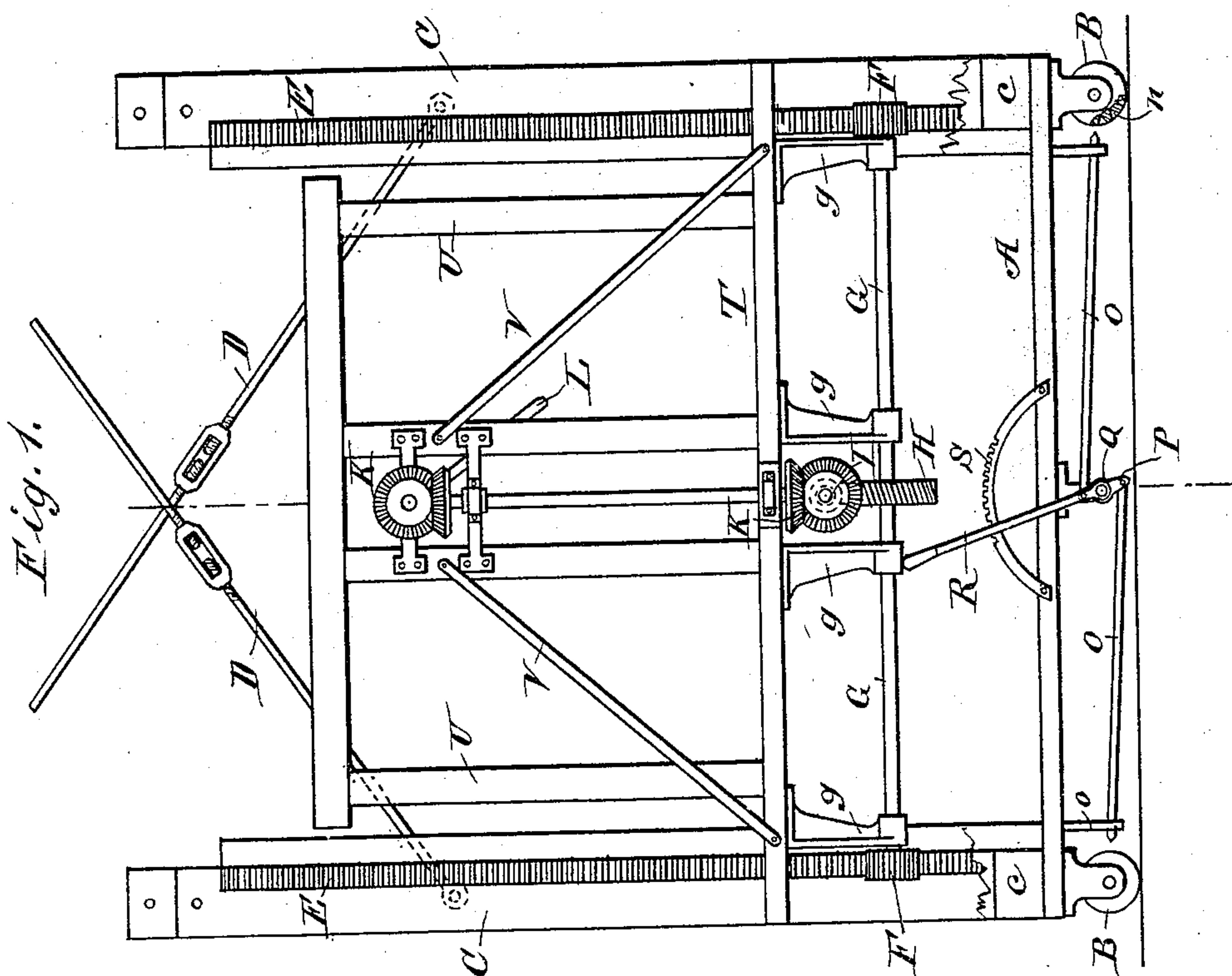
