

No. 643,570.

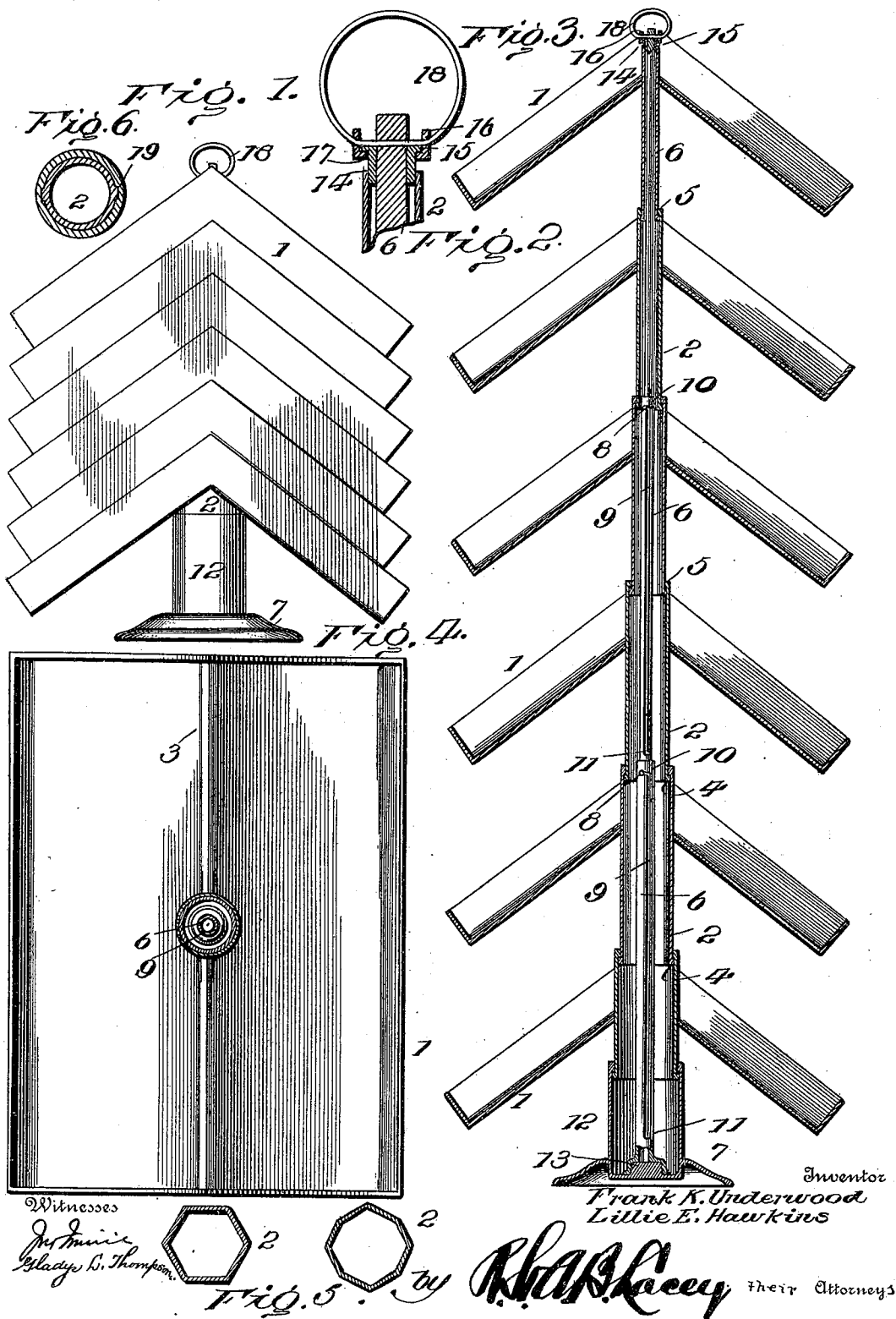
Patented Feb. 13, 1900.

F. K. UNDERWOOD & L. E. HAWKINS.

DISPLAY AND SAMPLE CASE.

(Application filed Sept. 14, 1899.)

(No Model.)



