the casing are open, as clearly seen in Fig. 3, and the end wall 21 of the casing provides a shoulder against which the lever 14 is held as a stop. Within the casing 16 a release pawl 22 is pivoted at 23, and a flat spring 24 bears against the pawl to hold it in engagement with the teeth 25 of the rack bar 17. As clearly seen in Fig. 1, the thumb piece or handle 26 of the pawl projects through a slot 27 in the casing 16, and the thumb pieces 18 and 26, it will be seen, are in close juxtaposition and are both easily accessible to the thumb of the operator.

In using the device the stick is grasped in the hand, with the thumb placed on the thumb piece 18. The normal position of the parts is indicated in Fig. 1, where the movable jaw 6' is shown held open by the spring 11. When it is desired to grasp an article with the jaws, the jaws are positioned over the article, and with the thumb on the thumb piece 18, the lever 14 is swung upon its pivot 15, and the movable jaw 6' is closed over the article, and it is grasped between the fixed jaw and the movable jaw

as is readily understood. The pawl 22 is held at all times in contact with the teeth 25, so that when the jaw 6' has been moved to grasp the article, the thumb may be removed from the thumb piece 18, and the jaws are held closed by means of the pawl which is in engagement with the rack teeth. When it is desired to release the article or package which is held with the jaws, the thumb is placed upon the thumb piece 26, and pressure thereon releases the pawl 22 from the teeth 25, and a spring 11 moves the openable jaw to open position, thus releasing the article.

15 From the above description taken in connection with the drawings it will be evident that I have provided a device which is facile in operation, which is durable, and which is efficient in performing the functions for which it is devised.

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Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

The combination with a stick, a fixed jaw and a movable jaw pivoted on the fixed jaw, 25 of a slotted casing fixed in the stick, a lever pivoted in the casing, a rack bar and a draw rod connecting the movable jaw and lever, a thumb piece on the lever, a release pawl pivoted in the casing and engaging said 30 rack bar, and a thumb piece on said pawl projecting through the slotted casing in proximity to the first mentioned thumb piece.

In testimony whereof I affix my signature 35 in presence of two witnesses.

CHARLES H. MOYER.

Witnesses:

J. H. EASTERDAY,
R. W. DENNIS.

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