E. K. DAY.

FASTENING DEVICE.

APPLICATION FILED SEPT. 9, 1921.

1,420,528. Patented June 20, 1922.

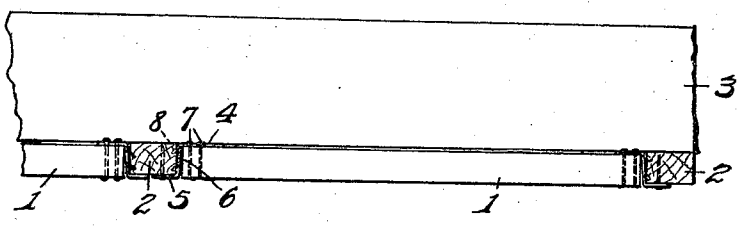


FIG. 1.

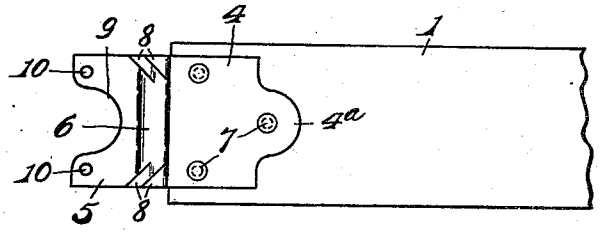


FIG. 2.

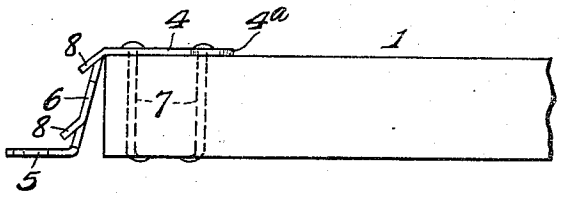


FIG. 3.

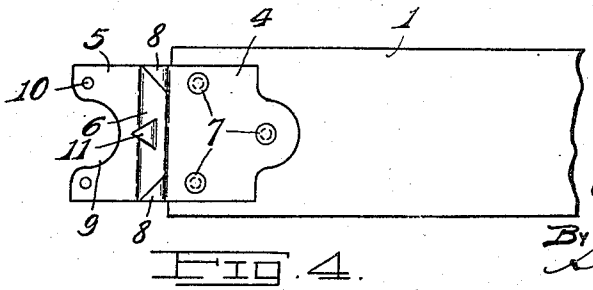


FIG. 4.

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UNITED STATES PATENT OFFICE.

EDGAR K. DAY, OF WHEELING, WEST VIRGINIA, ASSIGNOR TO WHITAKER-GLESSNER COMPANY, OF WHEELING, WEST VIRGINIA, A CORPORATION OF WEST VIRGINIA.

FASTENING DEVICE.

1,420,528. Specification of Letters Patent. Patented June 20, 1922.

Application filed September 9, 1921. Serial No. 499,554.

To all whom it may concern:

Be it known that I, EDGAR K. DAY, a citizen of the United States of America, and resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Fastening Devices, of which the following is a specification.

This invention relates broadly to fastenings, and more specifically to a clip for attaching the ends of headers or cross-sticks to furring strips and the like.

The primary object of the invention is to provide improved means for attaching the usual headers or cross-sticks to furring strips in the formation of mountings for metal ceiling plates and the like.

A further object is to provide attaching means of the character mentioned whereby the work of introducing headers in place is greatly facilitated, whereby such headers are rigidly held when so introduced, whereby the difficulties ordinarily encountered in attaching such headers by the use of nails are wholly obviated, and which overcomes the necessity for absolute accuracy in cutting headers to length.

With these and other objects in view, the invention resides in the features of construction which will hereinafter be exemplified, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view of a frame or mounting for a metal ceiling, illustrating the application of my invention in attaching headers to the furring strips;

Figure 2 is an enlarged top plan view of an end portion of a header equipped with the invention;

Figure 3 is a side elevation of the same; and—

Figure 4 is a view similar to Fig. 2 showing a modified form of the invention.

