G. W. MacILWAINE.

SUPPORTING OF OUTSIDE STAGING USED DURING THE CONSTRUCTION OF SHIPS OR OTHER STRUCTURES

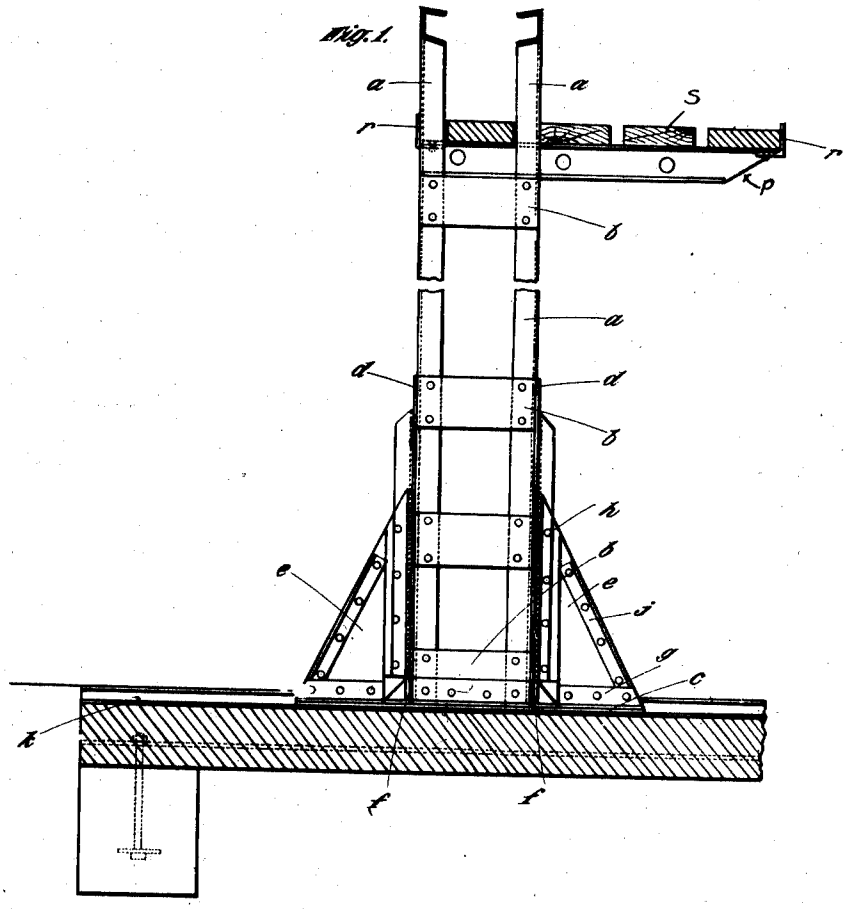
APPLICATION FILED JULY 31, 1918.

1,341,335.

Patented May 25, 1920.

2 SHEETS—SHEET 1.

Fig. 1.



INVENTOR:

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2 SHEETS—SHEET 2.

Fig. 2.

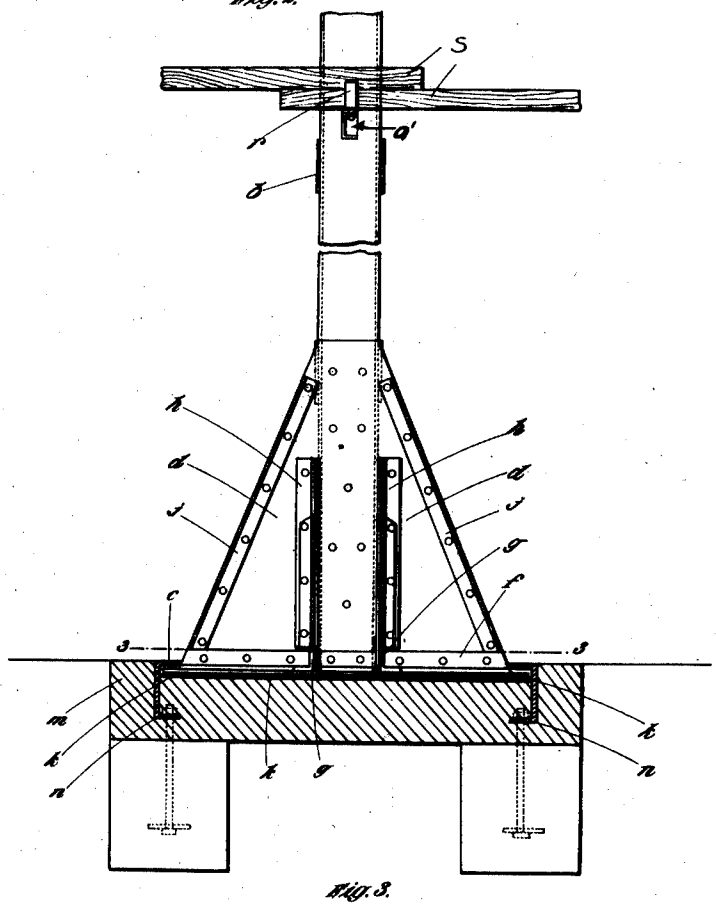
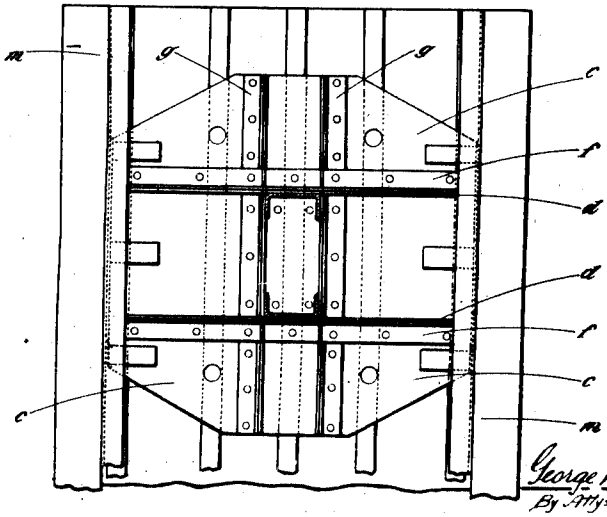


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE WILSON MacILWAINE, OF HEBBURN, ENGLAND.

