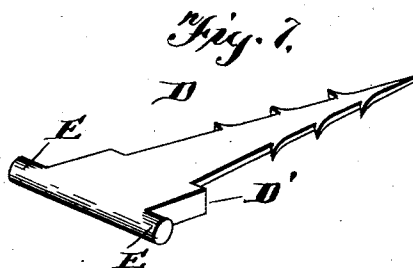
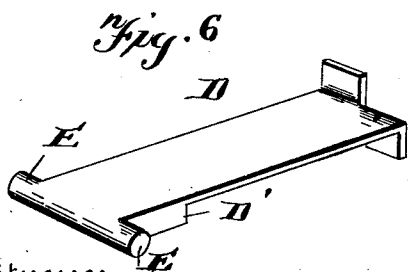
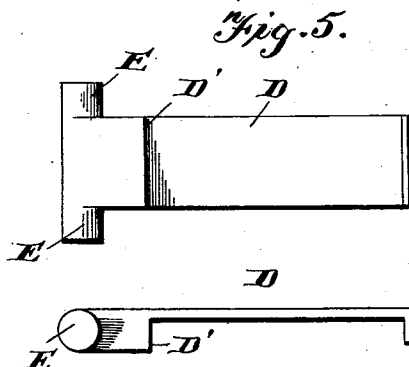
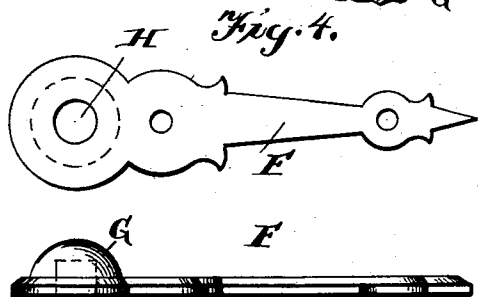
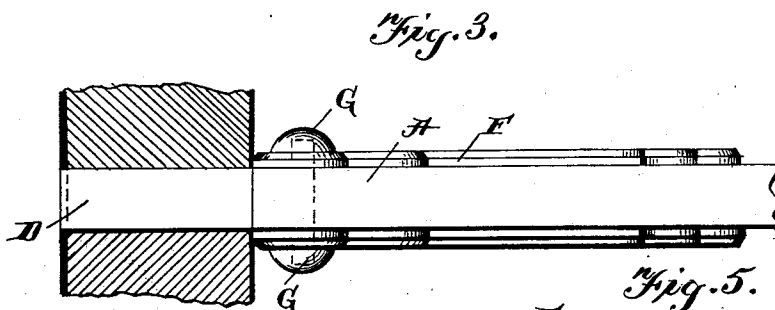
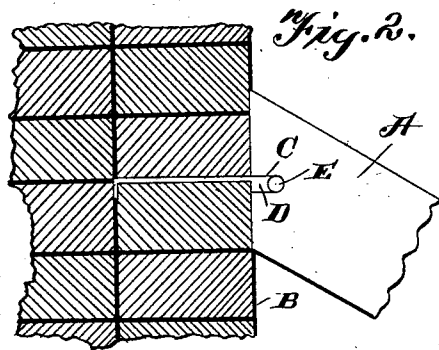
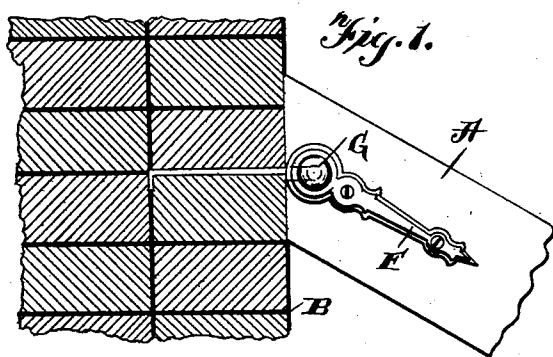


(No Model.)

D. M. ROTHENBERGER.
RAFTER SUPPORT.

No. 564,844.

Patented July 28, 1896.



Witnesses

Geo. C. Trech.
Hubert E. Rock

Inventor

D. M. Rothenberger

By Attorney *Pattinson & Washit.*

UNITED STATES PATENT OFFICE.

