No. 838,218. PATENTED DEC. 11, 1906.

M. F. SEELEY.

SCAFFOLD SUPPORT.

APPLICATION FILED DEC. 26, 1905.

Fig. 1

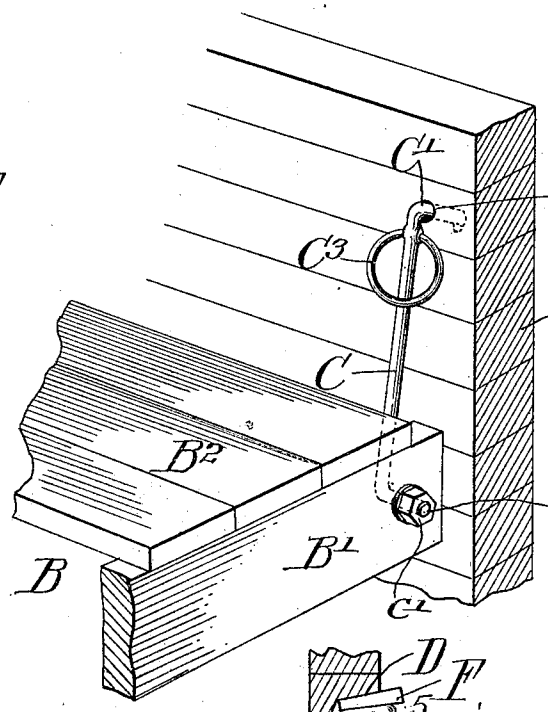


Fig. 6

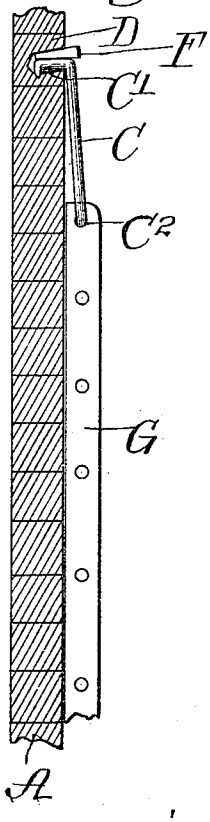


Fig. 3

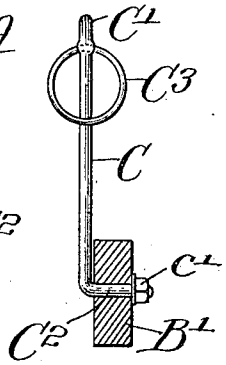


Fig. 2

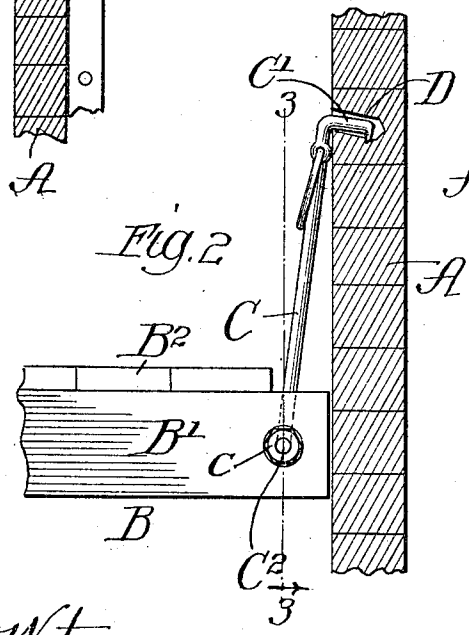


Fig. 4

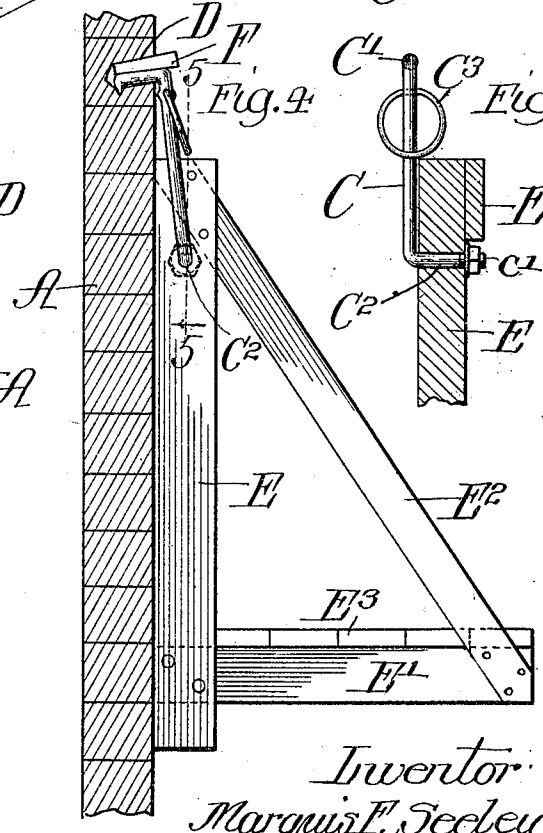


Fig. 5

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SCAFFOLD-SUPPORT.

