No. 636,541. Patented Nov. 7, 1899.

F. F. MARTINS & L. B. HASKELL.

STORE GOODS LIFTER.

(Application filed June 23, 1899.)

(No Model.)

Fig. 1.

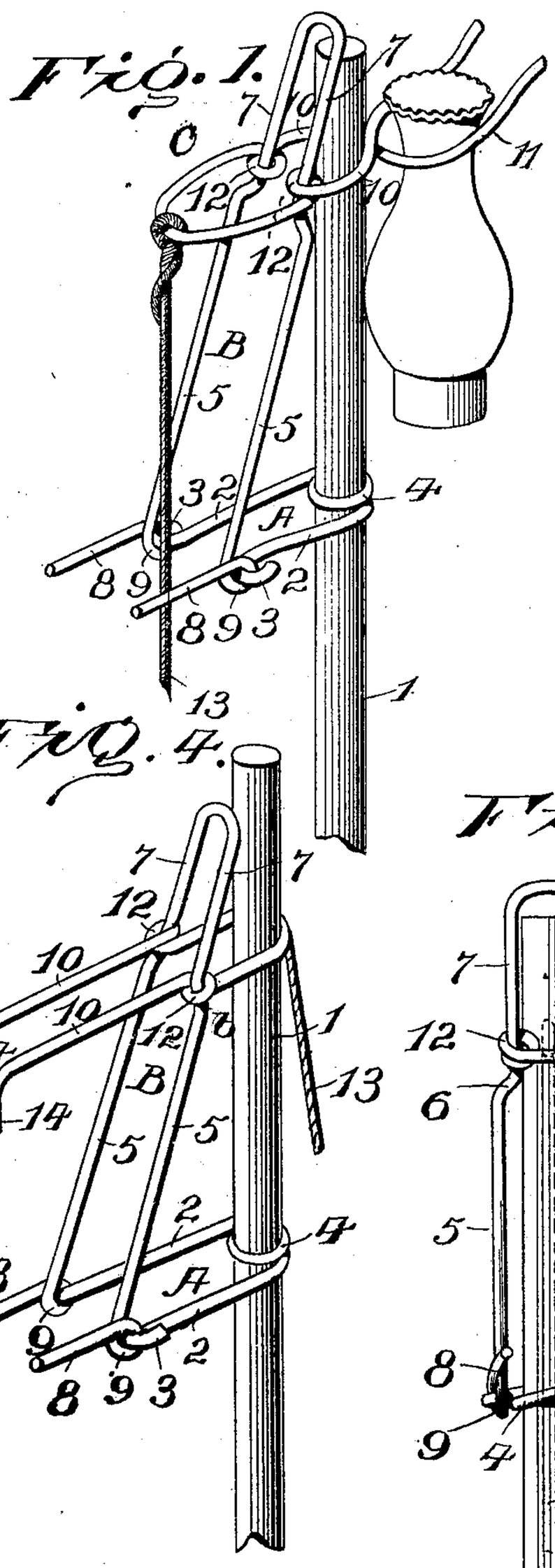


Fig. 2.

