Aug. 25, 1964 F. S. CALLAHAN 3,145,801

SCAFFOLD STAGING

Filed April 23, 1963

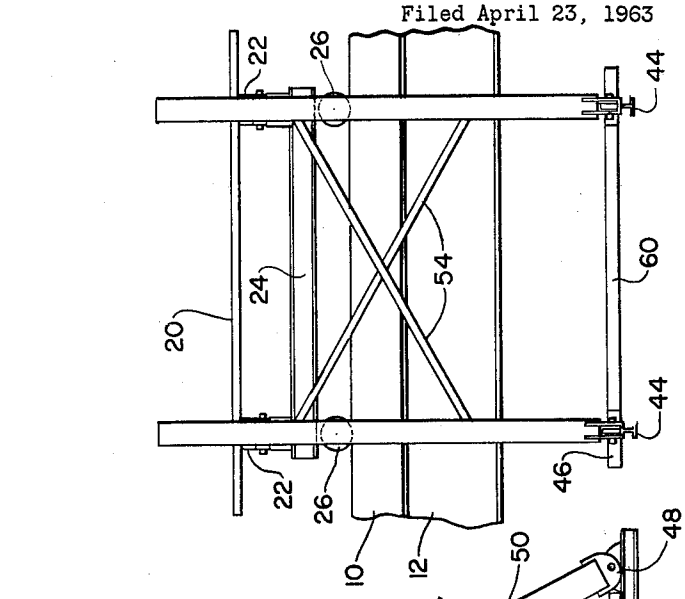


FIG. 2

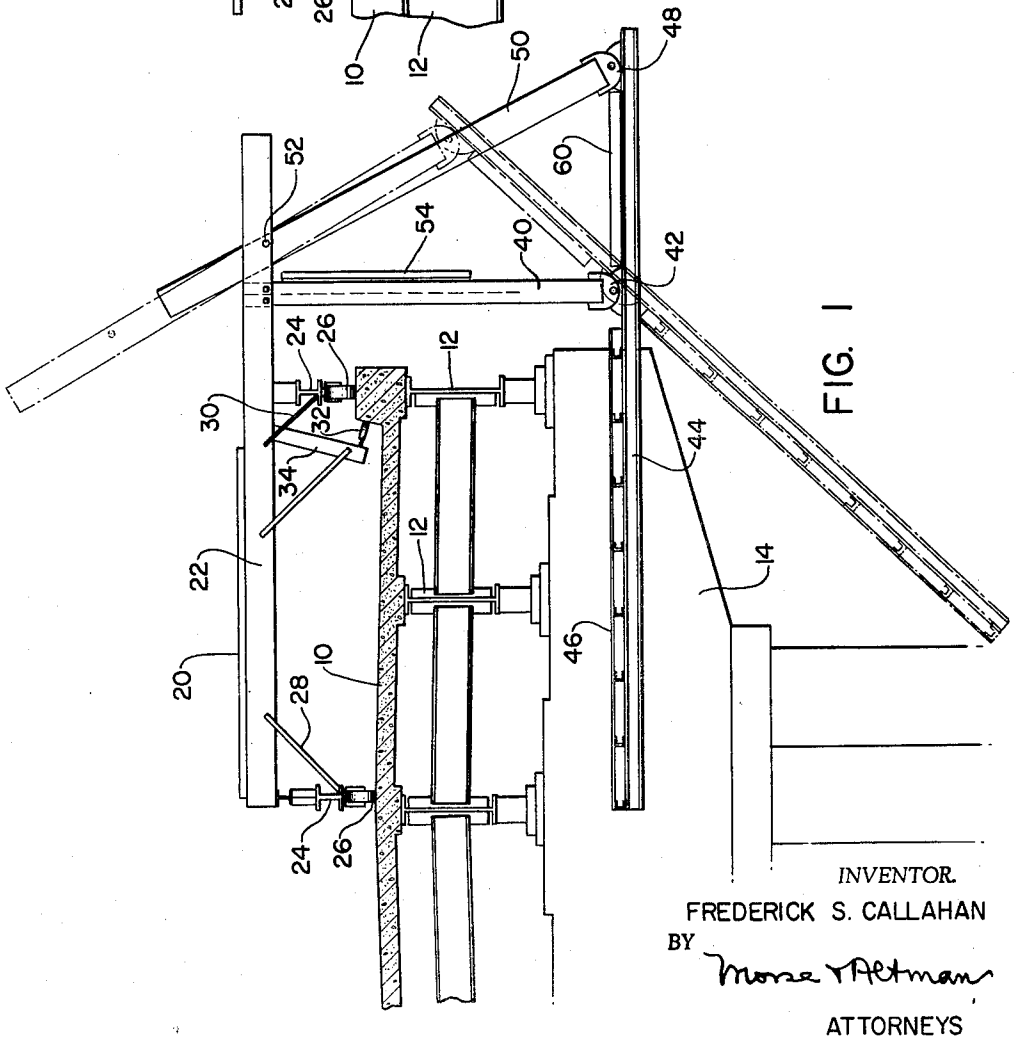


FIG. 1

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SCAFFOLD STAGING

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This invention relates to a scaffold staging designed for use on bridges supported by piers or on other equivalent structures where access to the underside is desired. Most modern highway bridges of any considerable size are of structural steel on which a road surface of concrete, asphalt or the like is laid. For proper maintenance the steelwork should be painted at intervals, this requiring a suitable support for the painters under the bridge. If the bridge is supported on piers and has no superstructure, a staging can be slung under the bridge and shifted along as neeed until it comes to a pier. Heretofore it has been necessary to dismantle the staging sufficiently to get it past the pier and to reassemble it on the other side of the pier to be shifted along until the next pier is reached.

According to the present invention, the staging includes a horizontal platform supported under the bridge by offset framework at one side of the bridge connecting the platform to a carriage which rides upon the bridge, and can be advanced as desired when the position of the platform is to be shifted. The framework is so constructed as to permit the platform to be swung down far enough to pass a pier so that the entire structure can be moved past the pier, whereupon the platform is readily swung back to its horizontal position for use.

For a more complete understanding of the invention, reference may be had to the following description thereof, and to the drawings, of which

FIGURE 1 is an end elevational view of a staging embodying the invention, in position for use; and

FIGURE 2 is a side elevation of the staging shown in FIGURE 1.

A traveling staging embodying the invention is shown as mounted on a bridge having a roadway **10** supported on beams **12** which extend from pier to pier, part of one such pier **14** being shown in FIGURE 1. The staging comprises a carriage consisting of one or more platforms **20** mounted on framework including parallel beams **22** which extend across and are secured to transverse beams **24**. Under the beams **24** are suitable wheels **26** which travel on the roadway **10** so that the staging can be advanced as required, any suitable motive means (not shown) being employed as desired. The frame of the carriage is stiffened by diagonal braces **28, 30**, and wheels **32** are supported by brackets **34** to bear against the side of a raised border or parapet **36** on the roadway **10** to keep the staging from rolling off the edge of the bridge.

