This invention relates generally to means for hanging and/or supporting scaffolds and more particularly to a scaffold hanger and support device capable of hanging and supporting a scaffold adjacent any selected portion of a wall above ground level wherein the ground is not directly relied upon for supporting the scaffold.

The need has long existed in the building trade for means whereby scaffolding could be quickly assembled into a scaffold and suspended adjacent a wall to be repaired or under construction. During the construction or repair of a wall it is often necessary to provide a scaffold to support a workman proximate to that portion of the wall under repair. As construction advances and the level of the wall rises it becomes necessary to support the scaffold by means other than upon the ground. The present invention is directed to providing means whereby scaffolding may be quickly assembled adjacent an existing wall or one under construction. Also, it often becomes necessary to repair an existing wall high above ground level and in order to do this it is essential to suspend a scaffold adjacent the exterior surface of the wall so that a workman can readily perform the necessary repair. For example on a tall building there is often need for repair of the wall area located between the upper row of windows and the roof. This area is very often impossible to reach by coming down from the top of the building with a scaffold due to various reasons such as an undesirable roof overhang which would normally cause a scaffold to hang at a distance too far removed from the wall for the workmen to work with ease. Thus, it becomes necessary for a scaffold to be built up from the nearest window below the area to be repaired. The present scaffold hanger and support device is particularly and readily adapted to be supported adjacent an open window in such a manner that the worker may reach the areas above the window with ease and safety.

An object therefore of the present invention is to provide means whereby a scaffold may be readily assembled and suspended adjacent a wall above ground level without relying upon the ground for support.

Another object of the present invention is to provide means for quickly assembling and supporting a scaffold adjacent to and above a wall that is already in existence or under construction.

Another object of the present invention is to provide a scaffold hanger and support device wherein a pair of scaffolds may be simultaneously mounted one above the other adjacent to a wall above ground level without relying upon the ground for support.

Still another object of the present invention is to provide a novel scaffold hanger and support device which permits a scaffold to be suspended from any given point along a wall while simultaneously supporting a scaffold above said point adjacent the wall to permit workmen to advance construction or repair the wall.

Another object of the present invention is to provide a novel scaffold hanger and support device characterized by its structural simplicity, the ease of assembly of its parts, its strong and sturdy nature and its low manufacturing cost. Other features of this invention reside in the arrangement and design of the parts for carrying out their appropriate functions.

Further objects of the present invention and certain practical advantages will be referred to in or will be evident from the following description of one embodiment of the invention, as illustrated in the accompanying drawings, in which:

FIG. 1 is a perspective view of the scaffold hanger and support member.

FIG. 2 is an end elevational view of a pair of scaffold hanger and support devices suitably mounted on a projecting frame member which cooperate to support a pair of scaffolding end portions one above the other.

FIG. 3 is a perspective view showing a pair of spaced projecting members overlapping a wall with each projecting member supporting a pair of scaffold hanger and support members which in turn cooperate to support one scaffold beneath the level of the projecting members and simultaneously cooperate to support a second scaffold above the level of the projecting members as partially illustrated by the scaffolding end portion supported above the level of the projecting members.

FIG. 4 is a vertical sectional view taken along the plane of line 4-4 of FIG. 2, showing a scaffold hanger and support member mounted on a projecting member with the hook portion of the hanger and support member as shown supporting a portion of the upper and lower scaffolding frame members.

Before describing in detail the herein disclosed embodiment of the invention, it is to be understood that the present invention is not limited to the structural details or the particular arrangement of parts herein shown, as devices embodying the present invention may take other forms. It is also to be understood that the philosophy and terminology herein used are for purposes of description and not of limitation, as the scope of the present invention is denoted by the appended claims.

Referring now to the drawings, the scaffold hanger and support member is designated generally by the numeral 10 and includes a main central closed band or loop portion 11 which is constructed preferably but not necessarily of ⅝ inch steel framing. In practice it has been found that if the inner opening formed by the band 11 has a width of approximately 4 inches and a height of approximately 10 inches, suitable space is provided therein for encircling frame members of sufficient strength to support the contemplated load as hereinafter described.

A rigid arm portion 12 depends from the band portion 11 and terminates at its lower end in a hook 13. The arm 12 and hook portions 13 are also made of suitable rigid steel framing. The hook portion 13 should be large enough to accommodate standard size scaffolding frame members.

It has been found that a hook having a diameter of 1½ inches is usually satisfactory for this purpose.

Means are provided on each hanger and support member for supporting scaffolding above the central band portion 11. Such means comprise a vertically upstanding rod 14 which is rigidly secured to a bracket 15 which is preferably formed as an integral part of the loop portion 11. The bracket 15 projects horizontally outwardly from the upper segment of the band 11. The rod 14 is preferably constructed of a hollow pipe with a hole bored through its lower end adjacent the bracket 15.

In assembling the present scaffolding to form the scaffold structure shown in FIG. 3, a pair of spaced projecting support members 18 and 19 are extended across the top of a wall 20 or through any suitable opening in the wall such, as a window, whereas the scaffolding members 18 and 19 may be supported on the window-sill. The inner end of the members 18 and 19 or that end opposite to the free projecting end may be secured, an-
chored or weighed down in any suitable manner so as to form a stable structure. The support members 18 and 19 may be constructed of a pair of standard 2 x 10 inch frame members which are readily received within the dimensions of the opening of the band portion 11.

A pair of spaced scaffold hanger and support members 10 are provided on each of the projecting members 18 and 19, with the brackets 15 thereof disposed in opposite directions. As seen in FIGS. 1-4 the hook portion 13 depends below the level of the support members 18 and 19 while the vertically upstanding rod portion 14 is located above the support members 18 and 19. Since all of the scaffold hanger and support members are constructed identical to one another, the hook portions 13 of a pair of such members mounted on a given support frame 18 or 19 as shown in FIG. 3, are disposed in opposite directions, to prevent the horizontal scaffolding frame members 21 of the scaffolding end portions 22 from becoming easily unhooked.

