No. 894,817. PATENTED AUG. 4, 1908.

J. N. COPELAND.

PICTURE HANGER.

APPLICATION FILED JULY 9, 1907.

Fig. 1.

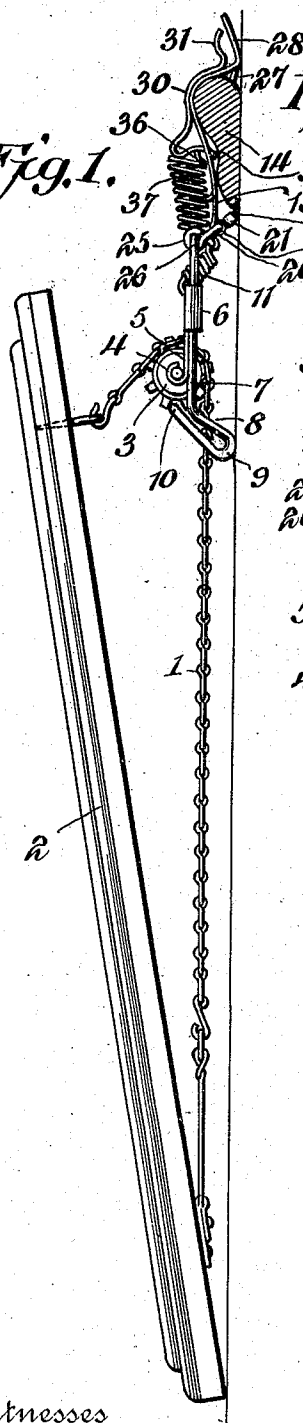


Fig. 2.

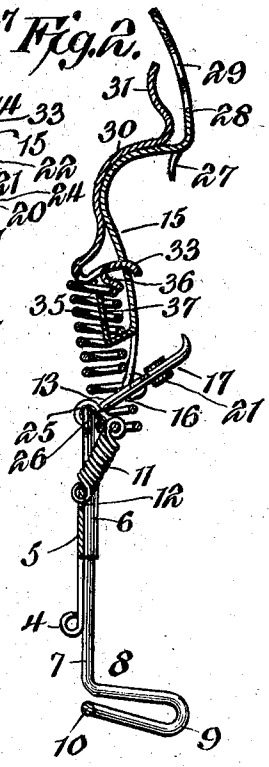


Fig. 3.

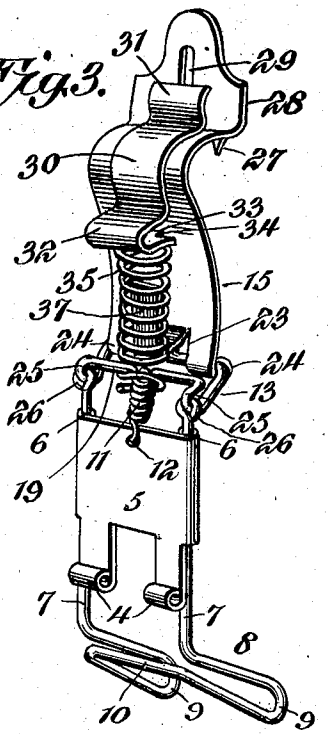


Fig. 4.

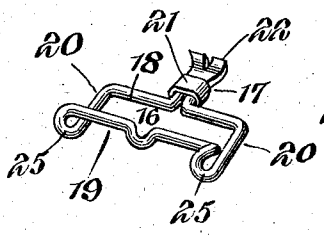
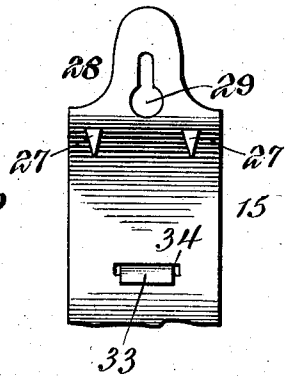


Fig. 5.



Witnesses

Howard D. Orr.

H. J. Riley

Joseph N. Copeland, Inventor,

By E. G. Siggers

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH N. COPELAND, OF ALTOONA, ALABAMA, ASSIGNOR TO J. N. RICKLES, OF ALTOONA, ALABAMA.

PICTURE-HANGER.

No. 894,817. Specification of Letters Patent. Patented Aug. 4, 1908.

Application filed July 9, 1907. Serial No. 382,865.

To all whom it may concern:

Be it known that I, JOSEPH N. COPELAND, a citizen of the United States, residing at Altoona, in the county of Etowah and State of Alabama, have invented a new and useful Picture-Hanger, of which the following is a specification.

The invention relates to improvements in picture hangers.