Referring to said drawings, 1 indicates a wooden cross stick or header adapted for introduction transversely between parallel furring strips 2 that are attached to ceiling joists 3 in the usual manner. Attached rigidly to each of the opposite ends of said stick or header is a clip formed of a single strip of resilient sheet metal and comprising a head portion 4, a foot portion 5, and an intermediate leg portion 6. Said head and foot portions, which are reversely disposed, occupy substantially parallel planes separated a distance corresponding substantially with the thickness of the header, and said head portion is seated upon and secured, as by nails 7, to the top surface of the header adjacent to its end, while the foot portion is designed to seat against the under face of an adjacent furring strip 2.

The leg 6, located intermediate said head and foot portions as aforesaid, is substantially straight and is outwardly inclined somewhat with respect to the vertical plane of the end of the header by which the clip is carried, as is best shown in Fig. 3. Struck up from said leg, preferably at points along each of the opposite lateral edges thereof, is one or more pointed tongues or prongs 8 which extend downwardly and forwardly at an acute angle to said leg.

In practice, the header 1 having the attaching clips mounted thereon as aforesaid is forced upward between adjacent furring strips 2 to a position in which the foot portions of said clips seat upon said strips. Due to the resiliency of the metal of which the clips are formed, in so introducing the header, the legs 6 are forced back somewhat toward the planes of the adjacent ends of the header and are consequently placed under tension. This tension acts to maintain the downwardly inclined prongs 8 in close engagement with the adjacent lateral edges of the furring strips, so that said prongs obviously bite into the latter and effectually resist any tendency of the header to retract or withdraw from its seated position.

Provided in the foot portion of each clip is a recess 9 which has for its purpose to permit the corners of ceiling plates to be nailed to the underlying furring strip when such corners overlie said foot, or when such corners overlie the feet of clips occupying the opposing relation shown at the left hand side of Fig. 1. Since the blanks of which the clips are formed are preferably cut without waste, the formation of such recess provides also for the formation of a tongue 4^a on the head 4 of each clip, as shown. Holes 10 may be provided in the foot portions of the clips for the reception of nails by which said portions may be further secured to the furring strips, if desired; however, such additional means of attachment will rarely be required in practice.

In the modification illustrated in Fig. 4

a prong or barb 11 is shown struck up from the metal of the leg 6 at a point intermediate the lateral edges of the latter. As is apparent, such barb will function in a manner substantially identical with the prongs 8.

What is claimed is—

1. An attaching clip of the character described, consisting of a strip of sheet metal bent to form an intermediate leg portion and oppositely extending head and foot portions disposed in parallel planes, said leg portion having inclined prongs struck up therefrom.

2. An attaching clip of the character described, consisting of a strip of sheet metal bent to form an intermediate leg portion and oppositely extending head and foot portions disposed in parallel planes, said leg portion being inclined and forming obtuse angles with said head and foot portions and having inclined prongs struck up therefrom.

3. An attaching clip for headers, consisting of a strip of sheet metal bent to form head and foot portions and an intermediate leg portion, said head and foot portions extending in opposite directions and occupying parallel planes, and said head portion being adapted for permanent attachment to the upper face of a header, said leg portion having prongs struck up therefrom.

4. An attaching clip for headers, consisting of a strip of resilient sheet metal bent to form reversely disposed head and foot portions and an intermediate leg portion, said head and foot portions being located in parallel planes spaced relatively to correspond approximately with the thickness of a header, and the head portion being adapted for attachment to the upper face of a header adjacent to an end of the latter, said leg portion being normally inclined to form obtuse angles with said head and foot portions and having prongs struck up therefrom.

In testimony whereof, I affix my signature in presence of two subscribing witnesses.

EDGAR K. DAY.

Witnesses:
W. F. KEEFER,
H. E. DUNLAP.