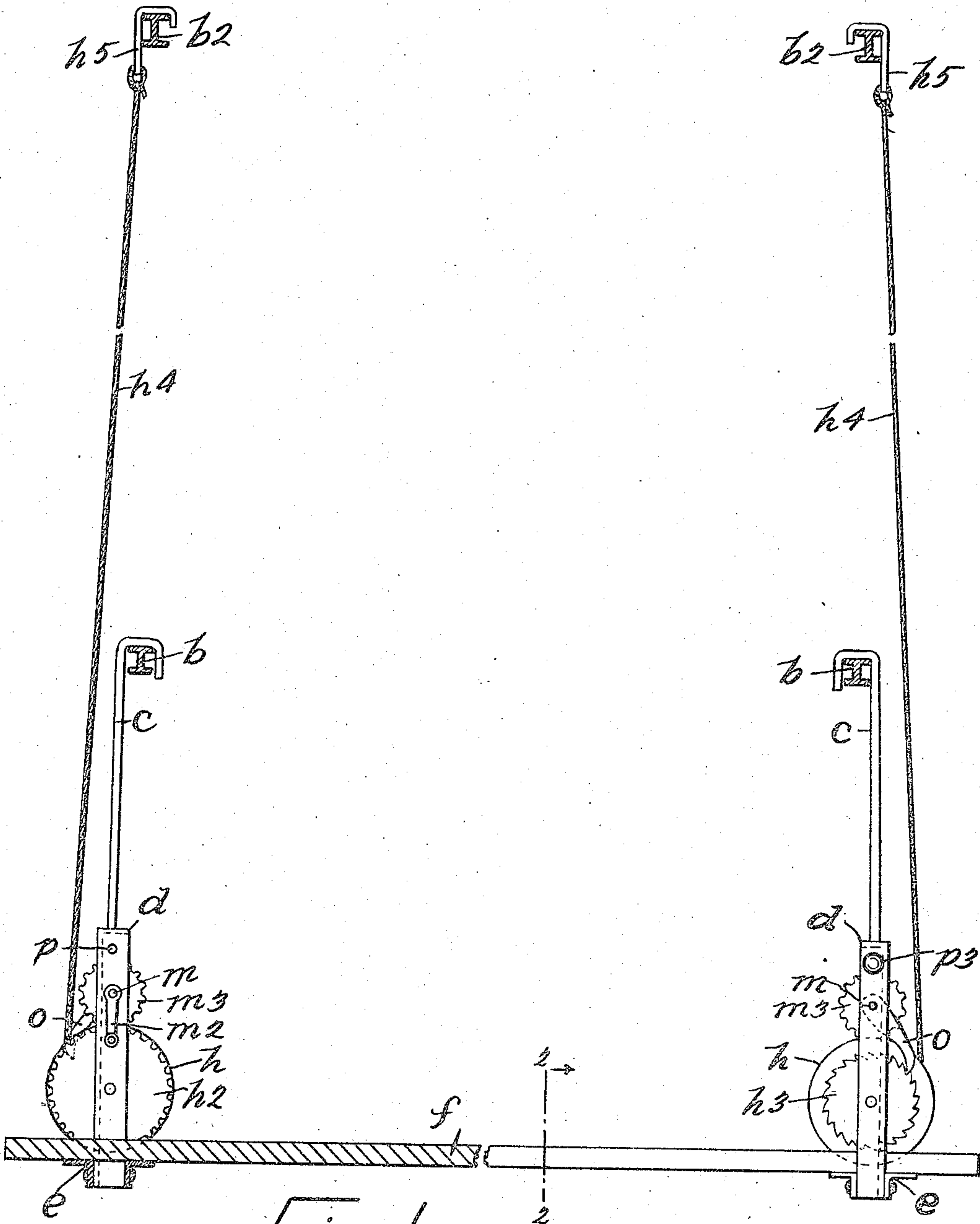


No. 854,959.

PATENTED MAY 28, 1907.

