A. D. THEODORE (WHOSE FULL LEGAL NAME IS T. D. ANAGNOSTOPOULOS.)

ARTICLE HANDLER.

APPLICATION FILED JUNE 15, 1918.

1,350,123. **Patented Aug. 17, 1920.**

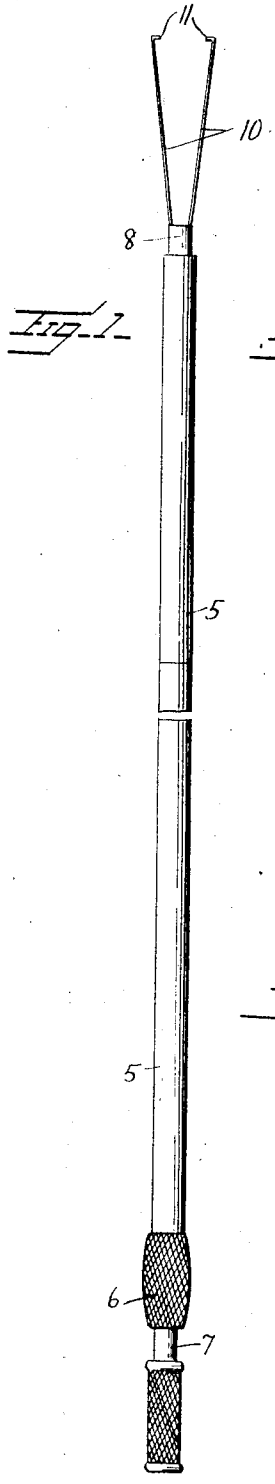


Fig. 1.

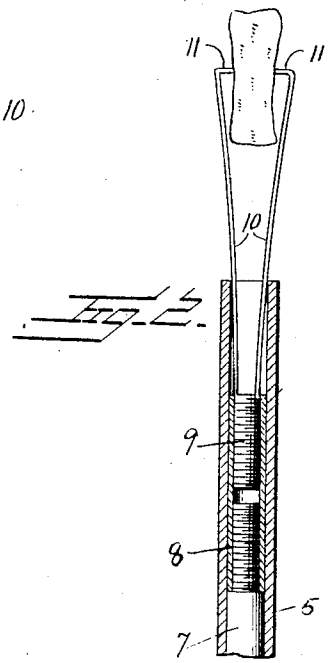


Fig. 2.

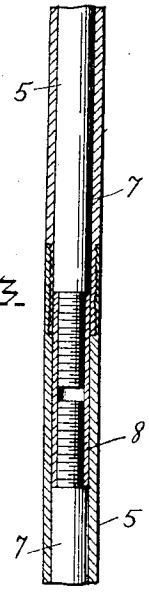


Fig. 3.

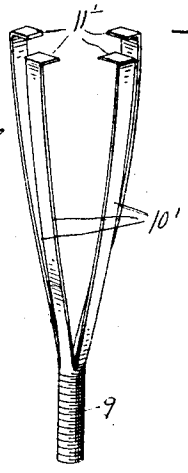


Fig. 4.

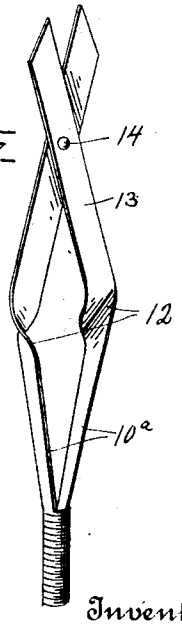


Fig. 5.

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ARTICLE-HANDLER.

1,350,123. Specification of Letters Patent. Patented Aug. 17, 1920.

Application filed June 15, 1918. Serial No. 240,266.

To all whom it may concern:

Be it known that I, ANOSTOPOULO D. THEODORE, a citizen of the United States, residing at Eunice, in the parish of St. Landry and State of Louisiana, have invented certain new and useful Improvements in Article-Handlers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved article handler, and has for its primary object to provide a very convenient and serviceable device for removing goods from store shelves, detaching or replacing electric light bulbs, and for various other analogous purposes.