Witnesses

Mr. Annie
Gladys L. Thompson

Gladys L. Thompson

Inventor

Frank K. Underwood
Lillie E. Hawkins

Lillie E. Hawkins

R. B. Lacey

Their Attorneys

UNITED STATES PATENT OFFICE.

FRANK K. UNDERWOOD AND LILLIE E. HAWKINS, OF OSKALOOSA, IOWA.

DISPLAY AND SAMPLE CASE.

SPECIFICATION forming part of Letters Patent No. 643,570, dated February 13, 1900.

Application filed September 14, 1899. Serial No. 730,513. (No model.)

To all whom it may concern:

Be it known that we, FRANK K. UNDERWOOD and LILLIE E. HAWKINS, citizens of the United States, residing at Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Display and Sample Cases; 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 exhibitors for displaying goods and holding them in convenient form for ready disclosure to a prospective customer.

The device is designed most especially for the use of commercial travelers or agents handling confectionery, fancy cakes, and small goods of every variety, said goods being placed in separate trays which have a superposed relation and are connected to telescopically-related tubular sections, which hold the trays in fixed and determinate relation when separated to display the goods.

The device involves a light and compact construction, and the trays are disposed so as to equalize the load upon opposite sides of a vertical axis and prevent the toppling over of the exhibitor when extended to display the goods or contents of the several trays.

The exhibitor consists, essentially, of a series of superposed trays, tubes attached to the respective trays and having a telescopic relation and a limited movement in each direction, and an extensible support composed of telescoping tubular sections and provided with interlocking means to hold the sections when extended and pushed together.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and the drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is an end elevation of an exhibitor constructed in accordance with the invention, the trays resting upon one another. Fig.

2 is a vertical section, the trays being separated. Fig. 3 is a detail view of the upper end portions of the inner and outer tubular sections, showing the connection between them. Fig. 4 is a plan section showing a tray in outline. Fig. 5 shows some of the many forms which the outer or tray tubes may have in cross-section. Fig. 6 is a cross-section of two contiguous tray-tubes, showing the means for preventing relative turning thereof.

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 exhibitor may comprise as many trays, tray-tubes, and inner telescoping tubes as required, the number depending upon the size, capacity, and variety of goods to be placed upon exhibition. Each tray 1 has a tube 2 of a length corresponding to the desired distance between the trays when separated and the portion necessary to provide an overlapping joint between the ends of adjacent tubes. The trays are secured to the tubes in any convenient and substantial manner and are arranged for convenience so as to incline outwardly and downwardly from their inner sides, which displays the goods to the best possible advantage when the trays are separated. The trays are provided in two series, which are disposed upon opposite sides of the tube or vertical axis of the device, thereby equalizing the load and preventing the provision of an unstable structure. Corresponding transversely-aligning trays are separated by a partition 3, which prevents the mixing of the goods in the ordinary handling of the exhibitor and are secured to the upper ends of the respective tubes 2. This construction admits of the lower ends of the tubes sliding within the upper ends of the relatively lower tubes next in order.

The tubes 2 progressively decrease in diameter from the lowest to the highest to admit of their telescopic relation and are limited in their downward movement by the trays 1 settling upon one another and in their upward movement by stops or inner annular shoulders 4 at the lower ends of the tubes engaging with other stops or annular shoulders 5 at the upper ends of the tubes. By having the tubes 2 polygonal in transverse section

they are prevented from relative turning and the trays maintain a fixed relation, whether separated or closed upon one another, and by having them of circular outline the trays can be turned when separated so as to bring any required tray opposite the observer for inspection without requiring the turning of the exhibitor or the person changing position to view the goods of the remotely-situated tray.