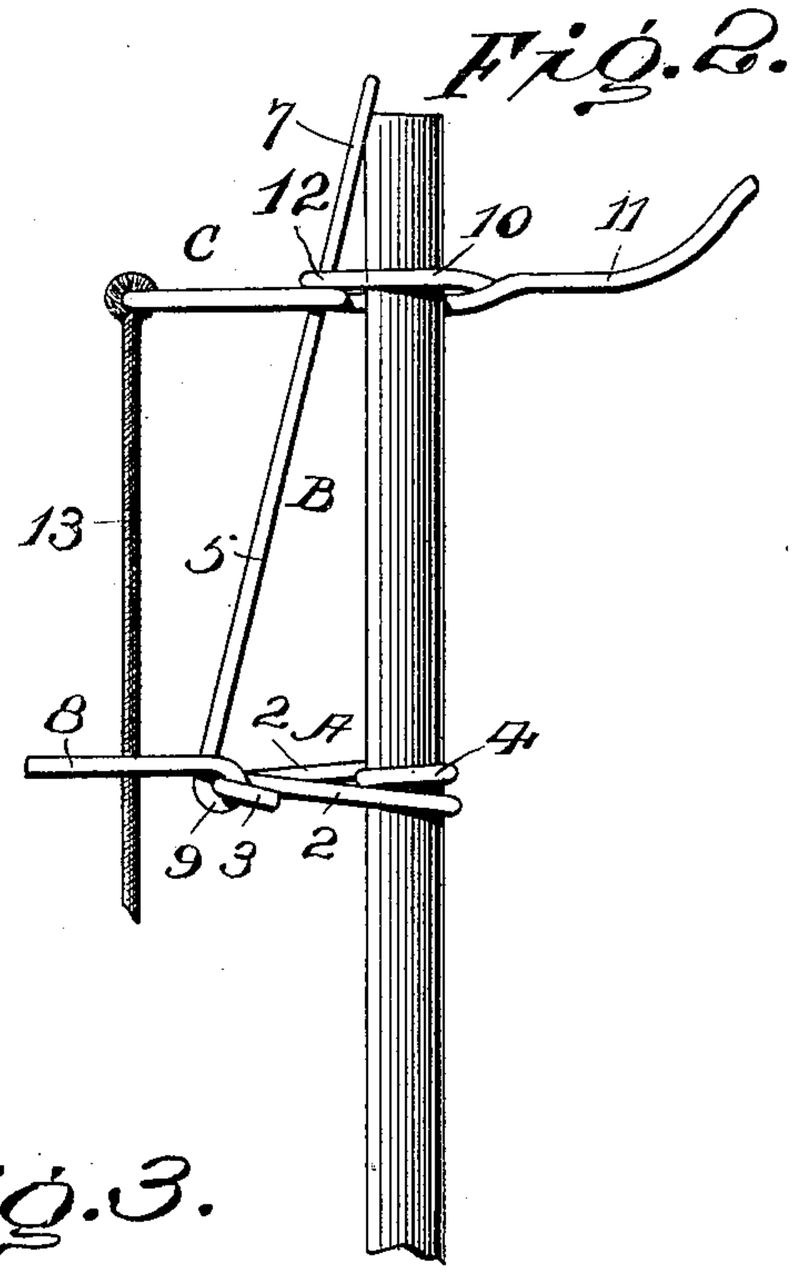


Fig. 4.

Fig. 3.

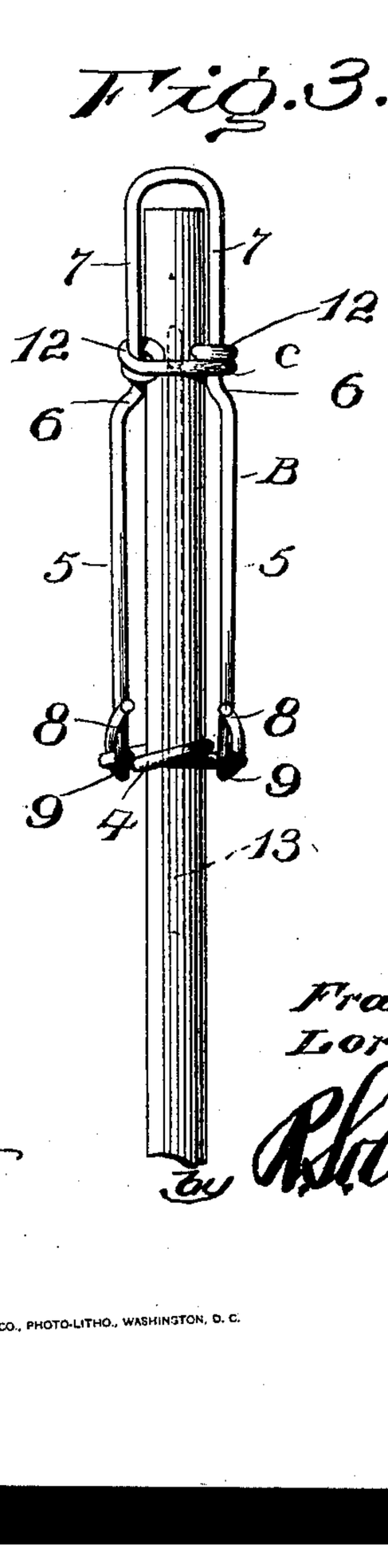
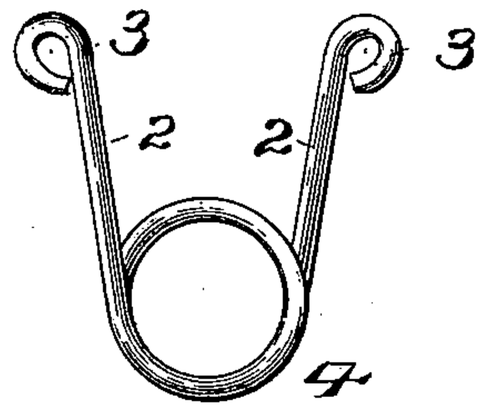


