

April 6, 1954

C. H. WEBSTER

2,674,429

HANGER BRACKET

Filed July 21, 1952

Fig. 1

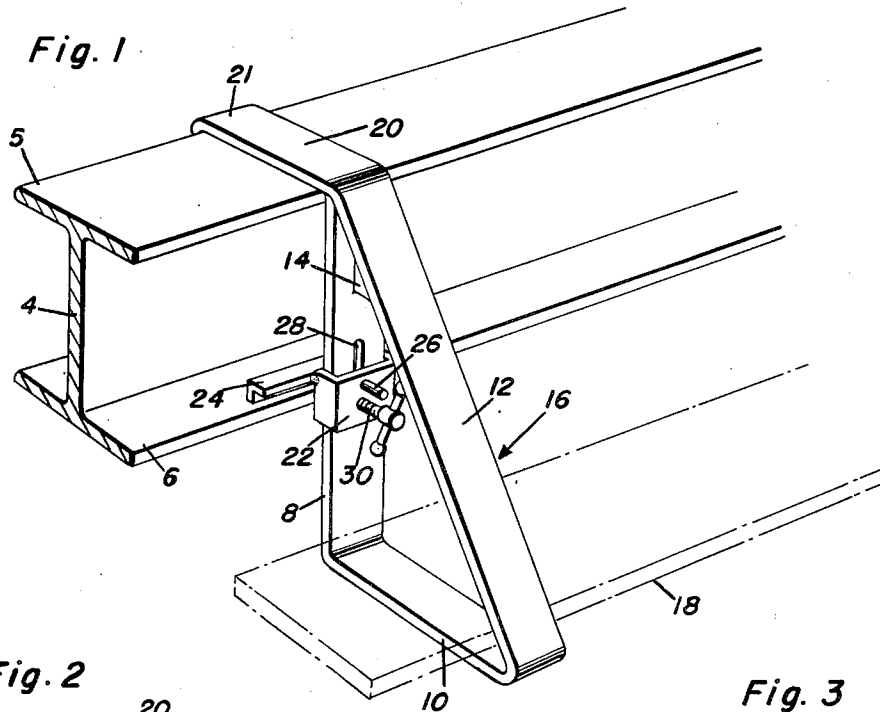


Fig. 2

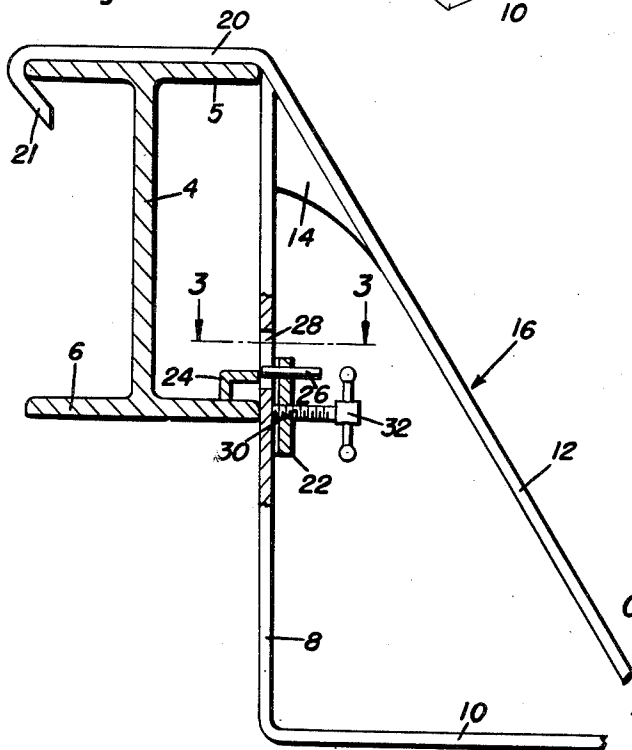
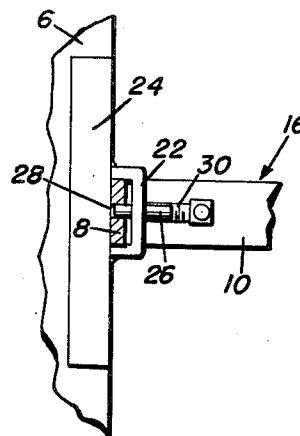


Fig. 3



Clement H. Webster
INVENTOR.

BY *Charles A. O'Brien*
and Harvey B. Jackson
Attorneys

UNITED STATES PATENT OFFICE

2,674,429

HANGER BRACKET

Clement H. Webster, Menasha, Wis.