No. 838,218. Specification of Letters Patent. Patented Dec. 11, 1906.

Application filed December 26, 1905. Serial No. 293,278.

To all whom it may concern:

Be it known that I, MARQUIS F. SEELEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Scaffold-Supports; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in hangers or supports for scaffolds used in building grain-elevator bins and the like or for work on the interior and exterior of buildings.

The invention is illustrated in the accompanying drawings as designed to be used in constructing the walls of a cribbing structure of that kind consisting of wooden strips laid one upon the other and overlapped at their ends at the corners of the structure. Such structures are common in the construction of bins for grain-elevators, grain-storage houses, and the like.

The object of the invention is to provide an improved scaffold-support so constructed as to permit the scaffold to be readily moved upwardly from time to time as the building of the structure progresses and which may be readily attached to the wall of the structure and removed therefrom.

The invention consists in the matters hereinafter pointed out and more particularly described in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of part of the wall of a cribbing structure, together with part of a scaffold, such as is used in the interior of an elevator-bin in the construction of the same, and a hanger for supporting the scaffold. Fig. 2 is a view in vertical section through the wall shown in Fig. 1, illustrating the scaffold and its support in side elevation. Fig. 3 is a detail section taken upon line 3 3 of Fig. 2. Fig. 4 is a view corresponding with Fig. 2, showing the scafford-support applied to a hanging scaffold on the outside wall of the building. Fig. 5 is a sectional elevation taken on line 5 5 of Fig. 4. Fig. 6 is a view showing a section of a wall of a grain-elevator bin and a supporting device embodying my invention applied to sustain a ladder.

As shown in said drawings, A designates one of the side walls of a cribbing structure, which may be employed for any suitable purpose—as, for instance, for an elevator-bin. Said wall consists of strips of wood laid in successive courses, beginning at the bottom, it being understood that all the strips constituting a complete course are usually laid before any of the strips constituting the next higher course are placed in position.

B indicates a wooden scaffold of common construction and of the kind which is located inside of and supported by the walls of the bin or like structure and upon which the workmen stand while laying or nailing to each other the strips or bars constituting the structure. The scaffold has the form of a horizontal platform and comprises cross-pieces, one of which is indicated at B′, and boards B^2, resting thereon and constituting the platform. The complete scaffold is made somewhat smaller than the interior dimensions of the bin to permit the same to be readily moved vertically therein as the construction of the bin progresses.

In the several figures of the drawings, C indicates one of the metal hangers by which a scaffold or the like is supported upon the wall of a structure. Said hanger C consists of a straight main part or shank having at its upper end an arm C′ at right angles, or approximately so, to the shank and at its lower end another arm C^2, also at right angles to the shank, but extending therefrom in a direction at right angles to the arm C′. At the extremity of the upper arm C′ is formed a downwardly-projecting point or prong *c*. The extremity of the lower arm C^2 is screw-threaded and adapted to receive a nut *c*′. The shank is apertured near its upper end and provided with a ring C^3, which forms a handle by which the hanger may be engaged or grasped in lifting the same, together with the scaffold.

In the construction shown in Figs. 1, 2, and 3 the hanger C is engaged with the scaffold by the insertion of its lower horizontal arm C^2 through a hole *b*, formed in the end portion of the cross-piece B′, the nut *c*′ being applied to said arm C^2, so as to hold the hanger engaged with said cross-piece. In case of an interior platform, such as is shown in Figs. 1, 2, and 3, one of the hangers C will

be attached to each end of each cross-piece of the platform. The upper arm C′ of the hanger will be engaged with the wall on which the scaffold is to be supported by means of a hole bored or formed in the wall and adapted to receive the arm. In the case of a structure formed by cribbing, such as shown, a hole D will be bored by an auger into one of the strips or layers constituting the wall. The hole D may be inclined slightly downwardly and inwardly, if desired.

When the hanger is engaged at its lower end with the scaffold in the manner described and its upper arm C′ is inserted in the hole D, the weight of the scaffold coming on the hanger will tend to depress the prong *c* into the wood at the bottom of the hole, and thus prevent possibility of the hanger being accidentally disconnected from the wall. The presence of said prong is not, however, absolutely necessary, and when the hole D is bored at a downward inclination the downward inclination of the arm C′, due to the outward inclination of the lower end of the hanger-shank, will tend to keep the hanger engaged with the wall.

