Aug. 7, 1934. E. H. KARP 1,969,014

ADJUSTABLE JOIST FRAMER

Filed April 8, 1932

Fig. 1.

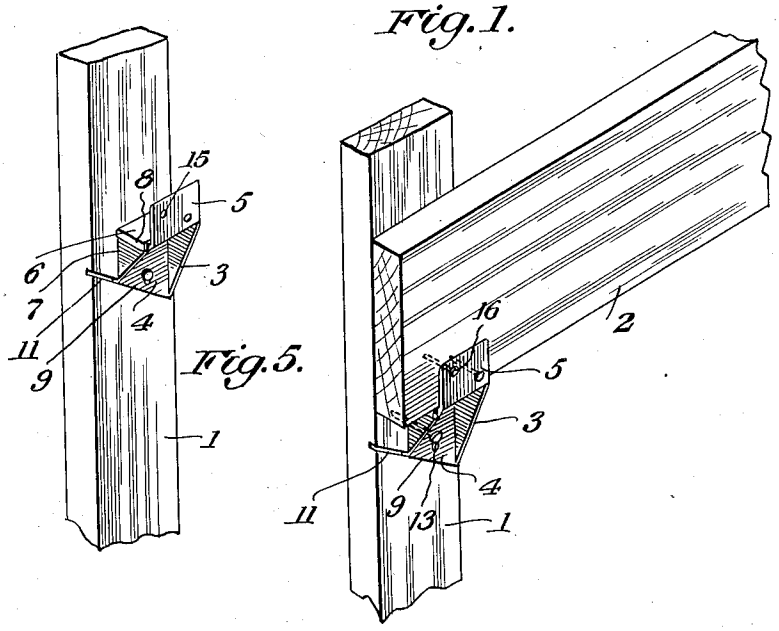


Fig. 5.

Fig. 2.

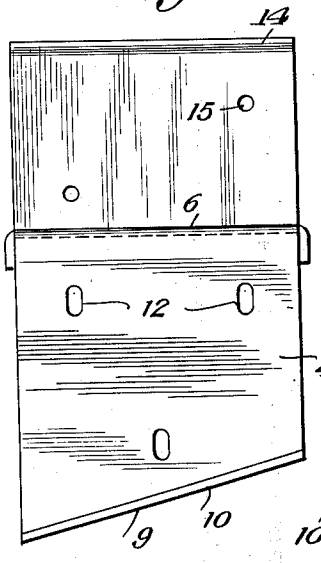


Fig. 3.

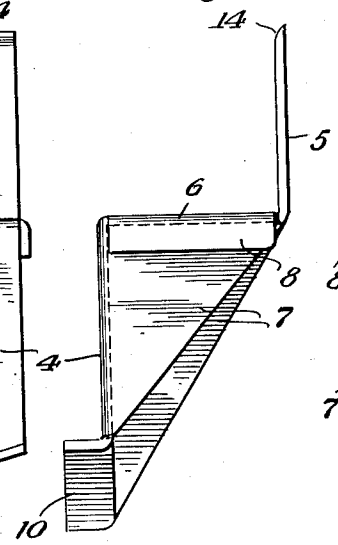
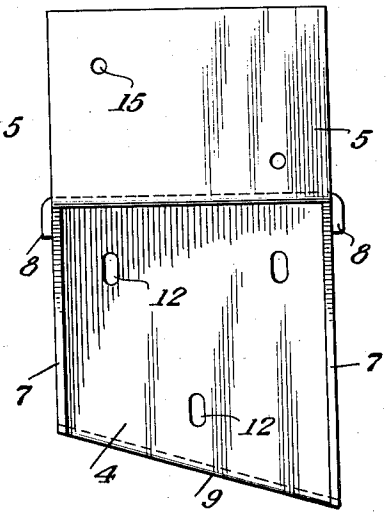


Fig. 4.



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Patented Aug. 7, 1934

1,969,014

UNITED STATES PATENT OFFICE

1,969,014

ADJUSTABLE JOIST FRAMER

Edward H. Karp, Lombard, Ill.

Application April 8, 1932, Serial No. 604,054

9 Claims. (Cl. 20—95)

This invention relates to an adjustable joist framer and has for one object thereof, the provision of a device of the above stated character which is especially adapted for the elimination of the use of both wall plates or ribbon plates forming joist supports, and the disadvantages of such devices, and a substantial reduction of the cost of labor and materials incident thereto.

Another object of this invention is to provide a joist framer having as a part thereof means for readily adjusting the framer vertically relatively to the stud, thus permitting joists of more or less varying depths to be supported at a uniform height of either their top or bottom edges, and obviating the necessity of sizing wood joists to a uniform depth.

A further object of this invention is the provision of means for anchoring the joist which assures the latter resting on its seat at all times either before or after shrinkage, and also compels the shrinkage to take effect at the floor line, and thus eliminate shrinkage at the ceiling line, obviating plaster cracks or breaks at or near the joint between wall and ceiling.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a perspective view illustrating an adjustable joist framer shown applied to a stud and joist and constructed in accordance with my invention.

Figure 2 is a rear elevation illustrating the framer.

Figure 3 is a side elevation illustrating the same.

Figure 4 is a front elevation illustrating the device.

Figure 5 is a perspective view illustrating the framer applied to the stud.

Referring in detail to the drawing, the numeral 1 indicates a stud with a joist 2 attached thereto by a framer 3 constructed in accordance with my invention. The framer 3 is made of any material suitable for the purpose, preferably steel, and consists of relatively offset vertical members 4 and 5 connected together by a horizontal member 6 that forms a seat for the joist. The vertical member 4 is preferably connected along its side edges to the side edges of the seat 6 by side walls or webs 7. Overhanging rightangularly disposed flanges 8 are preferably formed on the ends of seat 6 and overlie the walls or webs 7 to prevent outward bending or bulging of the latter when the seat is under load.

