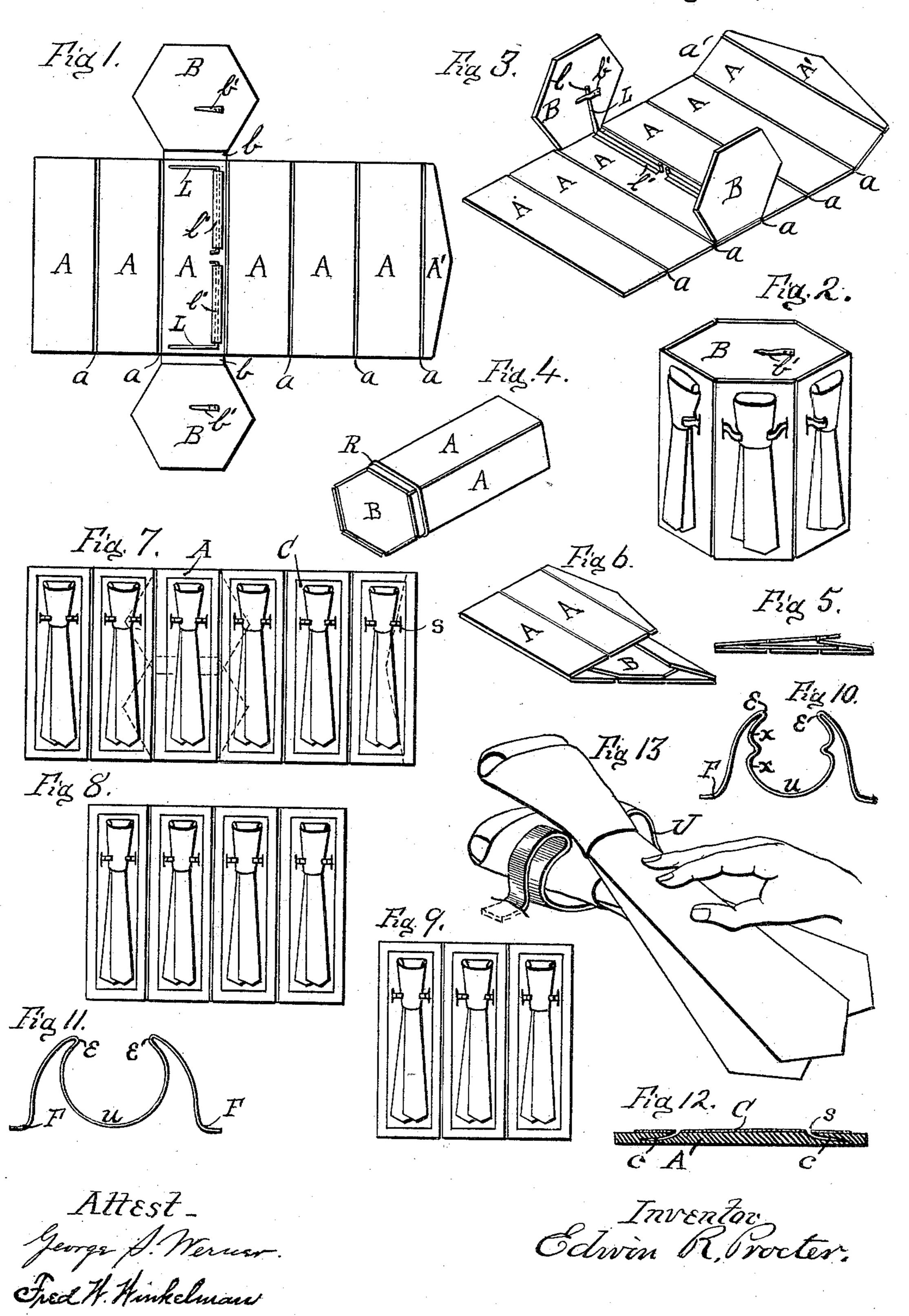
E. R. PROCTER. BOX FOR NECK WEAR.

No. 409,703.

Patented Aug. 27, 1889.



United States Patent Office.

EDWIN R. PROCTER, OF WASHINGTON COURT-HOUSE, OHIO.

BOX FOR NECK-WEAR.

SPECIFICATION forming part of Letters Patent No. 409,703, dated August 27, 1889.

Application filed March 30, 1889. Serial No. 305, 446. (No model.)

To all whom it may concern:

Be it known that I, EDWIN R. PROCTER, of Washington Court-House, Fayette county, Ohio, have invented an Improvement in Neck-Wear Boxes, of which the following is a specification.

