E. STRANDEN.

HANGING SCAFFOLD.

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955,011.

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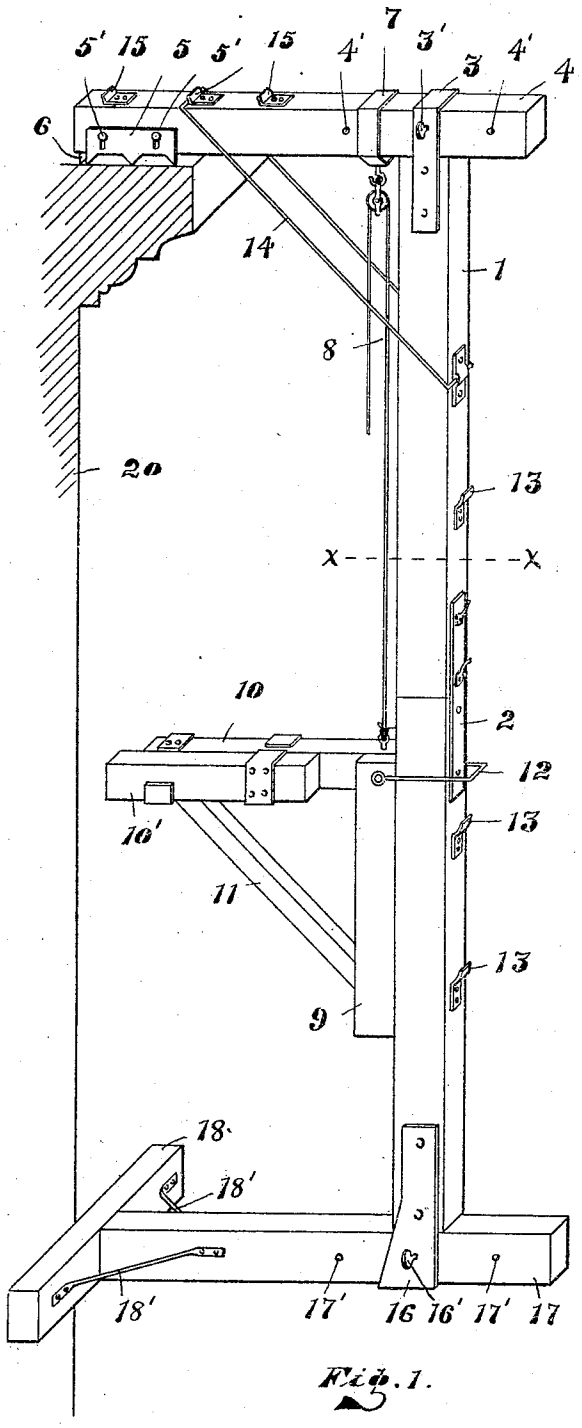

Fig. 1.

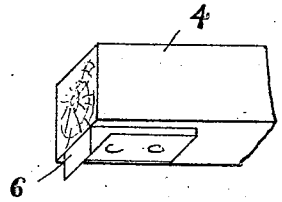

Fig. 3.

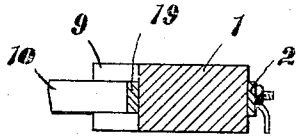

Fig. 2.

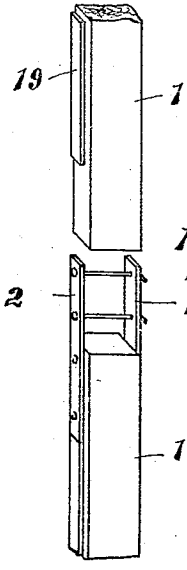

Fig. 4.

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HANGING SCAFFOLD.

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To all whom it may concern:

Be it known that I, EMIL STRANDEN, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Hanging Scaffolds, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in hanging scaffolds.

The object of my invention is to provide a scaffold of this character which can be suspended from most any form of building structure regardless of its height, and which is readily adjustable to fit such buildings.

Another object of my invention is to provide a more simple, cheap and efficient scaffold to accomplish the above result.

In the accompanying drawings—Figure 1 is a perspective view of one section of my improved scaffold showing it applied to a building. Fig. 2 is a horizontal sectional view of the mast taken on the line *x*—*x*, Fig. 1. Fig. 3 is a perspective view of the extreme inner end of the upper member of the scaffold section, and Fig. 4 is a perspective view of the removable coupling for the mast sections.

