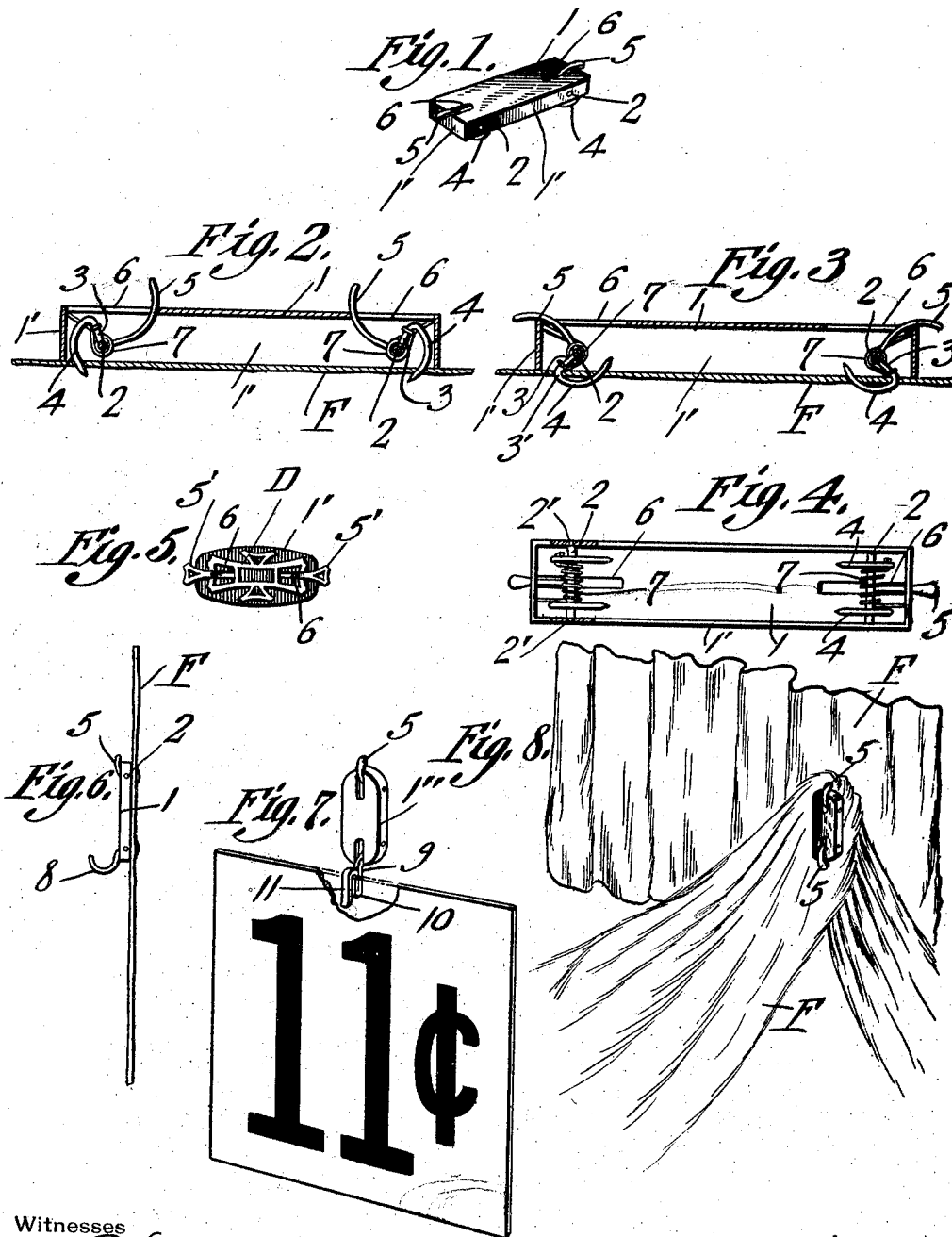


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 AUTOMATIC GRIPPING PIN.
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1,315,369.

Patented Sept. 9, 1919.



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AUTOMATIC GRIPPING-PIN.

1,315,369.

Specification of Letters Patent.

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Application filed October 30, 1916. Serial No. 128,457.

To all whom it may concern:

Be it known that I, WILLIAM KLINGE, a citizen of the United States, residing at Alexandria, in the county of Alexandria and State of Virginia, have invented a new and useful Automatic Gripping-Pin, of which the following is a specification.

An object of the present invention is to provide a safety gripping, pinning or supporting device which may be readily secured to any fabric or other soft material or to securely bind together separate pieces of fabric, paper, or like material.

Another object of this invention is to provide a gripping or pinning device which will effectively house or cover its securing prongs or hooks, so that the possibility of injury from these hooks will be obviated.

A further object of the present invention is to provide a pinning or gripping device of generally improved structure, whereby the device will be simple, durable, and inexpensive in construction, as well as convenient, practical, serviceable and efficient in its use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiments in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the invention.