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANCISCO FRUCTUOSO MARTINS AND LORING B. HASKELL, OF GLOUCESTER, MASSACHUSETTS.

STORE-GOODS LIFTER.

SPECIFICATION forming part of Letters Patent No. 636,541, dated November 7, 1899.

Application filed June 23, 1899. Serial No. 721,648. (No model.)

To all whom it may concern:

Be it known that we, FRANCISCO FRUCTUOSO MARTINS and LORING B. HASKELL, citizens of the United States, residing at Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Store-Goods Lifters; and we do hereby 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.

This invention relates to means for reaching goods or articles placed upon shelving or like supports and not accessible from the floor without requiring the mounting of a ladder or like device to enable same to be reached when required.

The purpose of the invention is the provision of a device of simple construction and easy and effective in operation and which will enable a person to secure an object placed beyond reach of the hand when standing upon the floor, thereby avoiding the danger and inconvenience usually attendant upon climbing a ladder or mounting a chair or analogous device for the purpose of becoming possessed of the coveted article.

For a full understanding of the merits, advantages, and details of construction of the invention reference is to be had to the following description and the drawings hereto attached.

In constructing a device in accordance with the invention it is not necessary to observe all the details herein set forth. Hence within the purview of the invention various changes in the form, proportions, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages thereof.

Referring to the drawings forming a part of the application, Figure 1 is a perspective view of the device. Fig. 2 is a side elevation thereof. Fig. 3 is a front view, the dotted lines indicating the cord. Fig. 4 is a perspective view showing the swinging frame constructed with hooked terminals to engage over the rear side of a box, can, or like package or article. Fig. 5 is a plan view of the base or supporting-frame.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The device comprises a pole or staff 1, which may be of any desired length or constructed in any desired manner, so as to be lengthened or shortened to suit the convenience of the user and adapt the device to the height of the article to be secured through the instrumentality of the appliance.

The grappling devices have adjustable connection with the upper end portion of the pole or staff and consist, essentially, of the supporting-frame A, vertical swinging frame B, and the adjustable swing-frame C.

The supporting-frame A is of approximately U form and comprises spaced arms 2, having terminal eyes 3 and a coil 4, through which the pole or staff 1 passes, said frame being constructed of wire of suitable gage bent into the form about as shown. The coil 4 is designed to grip the pole 1 with sufficient force to hold the frame and parts supported thereby in the required adjusted position.

The vertical swing-frame B is constructed of wire and comprises side members 5, having offsets 6 near their upper ends forming shoulders and having the portions 7, above the offsets or shoulders 6, disposed about in parallel relation and constituting guides for the part C, said frame B having horizontal arms 8 and eyes 9 looped into the terminal eyes 3 of the frame A, whereby the two frames A and B are hingedly connected.