For a wide bridge, the carriage beams **22** are preferably arranged to extend across only half of the width of the roadway, but these beams project out beyond the side of the bridge as shown. The framework also includes vertical beams **40** secured to the beams **22** beyond the side of the bridge, and extending down therefrom. Pivotally attached as at **42** to the lower ends of the vertical

beams **40** are normally horizontal beams **44** which extend under the roadway **10** preferably to the mid point thereof and support a platform **46** directly beneath the carriage and at a convenient distance below the roadway for painters to have access to the steelwork **12**.

To maintain the platform **46** in its horizontal position, the beams **44** extend out beyond the pivots **42**, the outer ends being pivotally attached as at **48** to struts **50** which extend upward to or past the respective beams **22** and are secured thereto by locking elements such as pins **52** which are removable to release the platform to swing to a tilted position. Diagonal cross-braces **54** help to keep the vertical beams **40** parallel to each other.

To counterbalance the platform **46** which is rockable about a horizontal axis through the pivots **42**, a weight **60** is mounted on the portions of the floor beams **44** which extend outward beyond the pivots **42**.

When the staging is in use, the platform **46** is horizontal and the whole structure is moved along the roadway as required until the platform comes to a pier **14**. Then the pins **52** are removed and the platform **46** is swung down far enough to clear the pier. Since the counterweight **60** balances the platform, this is easily done. The staging is then moved along until the platform is on the other side of the pier, whereupon the platform is restored to its horizontal position and locked in such position by insertion of the pins **52** in their holes.

To keep the staging from being capsized by the counterweight **60**, the top platform **20** is made heavy enough to hold the carriage down on the roadway.

I claim:

1. A staging comprising a carriage having supporting wheels and adapted to travel along the roadway of a pier-supported bridge, said carriage having framework adapted to extend out beyond the edge of the bridge, beams secured to and projecting down from said framework, a platform pivoted to said beams on a horizontal axis below the level of the bridge and normally located underneath said carriage, said platform having members extending beyond the pivot, means normally maintaining said platform in a horizontal position, said means including struts pivotally attached at their lower ends to said extending portions of the platform members and releasably attached to said framework.

2. A staging as described in claim 1, and means on said extending platform members counterbalancing the platform.

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