It has been customary to make "neck-wear" and other sample boxes with rigid sides and rigid ends, the same being liable in their un-10 filled condition to breakage in shipment. It has also been customary to use retaining devices of straw-board and of spring metal and similar elastic material, and by lifting up these devices with one hand the goods may be then inserted singly or in groups into retained position and likewise released—viz., by raising the spring, &c., with the one hand, while the other hand of the operator engages the goods and moves them out in the plane of the sur-20 face to which they are fastened, both hands being then required in the operation. To overcome these defects, I provide a polygonal "knockdown" box for the reception and display of goods, which is, first, capable of being 25 folded to such small compass as to ship more economically and in better condition than a permanently-built-up box having rigid sides and ends; second, which will display the goods contained in a more open manner and with 30 greater decorative effect; third, which will, when the goods in the box are partially sold out, be capable of adjustments oas to present the appearance of a smaller yet a full box, and which is provided also with such attachable 35 fasteners that, fourth, they will hold the goods firmly in position whether the box is only partially filled or upside down; fifth, that will hold the article so as not to chafe the front face of delicate fabrics; sixth, that hold the articles 40 in superimposed groups, so that the removal of the top one reveals the full face of the under one, no fastening disfiguring the face of the goods, not even crossing the outer top one; seventh, that an inspecting customer encum-45 bered with packages in one hand can with the free hand alone remove and return the articles to their places with ease.

In the accompanying drawings, Figure 1 is a plan of box outstretched—i. e., "knocked to down." Fig. 2 is a perspective view of box set up on end, inside out, so as to display goods from

all sides. Fig. 3 is a perspective view of box with the ends set up and fastened. Fig. 4 is a view of a full box rolled up for shelving, &c. Fig. 5 is a view of an empty box folded 55 for shipment. Fig. 6 is a view of an empty box in process of folding to form Fig. 5. Fig. 7 is a view of box with goods displayed on every leaf or panel, the ends and seal-flap turned under. Fig. 8 is a view of box with 60 goods displayed on four panels, the ends, flap, and two panels turned under. Fig. 9 is same view as Fig. 8 reduced by one panel. Figs. 10 and 11 are forms of clamps. Fig. 12 is a transverse section through a leaf and lining 65 of same. Fig. 13 is a view of the act of replacing a scarf or "tie."

My box consists of several leaves A, (three or more,) preferably six in number, hinged together with a similarly-hinged sealing-flap 70 A', though the latter is not essential to the device. To the opposite ends of one of the leaves A, which are preferably composed of straw-board, are attached by loose hinges b b the polygonal ends B B, of the same material 75 as the leaves A or similar material. The said ends are provided on their inner faces with the spring-clips b' b'. These ends B are capable of swinging a complete circle appreximately on their hinges bb-i. e., will fold 80 down either on the inside or the rear faces of the adjacent extended leaves, as desired. The points of the leaves and ends may be hinges of linen or other strong flexible material.

a represents the hinges of the leaves A. To fold up the box to its closed condition shown in Fig. 4 the ends BB are in succession held at right angles to the inside face of the leaves A and fastened in said position by the wire levers L L, journaled on the 90 inside face of the same leaf A to which the ends BB are hinged. The ends ll of said levers engage the metallic spring-clips b' b'. A cloth strip fast on the inner face of leaf serves as the journal for levers L L. l' is strip. 95 The ends B B being fast, the leaves A are then drawn from each side around the edges of the ends B B until said leaves unite, thus forming a closed polygonal box, which may be fastened in any approved manner to pre- 100 vent automatic unfolding of the box. A rubber band R may be used for the purpose.

2 409,703

To fold the box for shipment from box-factory—i. e., in the knockdown form—the ends B B are folded upon the in-face of the adjacent leaves, (the free ends of said ends B B overlapping when the leaves A are shorter than the added diameters of ends B B,) where upon the remaining leaves A on either side are in turn folded down upon said ends B B, Fig. 6, thus at last presenting the flat bundle shown in Fig. 5.

When goods are to be shown, the closed box is unfastened, whereupon it automatically opens and unrolls and presents the general form shown in Fig. 3. By unfastening the upright ends B B, which is done by disengaging the lever ends l l from the clips b' b', the said ends drop down, as shown in Fig. 1, whereupon they and the flap A' may be turned under the leaves A, when the device assumes when full of scarfs or ties, the more attractive

form of Fig. 7.

When the goods on the end panels are gone, the jaw-clamps J on said panels may be detached and thrown aside and these empty panels tucked out of the way underneath the full panels, as in Fig. 8, thus always preventing a full appearance even after the box is

partially exhausted.

