

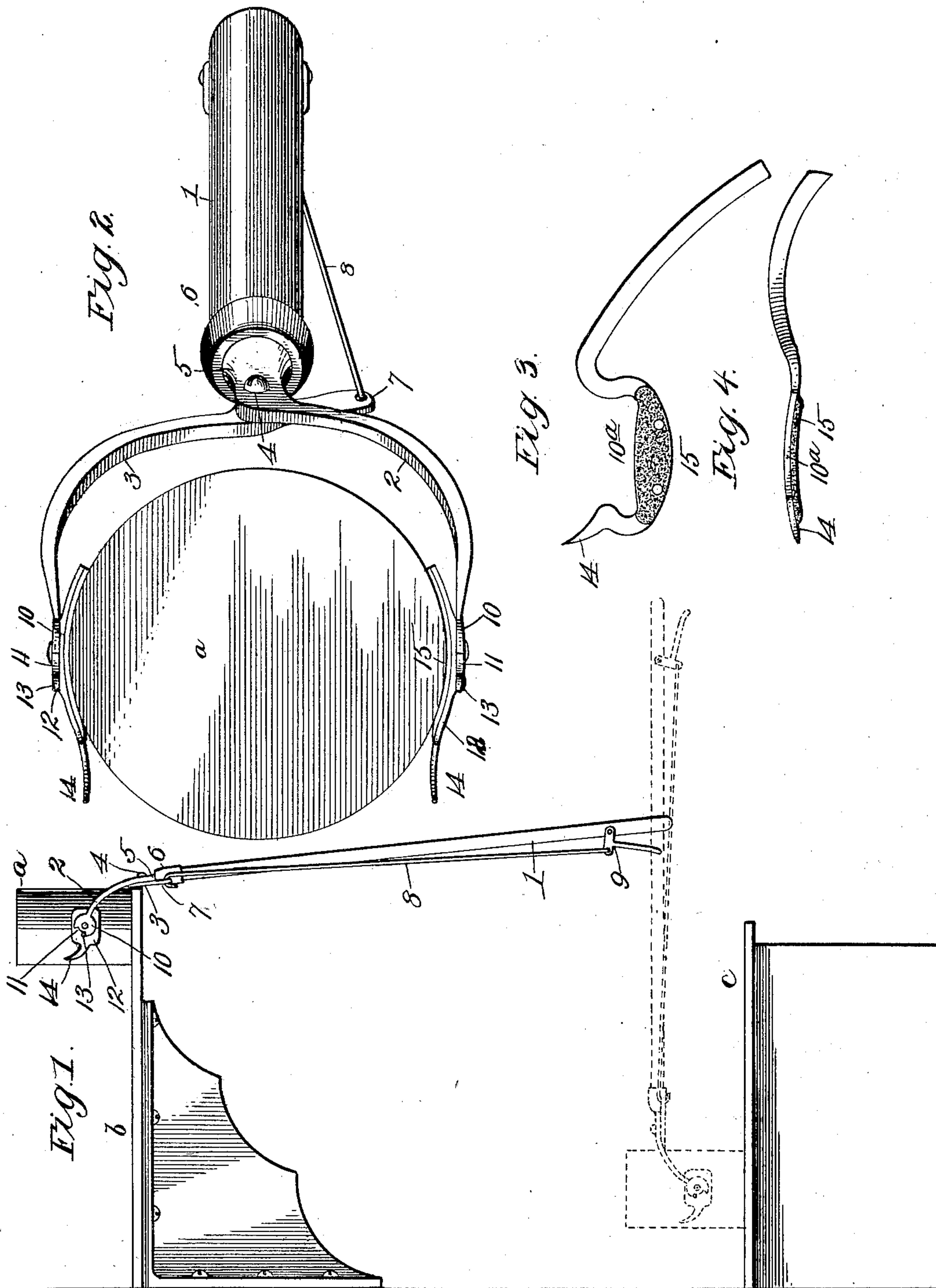
No. 703,163.

Patented June 24, 1902.

E. W. TOLER.
SHELF TONGS.

(Application filed Oct. 15, 1901.)

(No Model.)



Witnesses:
Arthur M. Arthur
H. C. Rodgers.

Inventor:
E. W. Toler.
By Fisher & Thorpe Attys.

UNITED STATES PATENT OFFICE.

EDWARD W. TOLER, OF KANSAS CITY, MISSOURI.

SHELF-TONGS.

SPECIFICATION forming part of Letters Patent No. 703,163, dated June 24, 1902.

Application filed October 15, 1901. Serial No. 78,680. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. TOLER, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Shelf-Tongs, of which the following is a specification.

My invention relates to tongs, and more especially to that class known as "shelf-tongs," which embrace arms of proper curvature to enable a can or other object to be grasped and removed from or deposited upon a shelf almost vertically above the person handling the tongs; and my object is to produce shelf-tongs whereby cans, glass jars, bottles, &c., may be handled with less chance of breakage than with the styles of tongs now in use.