W. J. MURRAY.
ADJUSTABLE SCAFFOLD.
APPLICATION FILED NOV. 12, 1906.

2 SHEETS—SHEET 1.



WITNESSES

W. J. Murray

BY

Adam Bee

INVENTOR

William J. Murray

J. Chris Lavelle

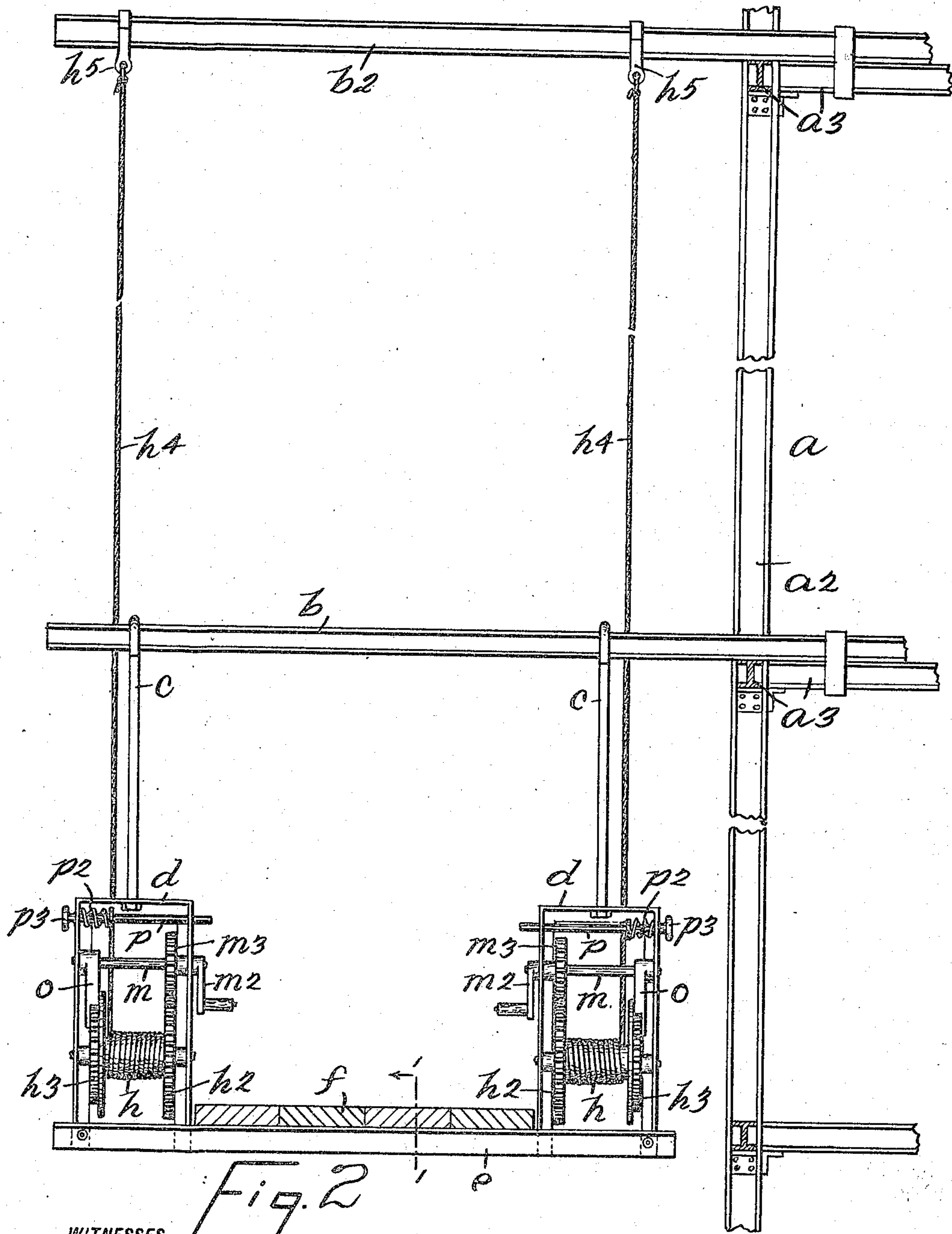
ATTORNEY

No. 854,959.

PATENTED MAY 28, 1907.

W. J. MURRAY.
ADJUSTABLE SCAFFOLD.
APPLICATION FILED NOV. 12, 1906.

2 SHEETS—SHEET 2.



WITNESSES
Amoulin

Adam Bee

BY

INVENTOR
William J. Murray

J. Chris Lassen
ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM J. MURRAY, OF NEW YORK, N. Y.

ADJUSTABLE SCAFFOLD.

No. 854,959.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed November 12, 1906. Serial No. 342,978.