Fig. 2 is a longitudinal sectional view showing the gripping prongs or hooks in their initial or inserting position.

Fig. 3 is a similar view, but depicting the prongs in their gripping position.

Fig. 4 is a rear view of the invention, a portion being shown in section.

Fig. 5 is a face view of an ornamented form of the invention.

Fig. 6 is a side view of a modified form of the invention, having one of its manipulating fingers terminating in a supporting hook.

Fig. 7 is another form of the invention in

which a resilient clamp or supporting member is formed at the outer terminal of one of the manipulating fingers.

Fig. 8 is a perspective view of the invention, depicting it in use in connection with drapery.

In the accompanying drawings, 1 designates a supporting member or casing having depending side and end flanges 1'.

A transverse shaft or pintle 2 is pivoted adjacent each end of the casing 1 in the opposed side flanges 1' as indicated at 2'. Each shaft 2 has one or more radial arms 3 extending therefrom, which are bent or turned sharply at 3', and from which points extend arcuate pinning or gripping prongs or hooks 4, that are concentric to the transverse shafts 2. A manipulating finger extends radially from each shaft 2, and these fingers extend through longitudinal slots 6 formed at the opposed ends of the face of the casing or supporting members 1. The manipulating fingers are preferably curved adjacent their outer ends and are adapted to extend beyond the opposed terminals of the casing 1, so that they may be readily gripped between the thumb and forefinger of the user.

In order to normally hold the outer or pointed ends of the prongs 4 within the casing 1, there are provided helical torsion springs 7, which are mounted on the shaft 2. Each spring 7 has one of its terminals engaging or secured to one of the radial arms 3 while the opposed terminal engages or is secured to the casing 1.

In practical operation, when it is desired to secure the device to a piece of fabric or other soft material F or to secure together separate pieces of material, the user grips the manipulating fingers between his thumb and forefinger and moves them to the position shown in Fig. 2, which exposes the pointed ends of the prongs 4. The device may now be readily secured to the selected fabric by simply placing the casing against the material, which causes the pointed end of the prongs 4 to pierce the material, and then releasing the manipulating fingers 5, thereby allowing the spring 7 to move the prongs 4 to their closed position, as shown in Fig. 4. It will be observed that in this position the pointed ends of the prongs are housed or incased by the casing 1, so that the user or wearer could not be in-

jured by the pointed prongs 4, nor could adjacent materials be snagged or torn by the said prongs.

Fig. 5 depicts a form of the invention in which the casing 1' and manipulating fingers 5' are shaped to harmonize with an ornamented design D. However, any approved form of design or ornamentation may be applied to the device and the component members of the invention may be designed to conform thereto.

In the form of the invention shown in Fig. 6, a supporting hook 8 is formed at the outer terminal of one of the manipulating fingers 5 in order to support any small commercial article, price tag or the like.

Fig. 7 shows another form of the device in which the opposed ends of the casing 1'' are rounded, and the outer terminal of one of the manipulating fingers is turned upon itself as indicated at 10, to form a resilient clasp or holder 11. This form of the invention may be employed to support display cards of any preferred form.

Fig. 8 illustrates the device connecting two pieces of fabric F, thereby allowing the fabrics to be draped or arranged for store window or other display purposes.

From the foregoing, it is manifest that the device may be employed for various purposes, such as a window trimming pin, display card holder, fabric and garment support, or by properly ornamenting it, it may be employed as an article of jewelry or personal ornament.

Having thus described the invention, what is claimed as new is:—

1. An automatic gripping-pin comprising a casing having depending side and end flanges, the rear face of the casing being open and longitudinally disposed slots formed in the front face of the casing, trans-

versely disposed shafts journaled within the casing adjacent the said slots, manipulating fingers rigidly secured to the said shafts and extending through the longitudinally disposed slots, spring-actuated arcuate prongs supported by the said shafts and having their outer ends pointed, said prongs being concentric with respect to the axes of the shafts and formed so that their pointed ends are positioned within the casing when said prongs are in their gripping position.

2. A device of the class described including a casing having longitudinal slots formed at the opposed ends thereof, transverse shafts pivotally secured in the casing adjacent the said slots, radial arms rigidly secured to the said shafts, arcuate pointed prongs extending from the arms, said prongs being concentric with the shafts, a helical spring mounted on each of the shafts and having one terminal engaging the casing and the opposed terminal in engagement with one of the radial arms to normally hold the pointed ends of the prongs within the casing, manipulating fingers rigidly secured to the shafts and extending radially therefrom through the longitudinal slots, thereby allowing the longitudinal slots to limit the movement of the manipulating fingers, said fingers having their outer ends curved so that they may be readily gripped and held by the thumb and forefinger during the extreme movement of the said fingers.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM KLINGE.

Witnesses:

J. THOS. COOK,
A. S. ELBOURN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."