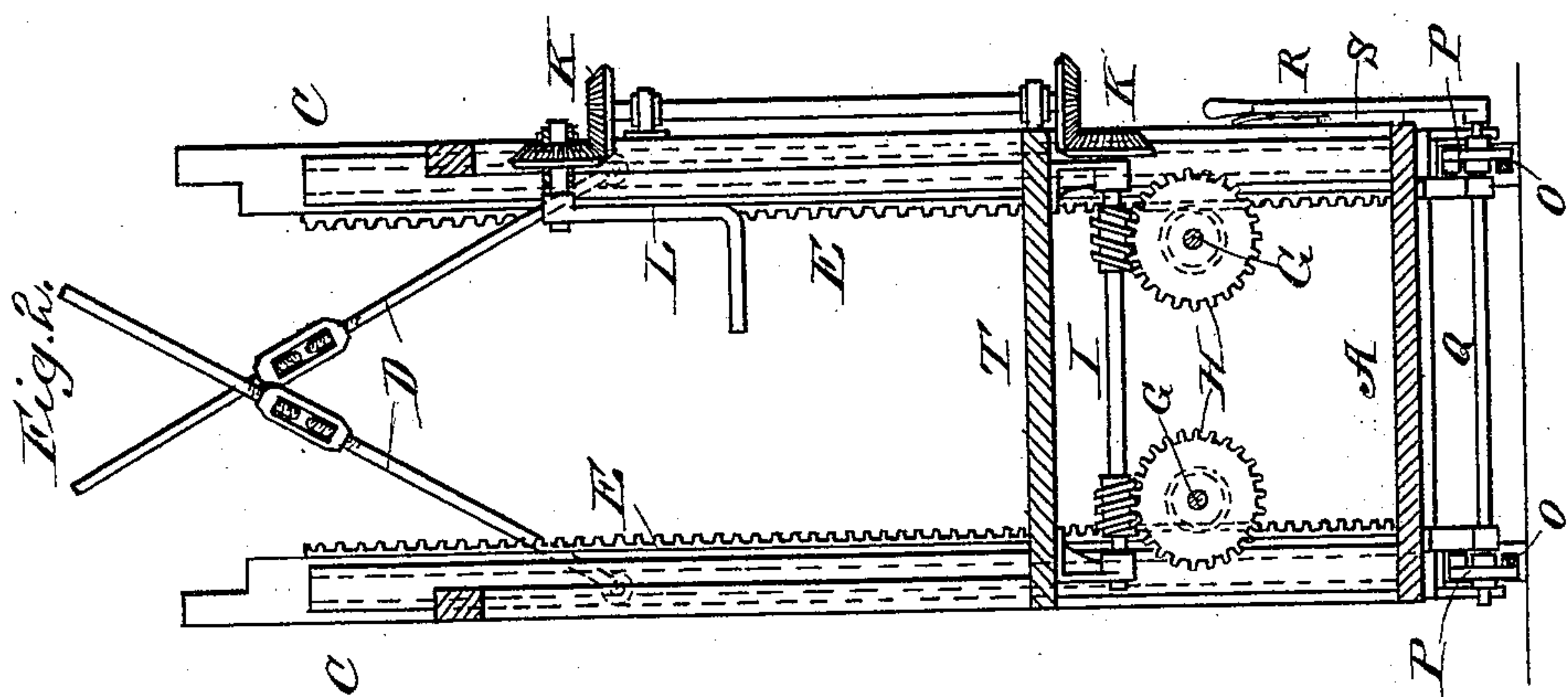