I provide for the retention of the goods an 30 open-mouth spring-clamp, of white-metal, preferably, which operates automatically i. e., without the touch or aid of the hand. By simply pressing the article into its mouth the lips, open as the article itself pushes the 35 lips outward, and, the orifice partially closing by tension over the inserted article, the latter is retained against the U-shaped bottom of the said clamp J. By this device the goods are held securely by a side pressure, as in a 40 vise whose jaws recede automatically in proportion as the bulk of the goods displayed are larger than the retaining-orifice, and at the same time the ever-open mouth of the clamp permits the full display of the design 45 face of the scarf or tie without the disfigurement of a fastening crossing the face of the goods.

Among other advantages, a side glance reveals the number of articles held in each clamp, the sides of same being exposed, as also it enables the user, when different patterns are held in the same clamp, to see the bottom article without removing the top one.

The jaw-clamps J may be made with the inside face of jaws corrugated, the number of corrugations x corresponding to the number of articles to be held and equal in number on either side. Said clamps may be provided with the flat feet F, by which they are held upright upon the said feet engaging the slits S in the inside lining C of the leaves A. Said slits may extend into cavities c, made in the substance of the leaves A, or only through the lining C, if same is strong.

When showing goods, the box may be turned inside out, as in Fig. 2, thus forming a pedestal

with display-panels on every side, with a top side for further use.

By compressing the outer legs of the clamps having the feet F F the said feet may be 7°

disengaged from the leaves A.

The clamps are preferably made deep enough from the points e of the spring-lips back to the bottom u of clamp to receive two or more ties or scarfs, as the central space in 75 the closed box admits of great projection of the contained articles toward the common

central space.

I am aware that Fleisch (display-box, No. 386,807, July 31, 1888) shows a tray-contain- 80 ing box, the contained trays being hinged at adjacent side edges to each other, whereby the said trays may be folded one upon the other, facing in couples, one of said trays being hinged to the box, the said trays being of 85 a size to be included neatly within the said box and its lid, and the box and each tray being provided with bent metal retaining-clips, and the said clips are provided with fingers adapted to span across the faces of the neck-90 ties and to be straightened or bent at will. I therefore disclaim whatever my device has in common as to features with the above invention.

What I claim as new and of my invention 95 is—

1. In a neck-wear holder, the combination of a series of hinged leaves provided with cavities and adapted to fold back to back or face to face at will, so as to form a prism, and 100 double-lipped spring-clamps having feet adapted to engage said cavities for the reception of the feet of the spring-clamps, said cavities extending within the material of said leaves outward from the slits made on the 105 inner face of said leaves, as and for the purpose specified.

2. In a neck-wear holder, the combination of a series of leaves A, attached at adjacent sides by a series of similarly-working hinges 110 a, and provided with the cavities C, made within the material of said leaves, for the reception of the outwardly-pointing foot ends of the spring-clamps, and the clamps J, having the feet F, as and for the purpose speci-115

fied.

3. In a neck-wear holder, the combination of a leaf A, having the cavities C, and the clamp J, having the lips e and the corrugations x in its jaws, and the feet F, as and for 120 the purpose specified.

4. In a neck-wear holder, the combination of a series of hinged leaves provided with cavities and adapted to fold back to back or face to face at will, so as to form a prism, and 125 double-lipped spring-clamps whose twin feet are adapted to engage said cavities and whose spring-lips retain within them the articles desired, as and for the purpose specified.

5. In a neck-wear holder, the combination 130 of a series of hinged leaves having cavities therein, and polygonal end leaves hinged at

right angles to the opposite ends of one of said series and adapted to stand fastened with plane of their faces at right angles to the plane of said one leaf, and double-lipped spring-clamps whose feet are adapted to engage said cavities and whose spring-lips retain within them the articles desired, as and for the purpose specified.

6. In a neck-wear holder, the combination of the ends B, having the spring-clips b', and the leaves A, having the journaled levers L and the cavities C, and the double-lipped spring-clamp J, having feet adapted to engage said cavities, as and for the purpose

15 specified.

7. In a neck-wear holder, the combination of the ends B and the leaves A, the former hinged to one of latter and the said leaves hinged together by the hinges b and a, respectively, and the clamp J, having the feet 20 F, adapted to engage the slits S and cavities C in said leaves, as and for the purpose specified.

EDWIN R. PROCTER.

Attest:

GEORGE S. WERNER, H. E. HANNAFORD.