F. WATT.

BRACKET.

APPLICATION FILED SEPT. 29, 1919.

1,365,012. **Patented Jan. 11, 1921.**

Fig. 1.

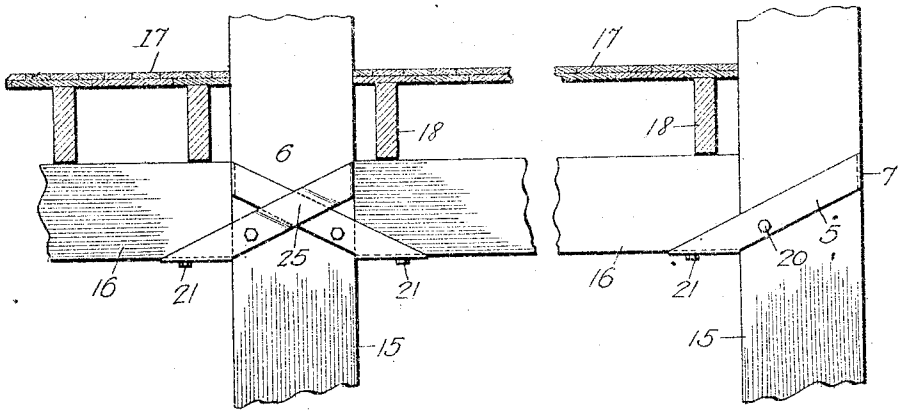


Fig. 2.

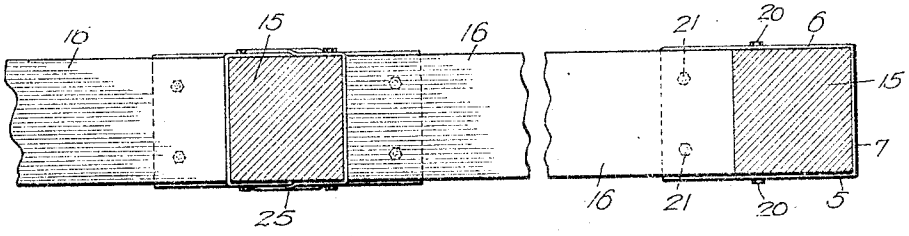
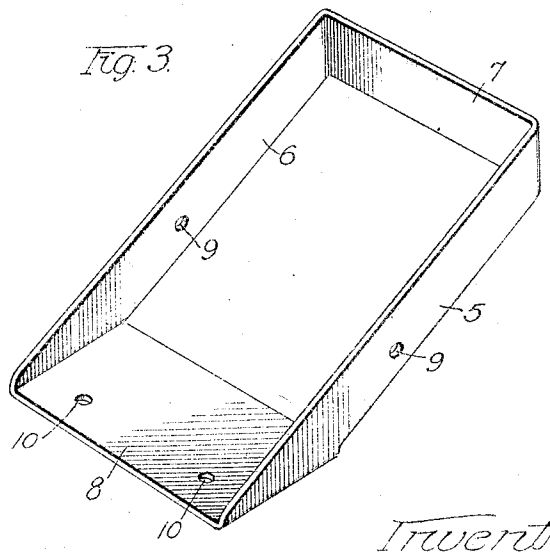


Fig. 3.



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UNITED STATES PATENT OFFICE.

FREDRICK WATT, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-THIRD TO THOMAS J. PEMBOR, OF CHICAGO, ILLINOIS.

BRACKET.

1,365,012. Specification of Letters Patent. Patented Jan. 11, 1921.

Application filed September 29, 1919. Serial No. 327,161.

To all whom it may concern:

Be it known that I, FREDRICK WATT, a subject of the King of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brackets, of which the following is a specification.

This invention relates to brackets.

It is particularly applicable for use in building construction.

An object of the invention is to provide an improved bracket.

Another object is to provide a single piece bracket which may be readily applied and removed.

Another object is to provide a bracket which is rigid and strong.

Another object is to provide a bracket having a seat for the members to be supported thereby.

Another object is to provide a bracket which does not depend upon extraneous fasteners for holding the load.

Another object is to provide a bracket which increases its holding power as the load thereon increases.

Other objects and advantages will appear from the specification and claims.