To all whom it may concern:

Be it known that I, WILLIAM J. MURRAY, a citizen of the United States of America, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Adjustable Scaffolds, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to builder's scaffolds and the object thereof is to provide such a scaffold which will permit of adjustment at any height during the construction of a building or the repair thereof; a further object being to provide such a scaffold which may be readily moved from one position to another by the workmen thereon without interfering materially with the work being performed and a still further object being to provide a scaffold of this description in which different supports are employed and in which the shifting from one set of supports to another set may be accomplished without interfering, in any degree, with the workmen thereon or their work.

My invention is fully described in the following specification, of which the accompanying drawings form a part, in which the separate parts are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a longitudinal view of a scaffold constructed according to my invention and shown partly in a section taken on the line 1—1 of Fig. 2; and Fig. 2 is a view thereof taken on the line 2—2 of Fig. 1 and showing partially the building upon which it is mounted and the manner of mounting.

In the drawings forming a part of this application I have shown partially a building *a* of structural iron and in course of construction and which comprises the usual uprights *a*², and horizontal beams *a*³ and in the practice of my invention I provide out-riggers *b* and *b*² which are secured to the structure *a* in any desired manner but which may be readily removed from one position to another as the work progresses and it will be understood that in buildings already finished the out-riggers *b* and *b*² may be projected through windows or secured to the roof in any manner to make them safe.

In the position of the scaffold shown the out-riggers *b* have each two rods suspended therefrom said rods *c* being each secured, pref-

erably detachably, to a frame *d* composed preferably of angle-iron, said frames being arranged in pairs and each pair being secured to a horizontal beam *e*, said beams *e* serving as supports for the usual planking *f* composing the flooring of the scaffold.

Rotatably mounted in each of the frames *d* is a drum *h* provided with a gear-wheel *h*² and a ratchet-wheel *h*³ and a rope or cable *h*⁴ is wound upon the drums *h* and are each provided with a hook *h*⁵ or equivalent device on the outer ends thereof. Rotatably mounted in each of the frames *d*, over the drums *h*, is a shaft *m* provided with a crank-arm *m*² and with a pinion *m*³ engaging the gear-wheel *h*² and loosely mounted on the shaft *m* is a pawl *o* which engages the teeth of the ratchet-wheel *h*³ as clearly shown. Passing through the frames *d*, over the shafts *m*, is a rod *p* which is normally forced in the direction of the crank-arm *m*² by means of a spring *p*² and the rods *p* are each provided with a handle *p*³ by means of which they may be drawn backwardly and, if desired, devices to hold the rods *p* in their backward position may be provided, none however being shown as various simple devices for this purpose are known.

In the use of my invention, a set of out-riggers *b* is placed in position and the hooks *h*⁵ of the cables *h*⁴ are hung thereon and when the crank-arms *m*² are operated the cables are wound on the corresponding drums until the frames *d* are clear of the ground after which the planking *f* is placed in position and the scaffold is ready for use, and, as the work progresses, the scaffold is raised by degrees until the cables are almost entirely wound on the drums and the scaffold is in close proximity to the outriggers *b*. Before this position has been reached by the scaffold, however, workmen other than those upon the scaffold have arranged the set *b*² of the outriggers at a greater height after which the rods *c* are hooked to the out-riggers *b*, the cables unwound from the drums and the hooks thereof hung from the out-riggers *b*² and when the crank-arms are again operated the scaffold is supported from the out-riggers *b*² after which the out-riggers *b* are removed and secured at a still greater height than the out-riggers *b*² and ready for another shift. It will be seen that the work being done from the scaffold has not been interfered with in this shifting of supports and much saving of time results for the high priced mechanics for the reason that ordinary laborers can per-

form the said shifting and they may also raise the scaffold by degrees by means of the crank-arms m^2 , and it will be understood that the spring operated rods p are used as an additional preventive means of unwinding of the cables if the pawl o should fail to engage the ratchet-wheel properly.

Having fully described my invention, what I claim as new, with the reservation of such modifications as come within the scope of the following claims, is:—

The combination with two bars having means for detachably securing them to a building, of a platform, frames on said platform carrying means operable from the platform and having connections adapted to be connected to one of said bars for raising the platform, and supporting means on said frames extending above the said bar when the platform has been fully raised and adapt-

ed to detachably engage said bar and rigidly support the platform therefrom, whereby the platform may be connected to one bar by the raising means and raised to a level to engage the supporting means with said bar and may then remain supported by said bar while the other bar is placed at a higher level and the raising means secured to the latter, the bars thus becoming alternately points of raising support and of rigid support for the platform.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 8th day of November, 1906.

WILLIAM J. MURRAY.

Witnesses:

J. C. LARSEN,
H. MOHLAN.