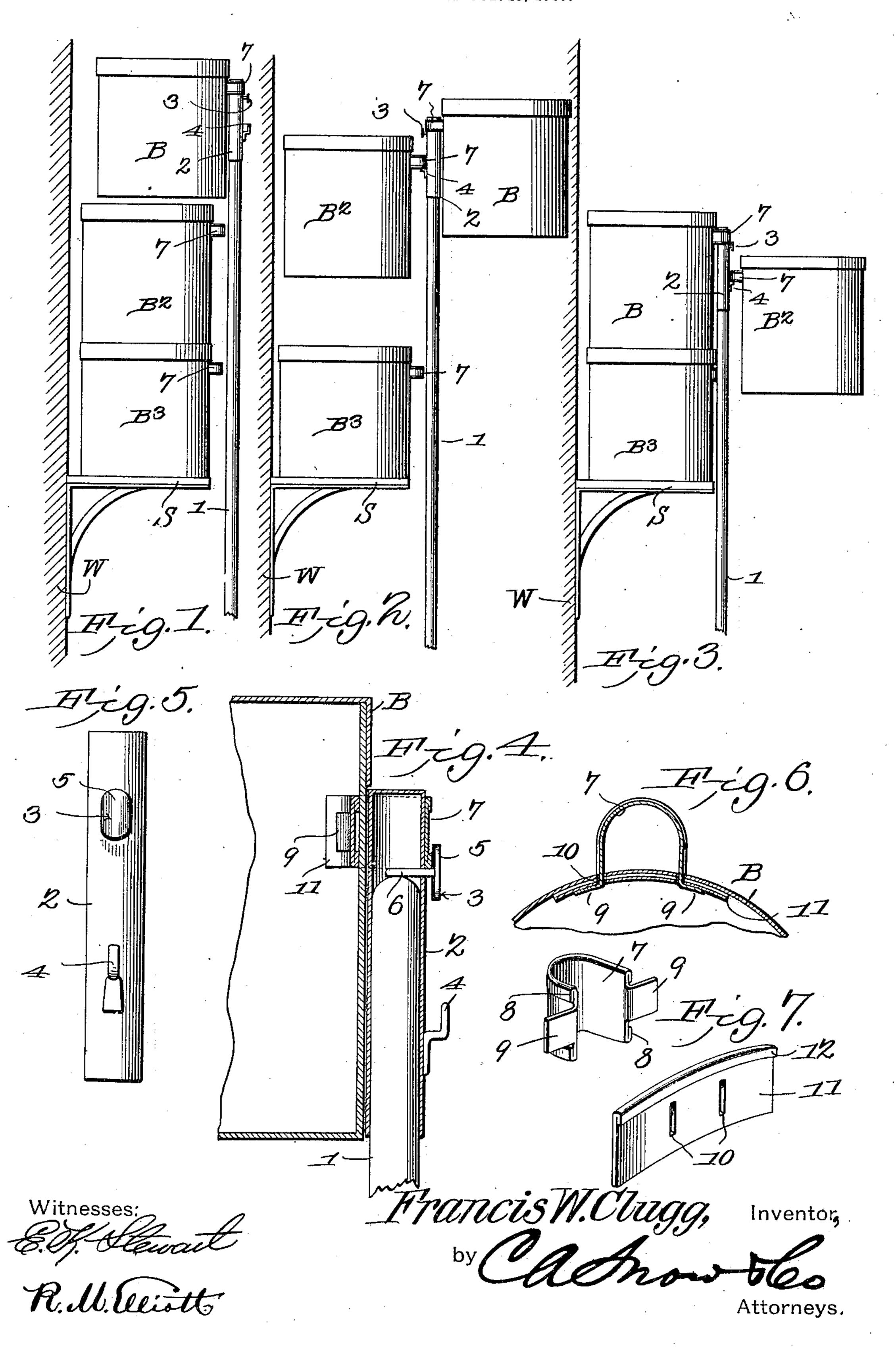
F. W. CLUGG.

BOX LIFTER.

APPLICATION FILED OCT. 13, 1905.



STATES PATENT OFFICE.

FRANCIS W. CLUGG, OF MANCELONA, MICHIGAN.

BOX-LIFTER.

No. 830,882.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Francis W. Clugg, a citizen of the United States, residing at Mancelona, in the county of Antrim and State of 5 Michigan, have invented a new and useful Box-Lifter, of which the following is a specification.

This invention relates to box-lifters.

The object of the invention is to provide a o simple and thoroughly efficient implement in the use of which boxes may be readily removed from high shelves or ledges without the employment of ladders for the purpose and in the use of which any particular box from a pile may be readily separated from the others and lowered to the counter or within easy reach of the operator.