The scaffolding end portions 22, as seen in FIGS. 2 and 3, are more or less of standard construction and readily available in prefabricated form. Each pair of scaffold hanger and support members 10 supported on their respective projecting support member 18 or 19 cooperate to support an upper and lower scaffolding end portion 22. The lower scaffolding end portions are supported by the hook portions 13 while the upper scaffolding end portions are received on the vertically upstanding rods 14. Suitable cross tie members 23 and 24 are shown secured between a pair of spaced lower scaffolding end portions to reinforce the scaffold structure and make it more rigid. A plurality of suitable planks 25 may be extended between the spaced scaffolding end members to provide a platform upon which a worker may stand. It will be understood that the scaffold structure as shown in FIG. 3, located between the projecting members 18 and 19 may be duplicated above the projecting members 18 and 19. However, for purposes of clarity in the drawings only one of the upper scaffolding end portions 22 is shown in FIG. 3. The present construction which makes possible both upper and lower scaffolds permits workmen to work on areas above and projecting members 18 and 19 as well as areas below the level of said members.

Since the hooked portions 13 of two cooperating scaffold hanger and support members 10 cooperate to receive the horizontal scaffolding frame member 21, the vertical scaffolding frame members 26 and 27 located at either end of the horizontal frame member 21 must of necessity fall outside the area between the two hook portions 13. For this reason the upstanding rod member 14 is offset from the central vertical axis A-A (see FIG. 2) taken through a diameter of the scaffold hanger and support member so that it may receive the lower end of the vertical scaffolding frame members 26 and 27 and thereby cause the vertical members 26 and 27 of the upper and lower scaffold end portions to be in vertical alignment with one another. This construction tends to balance and distribute the forces created by the upper and lower scaffolds in a manner whereby the scaffold hanger and support members remain in a substantially vertically disposed position and do not tend to become misaligned thereby adding to the safety and rigity of the scaffolding structure.

The minimum length of the hook supporting arm 12 is somewhat determined by the amount which the vertical scaffolding frame members 26 and 27 project above the horizontal scaffolding frame member 21. The length of the arm 12 must be great enough to prevent the distal end of the vertical scaffolding frame members from contacting, the projecting support members 18 or 19. By offsetting the upstanding pipe 14 it becomes possible to use standard scaffolding end portions all of one size. As seen in FIG. 2 if the rod 14 were located in alignment with the axis A-A of the hanger and support member 10 the upper scaffolding end portion would have to be smaller than the lower scaffolding end portion.

In FIG. 4 the lower end of the vertical scaffolding members is shown to be telescopically received over the rod 14. By providing a hole adjacent the lower ends of the scaffold frame members 26 and 27 which registers with the hole 16 of the rod 14 it is possible to insert a pin through said aligned holes to securely retain said members together. It will of course be understood that the rod 14 could alternatively be constructed with a central bore large enough to telescopically receive the lower end of the vertical frame members 26 and 27.

Although the scaffold hanger and support member of the present device makes it possible to assemble both upper and lower scaffolds, as shown in FIG. 3, it is to be understood that either an upper or lower scaffold may be assembled in the absence of the other, since the scaffold support member would satisfactorily support one scaffold in the absence of the other.

In view of the foregoing description, taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art.

Having thus described my invention, what I claim as new and useful and desire to secure by United States Letters Patent is:

1. A scaffold hanger and support member comprising a central band portion having a general rectangular inner opening of approximately 4 x 10 inches, a rigid arm portion depending from the bottom of said band portion, a hook provided at the lower end of said rigid arm portion, said hook being large enough to accommodate standard size scaffolding frame members, a rigid bracket secured to said band and projecting horizontally outwardly from said band, an upstanding rod rigidly secured to said bracket, said rod depending rigidly from said hook and said band being in alignment with the vertical axis of said band portion taken across a diameter of said band portion and said upstanding rod being offset from said central vertical axis, said upstanding rod having a hole provided therein to receive a pin, said rod adapted to receive and support scaffolding frame members above the level of said band portion and said pin adapted to secure said frame members to said rod, said band portion adapted to encircle suitable supporting frame members projecting from a wall and said hook portion adapted to receive and support scaffolding frame members below said band portion.

2. A scaffold hanger and support member comprising a central band portion, a rigid arm portion depending from the bottom of said band portion, a hook provided at the lower end of said rigid arm portion, said hook being large enough to accommodate standard size scaffolding frame members, an upstanding rod rigidly secured to said central band portion, said rod depending rigidly on said hook and said arm portion being in alignment with the vertical axis of said arm portion taken across a diameter of said band portion, said rod adapted to receive and support scaffolding frame members above the level of said band portion, said band portion adapted to engage suitable supporting frame members projecting from a wall and said hook portion adapted to receive and support scaffolding frame members below said band portion.

3. A scaffold hanger and support member comprising a central band portion having an inner opening, a rigid arm portion depending from the bottom of said band portion, a hook provided at the lower end of said rigid arm portion, said hook being large enough to accommodate standard size scaffolding frame members, a rigid bracket secured to said band and projecting horizontally outwardly
from said band, an upstanding rod rigidly secured to said bracket, said depending rigid arm portion and hook being in alignment with the vertical axis of said band portion taken across a diameter of said band portion and said upstanding rod being offset from said vertical axis, said rod adapted to receive and support scaffolding frame members above the level of said band portion, said band portion adapted to encircle suitable supporting frame members projecting normally to a wall and said hook portion adapted to receive and support scaffolding frame members below said band portion.

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