

L. B. GIRARD.
 WINDOW SHADE TACK.
 APPLICATION FILED OCT. 17, 1908.

942,321.

Patented Dec. 7, 1909.

Fig. 1.

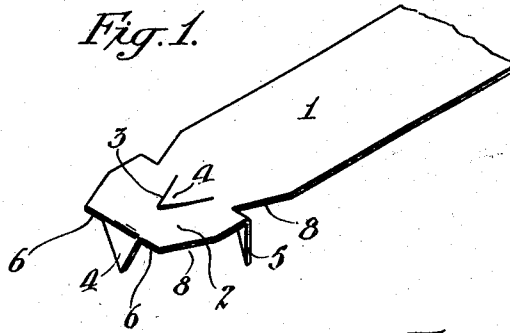


Fig. 5.

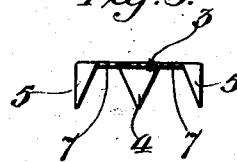


Fig. 3.

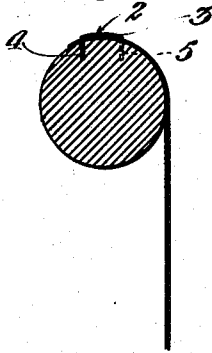


Fig. 2.

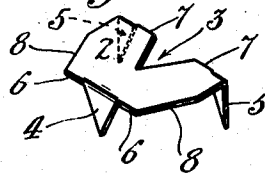
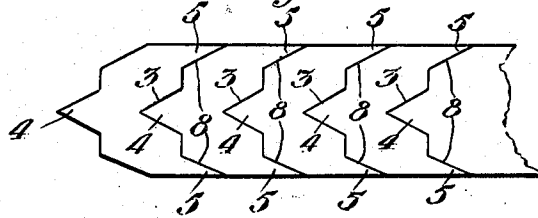


Fig. 4.



Witnesses:
 Frank L. Abraham.
 Louis W. Gratz.

Inventor:
 Louis B. Girard.

By *Samuel F. Hackley*
 attys.

UNITED STATES PATENT OFFICE.

LOUIS B. GIRARD, OF LOS ANGELES, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE GIRARD MANUFACTURING COMPANY, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF CALIFORNIA.

WINDOW-SHADE TACK.

942,321.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed October 17, 1908. Serial No. 458,285.

To all whom it may concern:

Be it known that I, LOUIS B. GIRARD, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Window-Shade Tack, of which the following is a specification.

This invention relates to a tack adapted for attaching window shades to rollers, and the main object of the invention is to produce a tack of the character described which may be stamped from a strip of sheet metal without wasting any of the material.

Another object is to provide a tack of this character which is adapted to be formed and driven automatically by a machine.

Referring to the drawings:—Figure 1 is a perspective view of a portion of the strip of metal, showing the tack as formed on the end thereof by the machine before the removal of the tack from the strip. Fig. 2 is a perspective view of the completed tack. Fig. 3 is a sectional view through a shade roller and tack. Fig. 4 is a plan view showing a series of tacks flattened out and laid together, the object of the view being to show that there is no waste metal. Fig. 5 is a rear elevation of the tack.

The tack is formed from a strip of metal 1 and consists of a head having a V-shaped notch 3, a down-turned front prong 4 and two rear prongs 5. On each side of the front prong 4 are two shoulders 6 which act to grip the shade when the tack is driven. On each side of the notch 4 adjacent each rear prong 5 is a shoulder 7, and the shoulders 7 also serve to grip the shade roller when the tack is driven. The notch 3 is produced as a result of forming the front prong 4 of another tack. Each side of the head 2 is beveled, as at 8, which beveled portion is the result of forming the rear prongs 5 of

another tack. All of the metal in the strip is utilized to the fullest extent. The notch 3 furnishes the metal for the front prong 4 and yet does not weaken the tack unduly as plenty of metal is left in the head. The prongs are well distributed which leaves sufficient material in the window shade between the perforations to prevent the shade from easily tearing at the points of fastening.

I am aware that shade roller tacks have been constructed with two prongs at one side and one prong at the other, but, so far as I am aware, I am the first to produce a shade roller tack such as herein shown which has a maximum gripping area, with its prongs spread well apart and which does not leave any waste metal in the sheet or strip from which it is cut, all of the metal being utilized to the fullest extent.

What I claim is:

1. A window shade tack comprising a head formed of sheet metal with a prong on one side and having a notch in the opposite side said notch being substantially the same size as said prong, and two prongs on the notched side, said head having two beveled portions each side of the single prong.

2. A shade roller tack comprising a single piece of sheet metal formed with a head having a notch 3, and a prong 4, said notch and prong having the relative areas as shown, said head having two prongs 5 and two cut-away portions 8 of substantially the comparative dimensions shown.

In testimony whereof, I have hereunto set my hand at Los Angeles, California this 10th day of October 1908.

LOUIS B. GIRARD.

In presence of—

G. T. HACKLEY,
FRANK L. A. GRAHAM.