An embodiment of the invention is shown in the accompanying drawing, in which—

Figure 1 is an elevation of a portion of a structure employing the bracket.

Fig. 2 is a top plan thereof, and

Fig. 3 is a perspective of a bracket.

In building construction it is often desirable to support cross beams or stays to the uprights or posts to support loads, brace the structure and retain the posts in proper relative position: Sometimes the structure is permanent and at other times the structure is temporary, as for example, scaffolds.

In such constructions it has ordinarily been the practice to embed the ends of the beams in the posts and secure them in place by suitable fasteners, such as bolts, screws or nails, or to support the beams upon projections or brackets secured to the posts by fasteners which bear the weight of the beam and the load carried thereby.

The bracket illustrated may be made of a single piece of strap metal, such as sheet metal and comprises a substantially rectangular frame having sides 5 and 6 and an end 7. The plane of sides 5 and 6 and the plane of end 7 are at substantially right angles to each other. The other end of the bracket is inclined at an angle to form a seat 8 upon which the beam to be carried rests. The plane of end or seat 8 is at an angle to the plane of the bracket. The side walls are each provided with an opening for the passage of a suitable fastener which projects therethrough and into the post. End 8 is provided with similar openings 10 for the passage of fasteners extending therethrough and into the beam. The fasteners may be of any suitable type, such as lag screws, where the posts and beams are of wood and bolts or screws where the posts or beams are of metal.

Figs. 1 and 2 illustrate an application of the bracket.

The uprights or posts 15 are to support a number of beams 16, which carry the load, insure the maintenance of proper spacing of the posts and lend strength and rigidity to the structure. The load, represented by a flooring 17, is carried upon the beams by joists 18.

Each post, where a bracket is to be applied, is grooved at one side to form a seat for the end 7 of the bracket. The required number of brackets are slid over the ends of the posts and are fastened in place by fasteners, such as lag screws 20. In this position the sides 5 and 6 of the brackets extend diagonally across the post and a corner of the beam as clearly shown in Fig. 1. The beam and post are thus held in place against relative lateral displacement. The end 8 of the bracket is substantially perpendicular to the length of the post and forms a seat for the end of beam 16. The inner edge of end 8 rests against the post some distance below end 7 and forms the lower jaw of the bracket, the upper jaw being the end 7. The beam may be secured to the bracket by suitable fasteners, such as lag screws 21, passing through openings 10 in the end 8.

The weight of the beam and the load carried thereby tends to rotate the bracket to cause the ends or jaws 7 and 8 to grip the post and bind the bracket in place. This tilting is insured by the groove in the back of the post holding end 7 relatively stationary, and the pivotal action of screws 20. In many cases the screws will be sufficient and the post need not be grooved.

The bracket thus binds or grips the post between ends or jaws 7 and 8 and the fasten-

ers are relieved of the strain. The heavier the beam and the load the greater will be the gripping action. One of the principal functions of the fastener is to hold the bracket in proper position and prevent the same from being jarred from position, particularly when, as in scaffolds and the like, it may be necessary to temporarily remove some of the beams. It also acts as a pivot to positively insure the tilting action of the bracket. The fastener ordinarily takes but little, if any, of the load and may, therefore, be made much lighter than is ordinarily the case when the bracket fasteners bear most or all of the load.

Where a center post is to support beams on both sides, as shown at the left of Figs. 1 and 2, the sides of one of the brackets may be bent to form an offset 25, fitting over the opposite bracket, as clearly shown in Figs. 1 and 2.

Having described my invention, what I claim is:—

1. A bracket comprising a rectangular structure for holding a vertical timber to an end or horizontally disposed timber; said bracket having two side members and a vertically disposed end member for close contact with the vertical timber and a horizontally disposed seat to receive the end of the horizontal timber, the side members, with the horizontal end seat forming a pocket within which to receive the end of the horizontal timber when the latter is in a plane parallel with the side members.

2. A one-piece bracket rectangular in form having a vertically disposed end member and a horizontally disposed end member and side members joining the end members and extending between the top and bottom edges of the vertical member and between the inner and outer edge of the horizontal member to form a pocket with the horizontal end member within which to receive the end of a timber.

In testimony whereof I hereunto subscribe my name.

FREDRICK WATT.