The support for holding the trays separated consists of telescoping tubes 6 of greater length than the tray-tubes 2. A base or stand 7 is attached to the lowest tubes 6 and 2, and the innermost or uppermost tubes 6 and 2 are connected so that a pull upon the top tube 6 will extend the tubes of the two series and separate the trays. The sections of the support have interlocking means to hold them extended and telescoped, the interlocking means being brought into play by relatively turning the sections 6. The top or innermost section 6, as also the intermediate section or sections, has a lateral stud or projection 8, which operates in a longitudinal slot 9 in the side of the tube 6 in which the respective tube-section 6 slides and limits the movement of the section in each direction. A lateral notch 10 extends from the upper end of each slot 9, and a corresponding notch 11 projects from the lower end of each of the longitudinal slots. When the projections 9 are seated in the notches 11, the tube or support sections 6 are held telescoped, and when seated in the notches 10 said parts are held extended. The telescoping sections of the support are locked and released by a relative turning of the sections, which causes the projections 8 to enter or leave the notches 10 and 11, according to the direction of rotation of the sections.

The base or stand 7 has a tubular extension 12, to which the lower end of the bottom tube 2 is fitted, and an inner extension 13, to which the lower end of the bottom section of the support is secured, preferably by a screw-thread joint.

A collar 14 is applied to the top tray-tube 2 and has an outer flange 15. A ring 18 or finger-grip is fitted to the collar below the flange and is free to turn thereon and has vertical ears 16 at diametrically opposite points which project above the flange 15 and are transversely apertured to receive a ring 17, the latter passing through an opening in the upper end of the relative top tube 6 of the extensible support.

When the support and tray tubes are telescoped and the trays rest upon one another, a turn of the tubes 6 causes them to become locked by the projections 8 entering the notches 11. When it is required to extend the tubes and support the trays, the tubes 6 are turned to withdraw the projections 8 from the notches 11, and an upward pull upon the ring 17 causes an outward sliding of the tubes. The top or inner tubes 2 and 6 being positively connected in the manner set forth move upward together, and when the top tube 2 has

moved a distance to bring the shoulders or stops 4 and 5 into contact the tube 2 next in order will move upward, and so on with all the tubes 2, each moving in regular order as the stops 4 and 5 of the succeeding tubes come into play. When the tubes are extended to their utmost limit, they are fixed by turning the tubes 6 to effect engagement of the interlocking means or entrance of the projections 8 into the upper notches 10. The exhibitor is closed by turning the tubes 6 to unseat the projections 8 and permitting the tubes to telescope and the trays to settle upon one another.

When the tray-tubes are required to be held from turning, they may be angular in cross-section, as shown in Fig. 5, or if round a feather-and-spline connection 19 may be provided between them, as shown in Fig. 6. Having thus described the invention, what is claimed as new is—

1. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, and an extensible support for holding the tubes extended and the trays vertically spaced, substantially as described.

2. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support composed of telescoping sections, and interlocking means between the sections of the support, substantially as set forth.

3. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support arranged within the tubes bearing the trays and provided with interlocking means and composed of telescoping sections, the extreme sections of the extensible support and the end tray-tubes being connected, substantially as described.

4. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support composed of telescoping sections of greater length than the tray-tubes and in less number, and interlocking means between the sections of the extensible support, substantially as described.

5. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support composed of telescoping tubes, certain of the tubes having longitudinal slots formed with lateral notches, and projections applied to certain others of the tubes to co-operate with the longitudinal slots and notches thereof, as and for the purpose described.

6. An exhibitor composed of a vertical series of superposed trays, telescopically-related tubes of polygonal cross-section applied to the respective trays, and an extensible support

composed of telescoping tubes of circular cross-sections and formed with cooperating slots and projections, the slots having lateral notches, substantially as specified.

5 7. In an exhibitor, a base having upwardly-projecting concentric extensions, telescoping tubes fitted to the outer extension of the base and bearing trays, and an extensible support fitted to the inner extension of the base and
10 provided with interlocking means between its telescoping elements, substantially as described.

8. An exhibitor comprising a base, telescoping tubes provided with corresponding

stops to limit their extension, trays applied 15 to the upper ends of the tubes, an extensible support having interlocking means, a ring loosely applied to the topmost tray-tube, and a finger-grip applied to the ring and connecting it with the top section of the extensible 20 support, substantially as described.

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

FRANK K. UNDERWOOD. [L. S.]

LILLIE E. HAWKINS. [L. S.]

Witnesses:

MARGARET WRIGHT,

JOHN T. LACEY.