The self-adjustable swing-frame C occupies an approximately horizontal position and approximates the form of the figure 8 in plan elevation and comprises side bars 10, crossed about midway of their ends, forming a fork 11. Eyes 12 are formed intermediate of the point of crossing of the side bars 10 and the fold or closed end of the frame by bending the said side bars into coils about as shown, said eyes 12 receiving the guide portions 7 of the side members 5 of the frame B. The pole or staff 1 is located in the space formed between the point of crossing of the wires and the eyes 12, which serve to limit the play of the frames B and C. The frame C is free to slide vertically upon the frame B and is limited in its downward movement by engage-

ment of the eyes 12 with the offset or shoulder 6 of the frame B. A string or like device 13 is attached to the closed end of the frame C to be pulled upon to effect an engagement or disengagement of the frame C from the article when placing the same upon the shelf or support.

When it is required to gain possession of a bottle, can, box, or like article beyond reach of the person standing upon the floor, the device is had recourse to and the end of the frame C is engaged over the top side of the article and the device manipulated until the arms 8 of the frame B are caused to engage under the said article, when the latter will be securely grasped and can be safely removed from the shelf or other elevated support. By having the frame C self-adjusting the device can automatically adapt itself to articles of differents heights, as will be readily comprehended. The arms 8 are of sufficient length to enable them to engage under the article and form an ample support therefor when removing the object from its overhead support.

The frame C (shown in Fig. 4) is constructed substantially like the corresponding part shown in the other views with the exception that the side bars are not crossed and their terminals are bent down, as shown at 14, forming hooks, which are adapted to engage with the rear side of a box, can, package, or the like and retain it upon the arms 8. The frame is differently arranged, the pole passing through the closed end between it and the upper end of the frame B and the hooked ends of the side bars overhanging the arms 8. This form is especially adapted for handling boxes, cans, and the like. The arrangement shown in Figs. 1, 2, and 3 is particularly adapted for bottles, lamp-chimneys, and kindred necked articles.

Having thus described the invention, what is claimed as new is—

1. In a device of the character described, a pole, a horizontal frame applied to the pole, an approximately vertical frame hinged at its lower end to the horizontal frame and free to swing toward and from the pole at its upper end, and an upper horizontal frame slidable upon the upper portion of the vertical frame and embracing the pole to limit the outward movement of the vertical frame at its upper end and adapted to swing in a vertical plane in any of its vertical adjustments, substantially as described.

2. In a device of the character set forth, a pole, an approximately vertically disposed frame having hinged connection at its lower end with the pole and provided with horizontal arms and adapted to swing toward and from the pole at its upper end, and a horizontal frame slidably mounted upon the upper portion of the vertical frame and adapted to swing thereon vertically and to embrace the pole to limit the outward movement of the vertical frame at its upper end and having a portion overhanging the aforesaid horizontal arms to coöperate therewith, substantially as specified.

3. In a device of the character set forth, a pole, an approximately vertically disposed frame hingedly connected at its lower end with the pole and having horizontal arms, the upper portion of the frame being offset to provide shoulders and guides, and a horizontal frame adjustably mounted upon the upper portion of the vertical frame and limited in its downward movement by engagement with the shoulders thereof and adapted to engage at its inner end with the pole, and provided at its outer end with engaging hooks, substantially as described.

4. In a device of the character specified, a pole, an approximately vertically disposed frame hingedly connected at its lower end with the frame and having horizontal arms, and a horizontal frame approximating the form of the figure 8 receiving said pole in the space formed adjacent to the point of crossing of the side members, and having its side bars adjustably engaged with said vertical frame and provided at their outer ends with hooks, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANCISCO FRUCTUOSO MARTINS. [L. S.]
LORING B. HASKELL. [L. S.]

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