A further object is to provide tongs of the character mentioned which are of simple, strong, durable, and cheap construction.

To these ends the invention consists in certain novel and peculiar features of construction and combinations of parts, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a side view of my improved tongs as operatively engaged with a can upon a shelf almost vertically above the person in charge. Fig. 2 is a top view of the same full size. Figs. 3 and 4 are inner face and top views of a modified form of tongs.

In the said drawings, where like reference-numerals designate corresponding parts, 1 designates a handle of suitable size, and secured at one end of the same are tongs, consisting, preferably, of the stationary arm 2, and the movable arm 3, pivoted to the stationary arm, as at 4. The said stationary arm is enlarged at its base, as at 5, and provided with the usual shank (not shown) extending into the handle, the ferrule 6 strengthening said handle so as to prevent its splitting. The movable arm 3 of the tongs is also prolonged beyond its pivot, as at 7, and pivotally connected to said arm is the pull and push rod 8, which is likewise connected to the lever 9, mounted on the handle, so that the operator by pushing said lever away can open and by drawing it toward the handle reclose the tongs.

The tong-arms are of approximately quad-

rant shape, as shown in Fig. 2, and also curve gradually to one side, as shown in Fig. 1, and terminate in enlargements or heads 10, this curvature (shown in Fig. 1) being to enable the operator to stand almost vertically below the shelf and yet reliably grasp a can or other object at diametrically opposite points. These heads 10 are provided with slots 11 to receive stop-pins 13, projecting outwardly from the clamping plates or jaws 12, swiveled or centrally pivoted to said heads, the arrangement being such that said jaws are enabled to turn through a quarter of a circle upon the heads, for a purpose which is hereinafter explained.

At least one of the jaws 12 is provided at its front end with an upwardly-projecting hook 14, and both jaws, it should be stated, curve on lines about concentric with the object to be grasped and are provided with resilient linings or cushions 15 at their inner sides, so as to engender sufficient friction to prevent chance of slippage, which might result in the breakage not only of the object but of valuable fixtures or other objects which it might strike.

To remove a can or analogous object from a shelf, as shown at *b* in Fig. 1, and deposit it on a counter, as at *c*, same figure, the salesman grasping the lower end of handle 1 pushes the lever 9 outward to open the tongs to approximately the position shown in Fig. 2. He then disposes the tong-arms at opposite sides of and contiguous to the can to be removed from the shelf, and in this connection it will be noted that by reason of the narrowness of the clamping-jaws from the inside to the outside this object can be accomplished without disarranging the contiguous cans or objects, as sufficient space to accommodate said narrow jaws is usually provided in stacking the cans. The tongs being properly disposed, the operator draws the lever toward the handle, so as to clamp the jaws tightly against the can. This being effected, the latter is lifted from the shelf. As this takes place it will be understood that stop-pin 13, by engagement with the lower end of slot 11, prevents the can from tipping over. As the tongs are swung downwardly at their upper ends in lowering the can to the counter *c*, for instance, the swiveled jaws under the weight of the can remain in their horizontal position,

and therefore retain the can in its upright position, so that it can be deposited upon the counter and the tongs withdrawn without direct contact with the hand of the operator, 5 whereas with the tongs having an immovable head it is far more convenient to place the can upon its side than in an upright position, as will be readily understood.

10 The hook 14 is designed for engagement with the bail or handle of an object, such as a bucket, to enable the latter to be conveniently lifted from a high shelf or other point.

In the modified construction shown in Figs. 3 and 4 it will be observed that I show the upper ends of the tong-arms in the form of a 15 U-shaped hook 14, the bridge or body portion of said U-shaped hook extending about concentrically of the object, such as a can, to be grasped. This formation of the head gives 20 a long bearing on the object, so as to eliminate chance of slippage.

From the above description it will be apparent that I have produced shelf-tongs which embody the features of advantage enumerated 25 as desirable in the statement of invention, and while I have illustrated and described the preferred construction of the same it is to be understood that it is susceptible of

change in minor particulars without departing from the principle of construction involved. 30

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

1. The combination of a handle, tongs secured to one end of the same, jaws swiveled to and at the inner sides of the tong-arms, and pin-and-slot connections between said arms and jaws whereby the swivel movement is limited to a fraction of a circle, substantially as 35 40 described.

2. The combination of a handle, tongs secured to one end of the same, jaws swiveled to and at the inner sides of the tong-arms, and having pin-and-slot connections with the latter, and provided at their inner sides with linings of compressible material, and at least 45 one of them with an upwardly-disposed hook, substantially as described.

In testimony whereof I affix my signature 50 in the presence of two witnesses.

EDWARD W. TOLER.

Witnesses:

H. C. RODGERS,

G. Y. THORPE.