Referring now to the drawing, 1 represents the mast which may be made of any number of sections desired and united by means of suitable fish-plates 2, whereby the mast may be readily shortened or lengthened as necessary in the use of the scaffolding on buildings of different heights and when it is necessary to work at different points in respect to the top and bottom of the building. The upper end of the mast is provided with a strap or stirrup 3, through which passes the outer end of a beam 4, the said beam resting upon the upper end of the mast. The stirrup or strap 3 carries a removable pin or screw 3′, which enters openings 4′ in the beam 4, and whereby the beam is adjustably held by the mast and the mast may be adjusted to or from the building, as will be hereinafter more fully understood. The extreme inner end of the beam 4 is provided with an anti-slipping device to prevent it from slipping when applied to a structure. This anti-slipping device consists of a vertically adjustable serrated metal plate 5, attached to one side of the beam 4, by means of pins 5′. Securely attached to the under side of the end of the beam are inclined calked members 6, these attachments being such as to readily accommodate themselves to surfaces usually engaged in construction work, such as the plate of a wall, the gable end of a roof or the gutter of a roof.

The beam 4 intermediate its shod end and the mast, carries the slidable strap 7, from which is suspended a block and tackle 8 attached to the vertical operative platform bracket, and upon which the working platform is supported. While I have shown and described but a single scaffold frame, it must be understood that two or more of these frames are used together to support the working platform. The platform bracket is composed of an upright 9 carrying the central horizontal portion 10 and brace 11 connecting the upright 9 and horizontal portion 10, and from which structure it will be seen that the bracket may be readily raised and lowered by the block and tackle to any desired position. The horizontal-portion 10 of the bracket has slidably attached thereto in any suitable manner the extension 10′ so that the supporting surface of the bracket may be adjusted to suit the space between the mast 1 and the wall operated upon. The upright portion 9 of the bracket has a bail 12 pivoted thereto, and said bail surrounding the mast 1 and made to engage clips 13 carried by the outer face of the mast and adapted to relieve the block and tackle of all the strain of the bracket, after it has been adjusted and the weight applied.

Pivoted to the outer face of the mast adjacent its upper end is a bail 14 which has its upper end surrounding the beam 4, and in engagement with the clip 15 carried by the upper face of the beam. There are a number of these clips which allow the bail to brace the mast in the different adjusted position of the beam 4.

The foot of the mast 1 is provided with a stirrup 16 similar to stirrup 3 and through which passes the horizontal beam 17, having openings 17′ into which the pin or screw 16′ passes, and whereby said beam is held in its adjusted position. The outer end of the beam 17 is provided with a cross beam 18, rigidly held by the brace 18′ and adapted to bear against the side of the structure and brace the lower end of the mast. The inner edge of the mast 1 is provided with a tongue 19 traveling in a groove

in the upright 9 of the bracket and acts as a guide for the bracket as it is raised and lowered on the mast.

The building structure is designated by 20 and the shod portion of the beam 4 is placed upon the upper end of the structure, while the cross-beam 18 engages the wall of the structure and holds the mast in a vertical position. The platform bracket is adjusted up and down by the block and tackle 8, and when in its proper position the loop 12 is allowed to drop over one of the hooks 13, and the bracket is positively locked against downward movement. By means of the fish-plate connection 2, the mast 1 may be lengthened and shortened by inserting or removing a section in the mast and whereby the scaffold is designed to work on buildings of different heights and at different places along the vertical wall thereof.

Having thus described my invention what I claim is:

1. A suspended scaffolding support comprising, an upright member or mast having an adjustable cross-arm at its upper end for engagement with a structure, an adjustable brace at its lower end and a vertically adjustable suspended platform supporting bracket operative longitudinally the mast.

2. A suspended scaffolding support, comprising an upright member or mast having an adjustable cross-arm at its upper end, an adjustable brace carried by the lower end of the arm, a vertically adjustable bracket carried thereby and a block and tackle for vertically moving the bracket on the mast.

3. A suspended scaffolding support, comprising an upright member or mast having an adjustable cross-arm at its upper end, an adjustable brace carried by the lower end of said mast, a vertically movable bracket carried by the mast, means for vertically moving the bracket on the mast, and means for holding the bracket in its adjusted position on the mast.