The object of the present invention is to improve the construction of picture hangers, more especially that shown and described in an application, filed by me June 15, 1906, Serial No. 321,891, and to provide simple and efficient means for firmly gripping a molding at both the top and bottom thereof, whereby a picture is effectually prevented from being accidentally knocked down.

A further object of the invention is to provide a picture hanger of this character, in which the weight of the picture will operate to maintain the clamping means in engagement with a molding, and in which the clamping means will be relieved of strain, when relieved of the weight of the picture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a side elevation of a picture hanger, constructed in accordance with this invention. Fig. 2 is an enlarged longitudinal sectional view, illustrating the construction for clamping the picture molding. Fig. 3 is a perspective view of the same. Fig. 4 is a detail perspective view of the lever. Fig. 5 is a detail view of a portion of the molding hook.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates a chain, constituting a picture cord, and designed to be connected to the upper and lower portions of a picture frame 2, by any suitable means. The chain passes over a sprocket wheel 3, and the links of the chain mesh with the teeth of the sprocket wheel, which is journaled in suitable bearings 4 of a slide 5. The sprocket wheel is provided with suitable journals, preferably formed by a shaft or pin, which passes through a central opening of the sprocket wheel, and the slide 5, is bifurcated or cut away at its lower portion to form a recess for the reception of the sprocket wheel. The sides of the slide are bent or rolled upon themselves to form longitudinal openings 6 for the reception of parallel side portions 7 of a hanger frame 8.

The slide is adapted to move upward and downward on the hanger frame 8, which is constructed of wire, and the lower portions of the sides are bent rearwardly to form projecting arms 9, which are approximately U-shaped. These arms are adapted to fit against the walls, as clearly illustrated in Fig. 1 of the drawing to off-set the sprocket wheel and the chain therefrom, so that the sprocket wheel will rotate freely, when it is unlocked, as hereinafter fully explained. The parallel guiding portions 7 of the hanger frame are also off-set from the wall by the arms 9, and the slide is adapted to carry the sprocket wheel into and out of engagement with a transverse connecting bar or portion 10 of the hanger frame, whereby the sprocket wheel is interlocked with the hanger frame and is held against rotary movement.

The slide is automatically moved upwardly by a coiled spring 11, when it is relieved of the weight of the picture. The coiled spring 11 is located between the sides of the hanger frame, and its lower end is secured to the top of the slide in a perforation 12 thereof, and the upper end of the coiled spring is secured to a lever 13, which is adapted to engage a picture molding 14 at the bottom thereof.

The lever, which forms a link for connecting the hanger frame with a molding hook 15, is constructed of wire, or other suitable material and it consists of a substantially oblong loop 16 and a stem 17. The loop is composed of transverse portions 18 and 19 and connecting portions 20, and the stem, which is formed by the terminals of the wire, extends from the center of the transverse portion 18 of the loop. The two members or portions of the stem, which are bound together by a band 21, have their ends extended to form a claw 22 for engaging the bottom of the picture molding.

The molding hook 15, which is constructed of sheet metal, or other suitable material, is provided at its lower end with a slot or bi-

furcation 23, and the sides thereof are rolled to form eyes 24, in which the transverse portion 18 of the loop is arranged. The transverse portion 18 of the loop is located at a point intermediate of the ends of the lever, and it forms a pivot for the same. The lever is provided at the ends of the outer transverse portion 19 with eyes 25, formed by bending or partially coiling the wire, and linked into eyes 26 of the upper ends of the sides 7 of the hanger frame. By this construction, the lever 13 is fulcrumed at an intermediate point, and its outer arm or portion is subjected to the weight of the picture, whereby its inner stem or arm is held firmly in engagement with the bottom of the picture molding and exerts a constant pressure on the same.

The molding hook, which conforms to the configuration of the molding, is provided at the top with spurs 27, which are held in engagement with the top of the molding by the pressure to which the clamping lever is subjected. The molding hook is also provided at the top with an extension 28, having an inverted key hole slot 29, adapted to receive a nail, or similar fastening device, and the picture hanger is locked in engagement with such fastening device by means of a latch 30, constructed of sheet metal, or other suitable material and curved at its intermediate portion to conform to the configuration of the molding hook and provided at its upper end with a lip or portion 31 to engage the fastening device. The latch is provided with a lower approximately horizontally disposed U-shaped portion 32, and the lower side thereof has a reduced projecting portion or lug 33. The reduced projecting portion or lug 33 extends through a slot 34 of the molding hook, and is curved to engage the latter, whereby the latch is hinged to the same. The latch is maintained in position for engaging the fastening device by means of a coiled spring 35, secured at its lower end to the clamping lever, and having its upper end located beneath and engaging the loop of the latch. The lower side of the loop is also provided at an intermediate point with a depending lug or projection 36, which is engaged by the spring 35. The spring 35 is also supported by a substantially L-shaped arm 37, extending from the lower portion of the molding hook and formed by bending the metal cut to provide the bifurcation 23. The spring, which is interposed between the latch and the lever, is adapted to hold the latter in engagement with the picture molding to prevent the device from becoming accidentally detached from the molding, when relieved of the weight of the picture.