Application July 21, 1952, Serial No. 299,991

1 Claim. (Cl. 248—235)

1

The present invention relates to certain new and useful improvements in hanger brackets, as they are generally classified, and has more particular reference to one which is especially well adapted to support one end of a plank or the like such as is customarily employed in the erection or construction of a workman's scaffold.

Brackets in the category under advisement are usually characterized by some means for attachment to a relatively stationary support such as for example, a building wall, a window sill, a structural beam or the like. The instant invention appertains to a bracket which is especially but not necessarily, adapted to be used in conjunction with an I-beam and which has complementary portions to coact effectively with and attach themselves usefully to the upper and lower flanges of the I-beam.

It is an object of the invention to structurally, functionally and otherwise improve upon similarly constructed and performing hanger brackets and suspension members in the category of invention under consideration. In achieving this end the improved bracket is, by comparison, thought to be simple, practical, efficient, and such in construction that it will serve the requirements of manufacturers, painters, carpenters and other users with adequacy and reliability.

Another object of the invention, in general, is to improve upon and reduce the number of parts entering into the combination, thereby not only increasing the efficiency of the structure as a whole, but also rendering the same less costly to manufacture, and to otherwise simplify factors of assembling and sale.

A preferred embodiment of the bracket is characterized by a substantially triangulated stirrup having an attaching arm with hook means at what may be called the upper end thereof, and having clamping means on one of the frame members thereof, which clamping means is co-operable with a flange of the I-beam.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheet of illustrated drawings.

In the accompanying sheet of drawings wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view showing a fragmentary portion of an I-beam, showing a portion of a scaffold-forming plank and showing one of the hanger brackets, the latter constructed in accordance with the invention and being illustrated in use.

2

Figure 2 is an enlarged view in section and elevation.

Figure 3 is a section on the horizontal line 3—3 of Figure 2, looking in the direction of the arrows.

The relatively stationary support means in the instant situation is, as before stated, an I-beam and this comprises a web 4 with upper and lower horizontal flanges 5 and 6.

The bracket is characterized by a three-sided or substantially triangular frame which strictly speaking is a right angled triangle actually made up of an L-shaped member and a diagonal brace connecting the portions of said L-shaped member. The L-shaped member comprises a vertical long limb 8 and a horizontal short limb 10 at right angles to the lower end of the long limb. The remaining or third member is a diagonal brace and this is denoted by the numeral 12 and it is connected at its upper end with the upper end of the long limb and is further stabilized by the association therewith of a reinforcing web or gusset 14. This over-all frame is denoted, as a unit, by the numeral 16 and comprises a convenient stirrup for the adjacent removable and insertable end of the scaffold board or plank 18. The upper end of the frame is provided with a lateral attaching arm 20 which extends across the top of the flange 5 and is provided with an attaching and retaining hook 21.

The aforementioned clamp means comprises a slidable U-shaped member 22 which slidably embraces the long arm or leg 8 and which has its arm portions joined with an angle-iron 24. The latter constitutes a rest and brace, and bears upon the upper side of the flange 6 when in use. The U-shaped member is provided with a pin 26 which is operable in a slot 28 to limit the up and down sliding movements of the U-clamp. A set-screw 30 is provided and this is in turn provided with a handle, 32.

In practice the arm 20 engages over the upper side of the flange 5 with the hook 21 engaging the flange in the manner shown. The stirrup-like frame 16 is suspended from the flange but is braced by the underlying flange 6. That is to say, it rests against the edges of the flanges 5 and 6 by way of the vertical long leg 8. In addition, however, a clamping connection is provided and this is obtained by bringing the rest 24 into firm abutting relationship with the flange 6 and then tightening up the set-screw 32. The slot and pin means 26 and 28 limits the sliding movement of the clamp means relative to the arm or leg 8.

3

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in the shape, size and arrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

Having described the invention, what is claimed as new is:

A hanger of the class described comprising a frame providing a stirrup and embodying an L-shaped member including a long arm and a complemental short arm, said arms being at right angles to each other, and a diagonal member connected with the respective outer ends of the long and short arms and providing a substantially triangular stirrup, a horizontal arm carried by one end of the long arm and terminating in an attaching and retaining hook, said

4

long arm being provided with an elongate slot, a U-shaped member embracing said long arm and cooperable with the slot, an angle iron slidably contacting said long arm and in a position at right angles to the lengthwise dimension of the long arm and appreciably greater in length than the width of the long arm, the end portions of said U-shaped member being integrated with intermediate portions of said angle iron, a set-screw carried by the U-shaped member and engageable with said long arm, and a rigid pin carried by said U-shaped member and slidably keyed in said slot.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,104,996	McHale	July 28, 1914
1,285,158	Haynes	Nov. 19, 1918
1,528,268	Schlegel	Mar. 3, 1925