Figs. 4 and 5 illustrate a hanger made in accordance with my invention as applied to support a scaffold for use on the outside of a building or structure. The wall A is herein shown as constructed in the same manner as before described, and in one layer of the same is bored a hole D. The scaffold-frame in this instance embraces uprights E, cross-pieces E′, and oblique braces E^2, connecting the outer ends of the cross-pieces E′ with the upper ends of the uprights E. Platform-boards E^3 rest on the cross-pieces E′. In this construction the hanger B has its lower horizontal arm B^2 inserted through the upper part of the upright E of the scaffold.

In the use of the device in connection with a scaffold such as is shown in Figs. 4 and 5 it will be desirable to drive a wedge or plug F into the hole D above the upper arm E′ of the hanger. Such plug will prevent possible disconnection of the hanger from the wall A in case unusual pressure is brought upon the outer edge of the platform of the scaffold, tending to throw the upper ends of the uprights E outwardly away from the wall against which they rest.

In Fig. 6 the hanger made as described is shown as used to support a ladder against a wall, as may be required in building operations to enable workmen to ascend to the scaffold. In this instance, G indicates a ladder the side pieces of which are provided near their upper ends with holes through which are inserted the lower horizontal arms of the hangers. A plug F may be used in connection with the hangers B in this instance, as in the construction shown in Figs. 4 and 5.

The scaffold when used in the construction of cribbing structures serves as a support for the workmen while laying the courses constituting the walls of the structure. After the walls have reached the height from which it is inconvenient to continue the laying of the courses two holes D D are bored into the wall near the top thereof and the scaffold is raised to engage the upper arms of the hanger C with the said holes. In raising the scaffold the workmen will stand on the upper edges of the walls and release the hangers from the holes in the walls, after which the released scaffold will be drawn upwardly by ropes or suitable hooked implements engaging the rings C^3. When the scaffold has been lifted to its proper height or near the top of the finished wall, the upper ends of the hangers will be engaged with additional holes bored in the wall near the top thereof. The scaffold is raised from time to time in like manner until the structure is completed.

The pivotal connection of the hangers with the cross-pieces or supporting-pieces of the scaffold afforded by the arms C^2, arranged at right angles to the upper arms C′, as before described, enables the upper ends of the hangers to be swung or moved in a direction toward or from the wall of the structure, and thereby readily released from and engaged with the holes bored in the wall to receive the same.

The engagement of the arms C′ with the holes in the wall is such that the hangers cannot be disengaged from the wall without first lifting the platform, so that the platform is reliably and safely supported, while at the same time the hangers may be easily released from the holes in the walls and the platform quickly and readily raised from one position to another.

By reason of the fact that during the building of a structure of the kind referred to the walls rise by successive steps it is not practicable to suspend the scaffold from the top edge of the wall, inasmuch as such arrangement would require shifting of the scaffold as the successive courses are applied. The hangers made as hereinbefore set forth afford an effective and safe means for suspending the platform, while making it possible to build a considerable vertical length of the structure at one setting of the scaffold. The holes bored in the walls to receive the upper arms of the hangers are so small that they do not weaken the structure, and they may be afterward plugged up, if desired.

I claim as my invention—

1. A metal hanger for scaffolds consisting of a shank provided at its upper and lower ends with integral lateral arms extending from the body at right-angled relation to each other, the lower arm being of cylindric form and adapted for pivotal engagement with a scaffold member by its insertion through a hole bored in said member and being pro-

vided at its end with detachable means by which it may be held in engagement with said scaffold member, and the upper arm being provided with a downwardly-extending prong.

2. A metal hanger for scaffolds consisting of a shank provided at its upper and lower ends with integral lateral arms which extend from the body of the hanger in right-angled relation to each other, the lower arm being of cylindric form and provided at its end with detachable securing means and the upper arm being provided with a downwardly-extending prong, said shank having in its upper part a transverse aperture and a ring inserted through said aperture and forming a handle for the hanger.

3. The combination with a scaffold member provided with a hole extending therethrough parallel with the wall on which the scaffold is hung, of a metal hanger consisting of a shank having at its upper and lower ends lateral rigid arms which extend from the shank at right angles to each other the lower arm being of cylindric form and adapted for pivotal engagement with said hole in the scaffold member and provided at its ends with detachable securing means for holding it engaged with the said scaffold member, and the upper arm being provided with a downwardly-extending prong.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 14th day of December, A. D. 1905.

MARQUIS F. SEELEY.

Witnesses:
C. CLARENCE POOLE,
G. R. WILKINS.