It is a more particular object of the invention to provide a device for the above purpose embodying a sectional rod or pole, article engaging means on one end of the pole having yieldable, relatively movable parts, and relatively stationary means with relation to which said pole is adapted to be shifted and which, when the pole is moved in one direction, coacts with the parts of the article holder to urge the same into clamping engagement with an article.

It is also a further object of my invention to provide a device for the above purpose which is strong and durable in its construction, capable of manufacture at relatively small cost, and the several parts of which can be easily and quickly assembled or disassembled.

With the above and other objects in view, the invention consists in the improved construction, combination and relative arrangement of the several parts as will be hereinafter more fully described, subsequently claimed and illustrated in the accompanying drawing in which similar reference characters designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a side elevation illustrating one embodiment of my invention;

Fig. 2 is a fragmentary elevation, partly in section, on an enlarged scale, showing the clamping means engaged with an article;

Fig. 3 is a detail sectional view showing the means for detachably connecting the pole sections and the tubular guide sections;

Fig. 4 is a detail perspective view of a slightly modified form of the article holder or clamp; and

Fig. 5 is a similar view of a cutting attachment, with which the device may be equipped.

Referring in detail to the drawing, 5 designates the several sections of an outer tubular guide, which are preferably constructed of sheet metal. Each of these sections is interiorly threaded at one end and exteriorly threaded at its other end. Thus, it will be readily seen that by simply connecting the exteriorly threaded end of one section to the interiorly threaded end of an adjacent section, a tubular guide of any desired length may be produced. One of these guide sections 5 may be provided with a suitable handle, indicated at 6, whereby it may be conveniently grasped and held.

Through the outer tubular guide sections 5, a pole is movably engaged and this pole likewise consists of a plurality of sections 7. These pole sections are provided at their opposite ends with metal ferrules 8, and one of these ferrules is interiorly threaded at its opposite ends to engage the reduced ends of the section 7, so that a series of pole sections can be readily connected or disconnected in the same manner as the tubular guide sections 5. To one end of the pole, an article holder or clamp is adapted to be connected. This clamp includes a metal sleeve or ferrule 9 exteriorly threaded to engage into the interiorly threaded ferrule on the end of the pole section. As shown in Figs. 1 and 2, spaced clamping members 10 are securely fixed in any suitable manner to the other end of the ferrule 9. These members preferably consist of spring metal strips normally extending in divergent relation to each other and provided at their free ends with the inwardly bent lips 11.

In the use of the device as above described, when it is desired to remove a can, package or other article from a high shelf, the operator securely holds the tubular guide at its lower end by grasping the handle 6, and with the other hand the pole is first projected beyond the upper end of the tubular guide and the clamping arms 10 positioned on opposite sides of the article. The guide is then moved upwardly upon the pole so that its upper end will engage with

the resilient arms 10 and force the same inwardly toward each other so that the terminal lips 11 of said arms will securely grip or clamp the article. The pole is then securely grasped with the other hand and the article lifted from its place upon the shelf. In this manner, it will be seen that store goods or other articles which are packed away in places not easily accessible may be easily and quickly obtained. In Fig. 4 of the drawing, I have shown a slightly modified form of the article clamp or holder which is principally designed for removing or applying electric light bulbs. In this construction, the end of the ferrule 9 is provided with a relatively large number of diverging spring arms 10′ having the terminal lips 11′. These spring arms are adapted to be positioned around the glass bulb and by then urging the tubular guide upwardly they may be clamped thereon so that by rotating the pole extending through the guide the bulb can be readily removed from its socket. It can also be as readily replaced by a similar operation.

In Fig. 5 of the drawing, I have shown another supplementary attachment which may be used for the purpose of pruning trees and various other cutting operations. In this construction, the end ferrule for the pole is provided with the resilient metal arms 10^a extending from the pole in divergent relation and said arms being twisted intermediate of their ends as at 12 to dispose the outer end portions of the arms to a plane at right angles to their inner end portions and in intersecting relation upon each other as shown at 13. At the point of intersection, the outer ends of the arms are connected by a pivot pin or rivet 14. The opposed edges of the intersecting portions of the arms at their outer ends are properly sharpened so that when moved relative to each other they will perform a shearing or cutting action. Thus in the use of this form of my invention, when the guide is shifted outwardly on the pole and upon the inner end portions of the arms 10^a, they will be forced toward each other and the intersecting outer end portions of the arms moved upon the connecting pivot to cut or sever the branch or other object which is disposed between their cutting edges.