SUPPORTING OF OUTSIDE STAGING USED DURING THE CONSTRUCTION OF SHIPS OR OTHER STRUCTURES.

1,341,335. Specification of Letters Patent. Patented May 25, 1920.

Application filed July 31, 1918. Serial No. 247,607.

To all whom it may concern:

Be it known that I, GEORGE WILSON MacILWAINE, of Messrs. Palmers Shipbuilding & Iron Co. Ltd., Hebburn, in the county of Durham, England, have invented certain new and useful Improvements in the Supporting of Outside Staging Used During the Construction of Ships or other Structures, of which the following is a specification.

The invention relates to the supporting of staging outside ships or similar structures during construction by means of adjustable uprights and self-locking thwarts made of steel or other material.

The invention has for its object the provision of a device of this type, simple in form and effective in use, with permanent means of adjustment so that it can be easily adapted to suit any width of ship built.

The invention further insures greater safety in the support of the staging.

According to the invention, a single steel upright or pillar is so constructed that its base is secured to the ground, and yet can be made to slide in or out to suit the breadth of the ship. Also the upright or pillar is provided with slots such that the thwarts can be placed at any required height. The thwart is so made that when it is in position along with the stage planks it is properly secured; for this purpose, the thwart has a tongue piece or stop at each end which also keeps the stage planks in place.

In one form of construction made in accordance with this invention, the pillars are formed of channel irons suitably spaced apart connected together at the top and bottom, and at intervals throughout their length. The base is formed of plate iron stayed to the pillars by gusset plates and angle irons.

Slots are cut in the webs of the channel irons at intervals through which the thwarts formed of channel irons are passed, the upper flanges of the channel irons forming the thwarts. Small lugs are fitted at the ends of the channels to form stops to lock the thwart in position. Planks are placed from thwart to thwart to form a staging. The plank may overlap at the pillars.

The bases of the pillars rest on sliding strips laid on a concrete bed, the base plates of the pillars being held down by the upper flanges of channel irons embedded in the concrete base.

Referring to the drawings filed herewith:—

Figure 1 is a part front elevation of one form of staging made in accordance with this invention.

Fig. 2 is a part side elevation.

Fig. 3 is a section on line 3 3, Fig. 2.

a a are channel irons connected together by plates *b b b*. The channel irons are connected to the base plate *c* by gusset plates *d d*, *e e* and angle irons *f g* and *h*. The edges of the gussets are protected and strengthened by angle irons *j j*. The base plate is adapted to slide on plates *k k k* disposed on a bed of concrete *m* and is held down by channel irons *n n* bolted to the concrete. In the web of the channel irons *a a*, slots *a'* are cut, through which the thwarts formed of channel irons such as *p* are passed. The ends of the channel irons are filled with lugs *r r* to forms stops. Planks *s s* are placed from thwart to thwart to form a staging. Wedges may be driven between the base *c* and the channels *n n* to hold the pillars securely when desired.

What I claim and desire to secure by Letters Patent is:—

1. A staging comprising a pillar formed of two channel irons disposed vertically and a base to which the pillars are connected, slots in both said channel irons at intervals, thwarts adapted to pass through said slots, said thwarts being provided with lugs at each end whereby they are rendered self locking, said thwarts being beveled at one end to allow them to pass through the slots, said slots being substantially the same width and depth as the thwarts, the arrangement being such that the thwarts are rigid when in position and movable when required to be altered in respect to height.

2. A staging comprising a pillar formed of two channel irons disposed vertically and a base to which the pillars are connected, slots in both said channel irons at intervals, thwarts adapted to pass through said slots, said thwarts being provided with lugs at each end whereby they are rendered self locking, said thwarts being beveled at one end to allow them to pass through the slots, said slots being substantially the same width and depth as the thwarts, said base

being slidably mounted on a foundation, the arrangement being such that the thwarts are rigid when in position and movable when required to be altered in respect to height and the whole adapted to be slidden substantially as described.

3. A staging comprising steel pillars, each consisting of channel irons spaced apart and connected together, and provided with holes at intervals, and thwarts having lugs at each end adapted to be passed through said holes, said lugs serving to keep planks in place on the thwarts and to lock the thwarts in the pillars.

4. A staging comprising steel pillars, each consisting of channel irons spaced apart and connected together, and provided with holes at intervals, and thwarts having lugs at each end adapted to be passed through said holes, said lugs acting to keep planks in place on the thwarts and to lock the thwarts in the pillars, and a base for attachment upon a foundation.

5. A single steel pillar comprising channel irons connected together at the base, said channel irons having slots therein, in combination with thwarts of substantially the same size as said slots, the thwarts being provided with lugs or angle clips at both ends, and having a beveled portion at one end to allow the thwarts to pass through the slots, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE WILSON MACILWAINE.

Witnesses:
N. RUSSELL,
E. NIXON.