DANIEL M. ROTHENBERGER, OF LANCASTER, PENNSYLVANIA, ASSIGNOR
OF TWO-THIRDS TO CHARLES B. KELLER AND FRANK K. SENER, OF
SAME PLACE.

RAFTER-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 564,844, dated July 28, 1896.

Application filed January 11, 1896. Serial No. 575,140. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. ROTHENBERGER, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Rafter-Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

This invention pertains to rafter-supports, the object being to provide a device of simple and improved form for securing the upper ends of rafters for porches and other auxiliary structures to the walls of the main building. Much difficulty has been experienced in securely fastening porch-rafters to walls, particularly those formed of brick, the tendency being to work loose, thus greatly weakening the strength of the roof. This objection is entirely done away with by using my improvement.

The invention consists in the novel features of construction hereinafter fully described and claimed, and illustrated by the accompanying drawings, in which—

Figure 1 is an elevation of the upper end of a rafter provided with my improved support, the wall to which it is secured being shown in section. Fig. 2 is a view similar to Fig. 1 with the socket-plate removed from the rafter. Fig. 3 is a sectional plan view. Fig. 4 illustrates in detail the socket-plate. Fig. 5 illustrates in detail the anchor for use in brick walls. Fig. 6 is a perspective view of an anchor of slightly-different form from that shown in Fig. 5. Fig. 7 illustrates in detail the form of anchor employed for frame structures.

A designates the rafter, which bears against the wall B at its upper end, where it is formed with the inwardly-extending transverse slot C. An anchor-plate D is inserted between the bricks of the wall, the same being of substantially the same thickness as the mortar. The inner end of this plate is turned downward to form a hook or flange just behind the brick, as indicated in the drawings, thus preventing the withdrawal of the anchor-plate

and necessitating the removal of the brick. The portion of anchor D extending beyond the surface of the wall is thicker than the inner portion, thus constituting a flange or shoulder D', which forms a bearing against the wall-surface, thus bracing the anchor-plate against downward pull. Upon the outer extremity of the anchor is the transversely-extending head forming oppositely-projecting trunnions E, the rafter when in position fitting up over the said head, and in fact over all of the anchor projecting from the wall.

To secure the rafter to the anchor, I provide socket-plates F, having the enlarged heads G, in which the sockets H are formed, into which the oppositely-projecting trunnions extend, while the reduced portions of the plates are secured by screws or bolts to the rafter, thus holding the rafter firmly to the projected anchor. These socket-plates are preferably of ornamental design, thus adding rather than detracting to the interior view of the roof.

The anchor-plate illustrated in Figs. 1 and 2 is shown in detail in Fig. 5. A slight modification such as shown in Fig. 6 may be resorted to, in which the inner end of the anchor is split centrally a short distance and the parts thus split bent up and down or in opposite directions, so as to secure double hold for the plate in the brick wall, as will be readily understood.

The anchor illustrated in Fig. 7 is formed with a tapering stem for use in frame structures in which the anchor-plate is simply driven, the same taking a firm hold by the toothed or serrated edges of the stem or point, as is shown. Thus it is rendered impossible for the rafter to become displaced from the wall to which it is secured without first removing the anchor, which when properly tightened is most firm and secure. The socket-plates are the only portions of the device which appear to view, the remainder being entirely hidden thereby.

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

1. An improved rafter-support comprising an anchor secured to and projecting from the wall, lateral projections upon opposite sides

of the anchor, and socket-plates arranged oppositely and secured to a recessed rafter which fits over the anchor, the socket-plates embracing the lateral extensions of the anchor, substantially as shown and described.

2. An improved rafter-support comprising an anchor secured to and projecting from the wall, laterally-projecting trunnions upon its outer extremity, and socket-plates arranged
10 oppositely and secured to a recessed rafter which fits over the anchor, the trunnions of the anchor projecting into the said plate, substantially as shown and described.

3. An improved rafter-support comprising
15 an anchor adapted to be secured to a wall,

and provided with oppositely-projecting trunnions, the projecting ends of the anchor being adapted to extend into the transverse slot or depression in the rafter, and the plates secured to the opposite sides of the rafter and
20 formed with the socket ends into which the trunnions extend, substantially as shown and described.

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

DANIEL M. ROTHENBERGER.

Witnesses:

GEO. A. LANE,
C. G. BASSLER.