From the foregoing description, taken in connection with the accompanying drawing, the construction, manner of operation and several advantages of my invention will be clearly and fully understood. The device as a whole is exceedingly simple, strong and durable, and is very convenient and serviceable in practical use. Any desired number of the detachable sections for the pole and the tubular guide may be provided so that the device can be made of any preferred length. When not in use, the sections may be disconnected and compactly bound together so that they will occupy but little space.

The guiding handle is capable of being lengthened or shortened, and this accomplished by adding or eliminating certain of the tubular sections 5, since they are threaded unitedly together. When the tubular sections 5 are joined as shown and described, an elongated handle is afforded, and since the handle is capable of being lengthened or shortened, it is possible to reach high or low shelves. The pole is mounted to reciprocate in the handle, and is also capable of being lengthened or shortened correspondingly to the handle. This pole, as previously stated, comprises the pole or rod sections 7 having their adjacent ends provided with reduced threaded parts, to be engaged by a plurality of connecting sleeves. By rotating the sleeves in one direction or the other, the pole or rod sections may be extended, for increasing or decreasing the length of the movement of the pole or rod. Furthermore, the slidable reciprocating rod or pole has a handle in one end to limit the rod in its movement in one direction, while the other end of the rod has a sleeve similar to the first sleeve 8, connected to a threaded part of one of the rod sections. A member is threaded into the last mentioned sleeve, and carries a plurality of resilient extensions adapted to move from and toward each other. These extensions 10^a terminate in rigid cutting elements, which assume positions at slight obtuse angles to the extensions. These cutting elements extend rigidly from the resilient extensions, and are crossed and pivotally united. The twisted parts 12, where the cutting elements of the resilient extensions join, are adapted to contact with the extremity of the inner surface of one end of the guiding handle to limit the rod or pole in its movement in its opposite direction. The resilient extensions are adapted to ride against the inner surface of the extremity of one of the guiding handles, to cause the cutting elements to rock or pivot relatively to each other, for the purpose of causing the edges to impart cutting actions on any suitable material, which may be remote from the other end of the guiding handle. While these elements are designed for cutting purposes, it is obvious that they are also adapted for use as clamping jaws, so as to grip an object between them.

While I have referred to several different forms of the article engaging device, it is manifest that numerous other forms might be devised which can be operated by a shifting movement of the outer tubular guide as above explained. It is further to be noted that the tubular guide sections and the pole

diameter and the pole, as well as the guide, can be entirely constructed of sheet metal if preferred. The device is susceptible of many other modifications in the form, proportion and arrangement of its several parts, and it is therefore to be understood that I reserve the privilege of resorting to all such alternative constructions as may be fairly embodied within the spirit and scope of the invention as claimed.

I claim:—

In an article handler, the combination with an elongated tubular guiding handle comprising a plurality of axially alined united threaded sections, whereby the guiding handle may be shortened or extended, of a pole movable slidably in said guiding handle having a handle at one end to limit the pole in its movement in one direction, said pole comprising a plurality of rod sections axially arranged, the adjacent end of said rod sections having reduced threaded parts, a sleeve interiorly threaded, and adjustably connecting said reduced threaded parts for uniting said rod sections, whereby the movable rod may be shortened or lengthened correspondingly to the guiding handle, an additional sleeve interiorly threaded connected to a certain reduced threaded part of an end rod section, and a member threaded into one end of said additional sleeve, and provided with spaced longitudinal extensions resiliently movable toward and from each other, said extensions terminating in rigid intersecting pivoted elements extending at slight obtuse angles from the resilient extensions, said extensions having parts, adjacent where the elements merge therefrom, adapted to contact and coöperate with the extremity of the interior of one end of said guiding handle, thereby limiting the pole in its movement in the opposite direction, said resilient extensions when moved toward and from each other by contact with the extremity of the guiding handle, adapted to actuate said elements.

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

ANOSTOPOULO D. THEODORE.

Witnesses:
T. V. WILLIAMS,
HENRY LANDRY.