The inclination of the picture is changed by adjusting the chain, as set forth in the said application, and the devices for gripping the picture molding effectually prevent the picture hanger from being accidentally knocked down, either when the picture hanger is subjected to the weight of the picture, or is relieved of the weight of the same.

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

1. A picture hanger comprising a molding hook provided with means for engaging the top of a picture molding, a hanger frame, means carried by the hanger frame for supporting a picture, and a lever forming a link connection between the hanger frame and the molding hook, and provided with a projecting portion arranged to engage the bottom of the picture molding and adapted to be maintained in engagement with the same by the weight of a picture.

2. A picture hanger comprising a molding hook, a lever fulcrumed between its ends on the molding hook and having one of its arms arranged to engage the picture molding, a hanger frame connected with the other arm of the lever, a picture cord, a yieldably mounted rotary device receiving the picture cord and operated by the weight of the picture to lock it against rotary movement.

3. A picture hanger comprising a molding hook, a lever fulcrumed on the molding hook and arranged to engage the molding, a hanger frame connected with the lever, a sprocket chain having means for connecting it with a picture frame, and a sprocket wheel slidable on the hanger frame and receiving the said chain.

4. A picture hanger comprising a molding hook, a lever fulcrumed on the molding hook and arranged to engage the molding, a hanger frame suspended from the lever, a slide mounted on the hanger frame, a rotary device arranged to receive a picture cord and movable into and out of engagement with the hanger frame, and a spring connecting the slide with the lever.

5. A picture hanger comprising a molding hook, and a lever fulcrumed on the molding hook at the lower portion thereof and extending in advance and in rear of the same and arranged to swing in a plane transversely of the picture molding, whereby when the front portion of the lever is subjected to the weight of a picture the rear portion will be swung into engagement with the molding.

6. A picture hanger comprising a molding hook having its lower end bifurcated and provided at opposite sides thereof with bearings, a clamping lever composed of inner and outer arms and having an intermediate pivot arranged in the said bearings, and means for suspending a picture from the outer arm of the lever.

7. A picture hanger comprising a molding hook having its lower end bifurcated and provided at opposite sides thereof with bearings,

a clamping lever consisting of a rearwardly extending stem arranged to clamp a picture molding, and a loop forming an intermediate pivot arranged in the said bearings, and means for suspending a picture from the loop of the lever.

8. A picture hanger comprising a molding hook having its lower end bifurcated and provided at opposite sides thereof with bearings, a clamping lever consisting of a rearwardly extending stem arranged to clamp a picture molding, and a loop forming an intermediate pivot arranged in the said bearings, a hanger frame hinged to the loop of the lever, and means carried by the hanger frame for suspending a picture from the same.

9. A picture hanger comprising a molding hook provided at the top with an extension having a key hole slot, a clamping lever fulcrumed on the molding hook at the bottom thereof, a latch mounted on the molding hook and arranged to confine a fastening device in the said slot, and a spring engaging the latch and the lever.

10. A picture hanger comprising a molding hook provided at the top with an extension having a key hole slot, a latch hinged to the molding hook and arranged to confine a fastening device in the slot, and a spring engaging the latch for holding the same in its engaging position.

11. A picture hanger comprising a molding hook provided at the top with an extension having a slot, a latch curved to conform to the configuration of the molding hook and arranged to confine a fastening device in the slot and provided with an outwardly projecting portion, and a spring engaging the outwardly projecting portion.

12. A picture hanger comprising a molding hook provided with a slot, a latch detachably interlocked with and fulcrumed on the molding hook, an arm located beneath the latch and projecting from the molding hook, and a spring supported by the arm and engaging the molding hook.

13. A picture hanger comprising a molding hook having its lower end bifurcated, the material cut to provide a perforation being bent upward to form an arm, a latch mounted on the molding hook, a clamping lever fulcrumed on the molding hook at the bifurcated portion thereof, and a spring supported by the arm and engaging the lever and the latch.

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

JOSEPH N. COPELAND.

Witnesses:

J. N. RICKLES,

J. F. THOMPSON.