

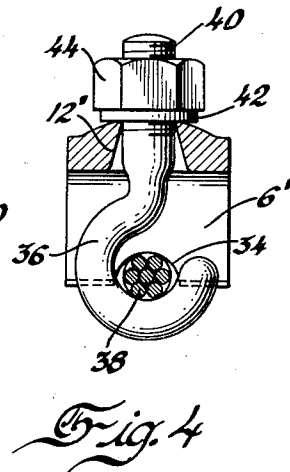
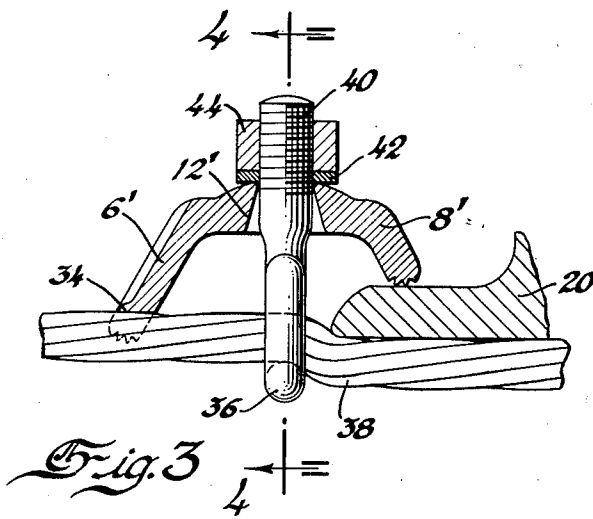
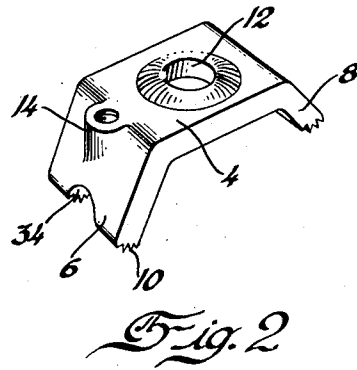
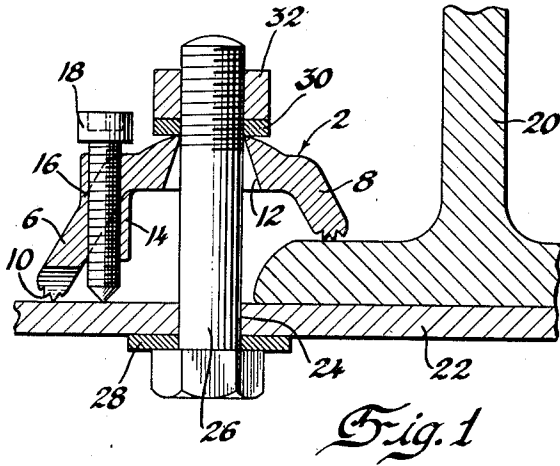
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CLAMP

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2,175,453

CLAMP

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3 Claims. (Cl. 189—35)

This invention relates to a fixture and more specifically to a supporting fixture to temporarily assist in supporting during construction.

It is often necessary during the construction of buildings and particularly in instances of large factory buildings, that it is desirable and necessary to temporarily support from some structure already in place some apparatus to assist in holding members for further construction. Since it is only to be temporary it is desirable that it should not be necessary to drive holes in the structure such as steel I beams.

It is therefore the primary object of my invention to provide a fixture for securing to a stationary structure without altering the structure.

It is a further object of my invention to provide a fixture as set forth above which is capable of a plurality of uses or adaptations.

With the above and other objects in view, which will become apparent as the specification proceeds, my invention will be best understood by reference to the following specification and claims which constructions described therein are illustrated in the accompanying drawing, in which:

Figure 1 is a vertical sectional view showing my fixture in clamping position.

Figure 2 is a perspective view of the clamp fixture.

Figure 3 is a view similar to Figure 1 showing a modified form of my invention.

Figure 4 is a sectional view taken on line 4—4 of Figure 3.

Referring now specifically to the drawing and particularly to the species of invention shown in Figures 1 and 2, there is provided an angle clamp designated generally at 2 which is formed of a straight central section 4 and two diverging angular end portions 6 and 8, the latter being shorter than the former, and the tips of both ends being provided with transverse grooves or corrugations such as 10 to prevent slipping. In the central portion 4 there is a circular opening 12, the diameter of which tapers from one face of the clamp to the other, the upper face being the smaller diameter.

Adjacent the end juncture of the end 6 and the central section there is provided a raised boss 14 on both the inner and outer surfaces, the same forming roughly a cylinder and internally threaded as at 16 for a bolt 18 which would extend at substantially right angles to the central section 4.

In application let us assume that the construction of the building has reached the stage where the structural I beams are in and one such as

shown at 20 is selected. It is desired to support therefrom a plate or member 22 which has an opening 24 therein. A bolt 26 is inserted through the opening 24 and a washer 28 is provided under the bolt head. The shaft of the bolt extends through the tapered opening 12 in the clamp fixture and a washer 30 and clamping nut 32 are applied to the bolt and tightened down to clamp the plate to the I beam. In some instances the thickness of the lower portion of the I beam will vary and the bolt 18 provides vertical adjustment of the other side of the clamp to keep the central portion substantially horizontal though this is not absolutely necessary as the tapered bolt hole 12 allows the bolt to pass through if the plate and central section 4 are not parallel.

In the modified form shown in Figures 3 and 4, the use of the same type of clamp is shown when it is desired to support a messenger cable such as that used for supporting conduit for wiring purposes. In this case the adjusting bolt 18 is omitted and there is provided in the longer angular leg 6' a circular notch 34.

It should be noted in this respect that such a notch is provided in the clamp 2 so that that one may be used for either type. As before, the short leg 8' is designed to contact the I beam face and there is an eye hook 36 which extends down around the messenger cable 38 and has a threaded shank 40 which extends upwardly through the tapered opening 12' and is held in place by a washer 42 and nut 44 pulling the cable 38 up against the I beam lower surface and into the notch 34 in the clamp to thus support the cable from the beam for any period desired.

It is obvious that when the purpose has been carried out the bolt 26 or hook 36 may be removed easily and the whole temporary means taken down and used again when desired.

I claim:

1. In a clamping fixture, a central section having a tapered opening therein, a pair of arms extending at diverging angles from the central portion, the arms being of different lengths, the ends thereof being curved and provided with corrugations and means extending through the tapered opening to clamp any desired part to the extending arms at any angle within a given range.

2. In a clamping fixture for clamping two members together, a clamp having a central section with a tapered opening therein, angular arms extending from the central portion, said arms being of different lengths, the ends thereof being curved and provided with corrugations and means

extending at any desired angle through the tapered opening to pull one of the members against the other and one arm, the other arm contacting the second member.

5 3. In a clamping device for holding two members together, a clamp comprising a straight cen-

tral portion, angularly divergent arms extending therefrom, corrugations on the tips of the arms, and threaded means in one of the arms to vary the effective length of the arm for contacting one of the members.

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