With the above and other objects in view, as will appear as the nature of the invention 20 is better understood, the same consists in the novel construction and combination of parts of a box-lifter, as will be hereinafter fully de-

scribed and claimed.

In the accompanying drawings, forming a 25 part of this specification, and in which like | characters of reference indicate corresponding parts, Figures 1, 2, and 3 are views in the nature of diagrams exhibiting the manner in which a particular box may be removed from 30 a pile and lowered to the ground or counter. Fig. 4 is a sectional detail view through a portion of a box and the implement or box-lifter, showing the coöperation between the two parts when a box is being lifted. Fig. 5 is a 35 view in elevation of a portion of the lifting implement. Fig. 6 is a horizontal sectional view showing more particularly the manner in which the handle is combined with the box. Fig. 7 is a collective detail view in perspec-40 tive of the different parts of the handle forming a part of the present invention.

The box-lifter embodies a handle or pole 1, which may be made of any suitable material and of any length and with which is com-45 bined a collar or socket-piece 2, carrying in this instance two box-handle-engaging elements 3 and 4. While but two of these elements are herein shown, it is to be understood, that the invention is not to be limited thereto, 50 as a greater number than two may be utilized if found necessary or desirable, so that the term "plurality" hereinafter applied to these elements is to be taken as indicating an in-

definite number.

The engaging element 3 is herein shown as consisting of a relatively flat head 5 and a

shank 6, which is secured to the collar in any preferred manner, as by being soldered thereto, while the element 4 is approximately Zshaped and is secured to the exterior of the 60 collar, as by being soldered or riveted thereto. The collar may be made of any suitable material, as also the elements 3 and 4, and the former may be either permanently or detachably connected with the pole or handle, as 65 preferred. It will be noted by reference to Fig. 4 that the head of the element 3 lies close to the collar, while the element 4 projects some distance beyond the same, and the object of this arrangement is to prevent the 70 element 3 from interfering with the element 4 when the latter is to be hooked into engagement with a box-handle or when it is to be released therefrom.

The box-handle, to which reference has 75 been made, comprises a handle proper, 7, which consists of a length of metal, preferably of tin, curved to the appropriate shape and having edges overturned to form a reinforcing-bead 8 and its terminals reduced to 80 form tongues 9, which are adapted to engage slots 10 in a curved plate 11, one edge—the upper edge in this instance—being shown as overturned to form a reinforcing-bead 12. The plate is disposed on the inner side of the 85 box B. The tongues 9 are inserted through the slots 10 and are then turned at right angles to their normal position, as shown in Fig. 7, thereby securely combining the handle and

plate with the box.

As shown in Fig. 1, there are three superposed boxes B, B², and B³, which are exhibited as supported on a shelf S, secured to a suitable support, such as a wall W. Suppose it be desired to lower the box B2. To effect 95 this result, the upper end of the collar is inserted through the handle of the box B until the latter engages the element 3, whereupon the pole is turned to bring the box B to the position shown in Fig. 2, and the handle of roo the box B² is engaged by the element 4. The pole is then again turned to bring the box B to the position shown in Fig. 3, when it may be superposed upon the box B³, the box B² being still in engagement with the element 4, 105 and upon the pole being lowered the box may be deposited upon a counter or other support.

As herein shown, the element 3 is disposed below the upper end of the collar a distance approximately equal to the width from the cro box-handle; but this is not essential, as it may be arranged at a greater or less distance

from the upper end of the collar and still be within the scope of the invention. It is also to be understood that instead of making the element 3 approximately stud-shaped, as shown, it may be made in the same form as the element 4, and as this will be readily understood detailed illustration of such modification is omitted. It will also be obvious that instead of securing the handle-engaging elements to a collar and combining this with the pole that they may be secured directly to the pole, and as this will be obvious detailed illustration thereof is omitted.

It will be seen from the foregoing description that although the improvements herein defined are simple in character they will be thoroughly effective for the purpose designed and will result in a large saving of time and labor in lifting overhead boxes from their

resting-places and depositing them upon a 20 counter.

Having thus described the invention, what

is claimed is—

A box-lifting implement embodying a pole, a collar or socket-piece mounted thereon, and box-handle-engaging elements carried by the collar and disposed in alinement with each other, one of the elements being disposed close to the socket and the other projecting some distance outward therefrom.

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In testimony that I claim the foregoing as my own I have hereto affixed my signature.

in the presence of two witnesses.

FRANCIS W. CLUGG.

Witnesses:
Fanna I. Allison,
O. A. Thompson.