The lower edge of the member 4 is cut or formed on an incline as shown at 9 and has formed on said edge a rearwardly extending rightangularly disposed flange 10 forming a load bearing foot adapted to enter an inclined groove or kerf 11 cut at a desired inclination, preferably about 22.5° from the horizontal, in one face of the stud 1 and deep enough to bring the member 4 in contact with said face of the stud, the bottom wall of the groove 11 forming a seat or rest for the foot 10. The member 4 is provided with a plurality of holes 12 to receive fasteners 13 driven into the stud for anchoring the framer 3 to the stud. The joist 2 rests squarely upon the seat 6 as shown in Figure 1 and by then entering the foot 10 in the groove 11, and shifting the framer to the right or left, either the top or the bottom edge of the joist may be set at just the desired or required height, thus eliminating the necessity of sizing joists to a uniform depth. The fasteners 13 may be of any suitable character, preferably of the rivet headed nail type.

The vertical member 5 may have its upper edge bevelled as shown at 14 to facilitate entry of the joist to its seat and is also formed with holes 15 for receiving fasteners 16 similar to the fasteners 13 which are driven into the joist only, thus assuring the seating of the joist on the horizontal member 6 of the framer at all times and providing a rigid and sufficient tie from wall to wall supporting studs.

The joist and stud framer or connector herein shown and described is designed and well adapted to prevent cracking of the plaster at the joint or seam between the ceiling and a side wall, for the reason that transverse shrinking of the joist will disturb only the level of the upper edge thereof and not the level of its lower edge. The upper edge, of course, supports the floor boards, and the floor wainscoting overlies and covers the wall plaster around the edges of the floor, and can be arranged to cover any crevices which may be present or which may develop due to shrinkage.

From the foregoing description taken in connection with the accompanying drawing, it will also be noted that a joist framer of this character, due to its simplicity, will provide a large saving in labor costs and materials over the type of devices now employed and known as ribbon or plate joist supports and that the device only

requires a single cut or slot in the stud to make the installation.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of my invention, as claimed.

Having thus described my invention, what I claim is:

1. A one-piece joist framer, comprising a plate attachable to a stud, a joist seat projecting forwardly of said plate, and a rearwardly extending flange on the rear of said plate adapted to fit a kerf in and extending transversely of the stud.

2. An integral metal joist framer, comprising a joist supporting plate extending horizontally outwardly from the broad face of a stud and having a flange upstanding from the outer edge of said plate to overlap and retain the joist on said plate, a part adapted to extend into said face to limit downward movement of the framer relatively to the stud, and means for preventing said plate from moving outwardly from said face.

3. A joist framer, comprising a plate adapted for attachment to the face of a stud and having on its rear side a lateral projection adapted to rest in a recess in the stud, a forwardly extending joist seat carried by said plate, means for attaching said plate to said stud, and an upstanding flange on the outside of said seat to overlap and retain the joist on said seat.

4. A joist framer, comprising a plate adapted for attachment to the face of a stud and having on its rear side an inclined member adapted to rest on a correspondingly inclined seat on the stud, whereby the height of said plate may be adjusted by shifting the same transversely of the stud, a forwardly extending joist seat carried by said plate, and means for attaching said plate to said stud in any adjusted position of said plate.

5. A joist framer, comprising a plate adapted for attachment to the face of a stud and having on its rear side an inclined member adapted to slidably fit a correspondingly inclined groove in the face of a stud, whereby the height of said plate may be adjusted by shifting the same transversely of the stud, said plate formed with nail holes for attaching the same to the stud in any adjusted position of said plate, and a forwardly extending joist seat carried by said plate.

6. A joist framer, comprising a plate adapted for attachment to the face of a stud and formed on its lower end with a rearwardly extending inclined foot adapted to slidably fit a correspondingly inclined groove in the face of the stud, whereby the height of said plate may be adjusted by shifting the same transversely of the stud, said plate formed with nail holes for attaching the same to the stud in any adjusted position of said plate, and a forwardly extending joist seat carried by said plate.

7. A joist framer, comprising a plate adapted for attachment to the face of a stud and formed on its lower end with a rearwardly extending inclined foot adapted to slidably fit a correspondingly inclined groove in the face of the stud, whereby the height of said plate may be adjusted by shifting the same transversely of the stud, said plate formed with nail holes for attaching the same to the stud in any adjusted position of said plate, and a forwardly extending joist seat carried by said plate, said seat formed with an upstanding flange on its front edge to overlie the side of a joist resting on said seat, and means for attaching said flange to said joist.

8. A joist framer, comprising a horizontally disposed seat to be engaged by a joist, oppositely extending relatively offset vertical members formed integral with said seat, one of said members having a beveled upper edge, and the other member being bent angularly to form an inclined supporting flange adapted to slidably fit within a groove cut at a corresponding inclination in one face of a stud, fastening means for securing said last-named member to the stud, and fastening means for securing the other member to the joist.

9. A joist framer, comprising a horizontally disposed seat to be engaged by a joist, oppositely extending relatively offset vertical members formed on the seat, reinforcing webs between the seat and one of said members, the latter having its lower edge cut on an incline and bent angularly to form a supporting flange adapted to fit within a correspondingly inclined groove cut in one face of a stud, means for securing said last-named member to the stud, retaining flanges on the seat engaging said webs to prevent spreading thereof, and means for securing the other member to the joist.

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