4. A scaffolding support, comprising a sectional mast, an adjustable cross-arm carried by the upper end of the mast, an adjustable brace carried by the lower end of the arm, a bracket vertically movable upon said support and means for holding the bracket in its adjusted position.

5. A scaffold support, comprising a sectional mast, a cross-arm carried by the upper end of the mast, a brace carried by the lower end of the mast and a vertically movable platform bracket carried by the mast.

6. A scaffolding support, comprising a sectional mast, a cross-arm carried by the upper end of the mast, a brace carried by the lower end of the mast, a vertically movable platform bracket carried by the mast, and a bail carried by the bracket and surrounding the mast and adapted to lock the bracket in its adjusted position on the mast.

7. A scaffolding support, comprising a sectional mast, a cross-arm carried by the upper end of the mast, a brace carried by the lower end of the mast, a platform bracket vertically adjustable on the mast, a block and tackle supported by the cross-arm and secured to the bracket and means for positively locking the bracket to the mast.

8. A scaffolding support, comprising a sectional mast, a cross-arm carried by the upper end of the mast, a brace carried by the lower end of the mast, a platform bracket vertically adjustable on the mast, a block and tackle supported by the arm and secured to the bracket, clips carried by the outer face of the mast, and a loop pivoted to the bracket and surrounding the mast and adapted to hook upon one of said clips.

9. A scaffolding support, comprising a sectional mast secured together by fish plates, a stirrup carried by the upper end of the mast, an arm passing through said stirrup, clips carried by the upper face of said arm, a loop pivoted to the mast and surrounding the arm and in engagement with one of said clips, a stirrup carried by the lower end of the mast, a brace extending through said stirrup, and a vertically movable platform carried by the mast.

10. A scaffolding support comprising a sectional mast, a stirrup carried by the upper end of the mast, an arm extending through the stirrup, a pin extending through the stirrup and locking the arm, therein, a stirrup carried by the lower end of the mast, a brace in said stirrup, a pin passing through the stirrup and locking the brace therein and a vertically movable platform bracket carried by the mast intermediate the arm and brace.

11. A scaffolding support, comprising a mast, an adjustable arm carried by the upper end of the mast, an adjustable brace carried by the lower end of the mast, a platform bracket vertically adjustable on said mast, and an adjustable arm carried by the bracket.

12. A scaffolding support, comprising a mast, an adjustable arm carried by the upper end of the mast, an adjustable brace carried by the lower end of the mast, a platform bracket vertically adjustable on the mast, an adjustable member carried by the bracket and teeth carried by the inner end of the arm for engagement with the building structure.

13. A scaffold support, comprising a structural mast secured together by fish plates, a stirrup carried by the upper end of the mast, an arm horizontally movable in said stirrup, a removable pin passing through the stirrup and the arm, the inner lower face of the arm having teeth, clips carried by the upper face of the arm, a loop pivoted to the mast and surrounding the arm

and in engagement with one of said clips, a vertically disposed tongue carried by the inner face of the mast, a platform bracket having a groove to receive the tongue of the mast, a block and tackle connecting the arm and the bracket, an inwardly adjustable member carried by the bracket, clips carried by the outer face of the mast, a loop pivoted to the bracket and surrounding the mast and in engagement with one of said clips, and a horizontally adjustable brace carried by the lower end of the arm.

14. A suspended scaffold support, comprising an upright member or mast, an adjustable cross-arm at its upper end for engagement with a structure, and a base supporting the mast and adjustably forming a brace, and a vertically adjustable suspended platform supporting bracket vertically movable on the mast.

15. A suspended scaffold support, comprising an upright member or mast having an adjustable cross-arm at its upper end for engagement with a structure, a brace pivoted to the mast and having an adjustable connection with the cross arm, an adjustable brace and base at the lower end of the mast and a vertically adjustable suspended platform supporting bracket vertically movable on the mast.

16. A suspended scaffold support, comprising an upright member or mast, having an adjustable cross-arm at its upper end for engagement with the structure, a brace pivoted to the mast and having an adjustable connection with the cross arm, an adjustable brace supporting the lower end of the mast, and adapted to engage the structure, a vertically adjustable suspended platform supporting bracket, a horizontally adjustable arm carried by said bracket, and means for vertically moving the bracket on the mast.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL STRANDEN.

Witnesses:

NORMAN E. LAMOND,

S. GEO. STEVENS.