2 Sheets—Sheet 1.

No. 467,096.

Patented Jan. 12, 1892.



WITNESSES:

W. M. Twitchell  
to Sedgewick

*INVENTOR*

BY *J. Harper*  
*Munn & Co*  
ATTORNEYS

(No Model.)

2 Sheets—Sheet 2.

J. HARPER.  
PORTABLE SCAFFOLD.

No. 467,096.

Patented Jan. 12, 1892.

Fig. 3.

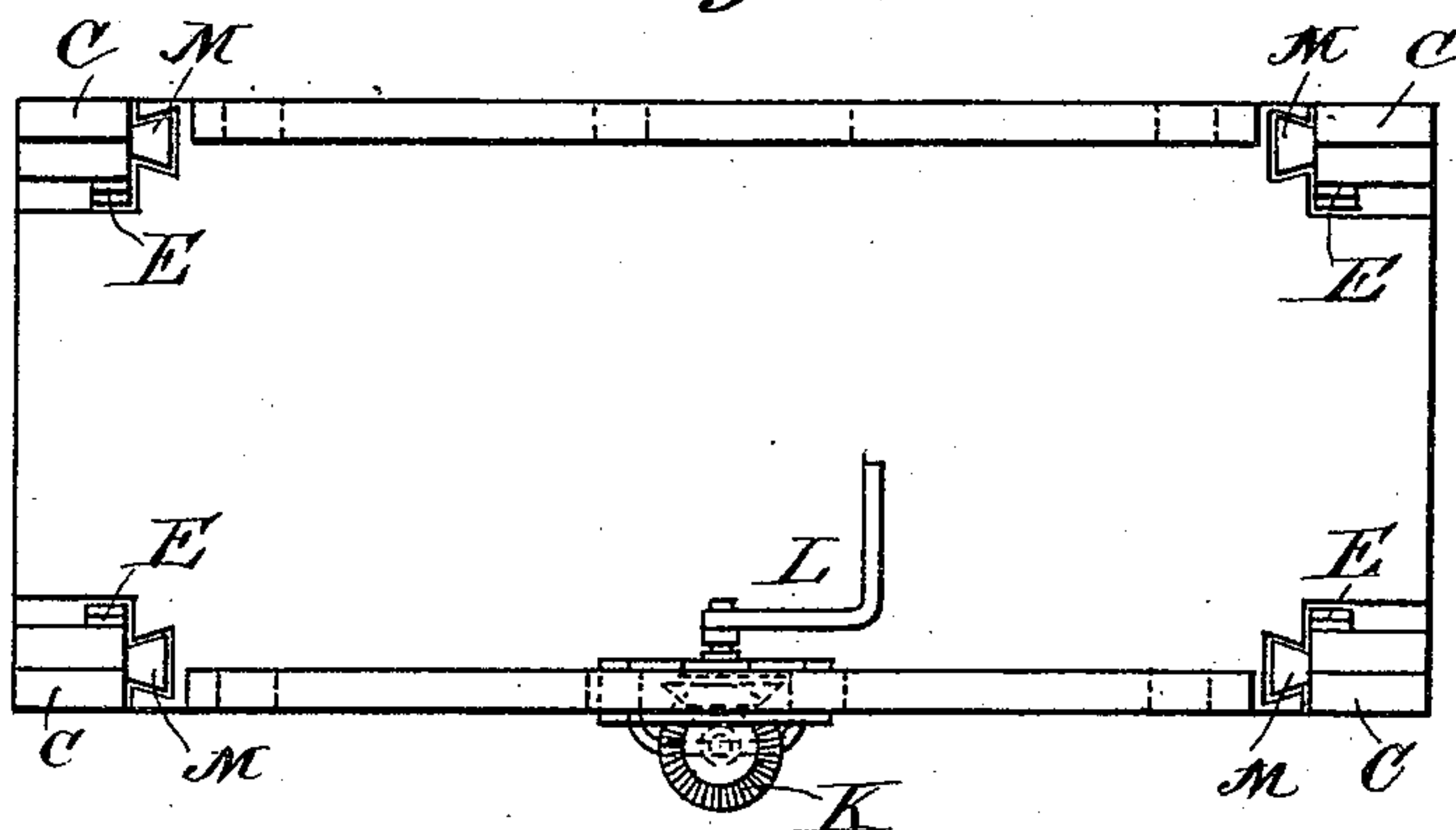
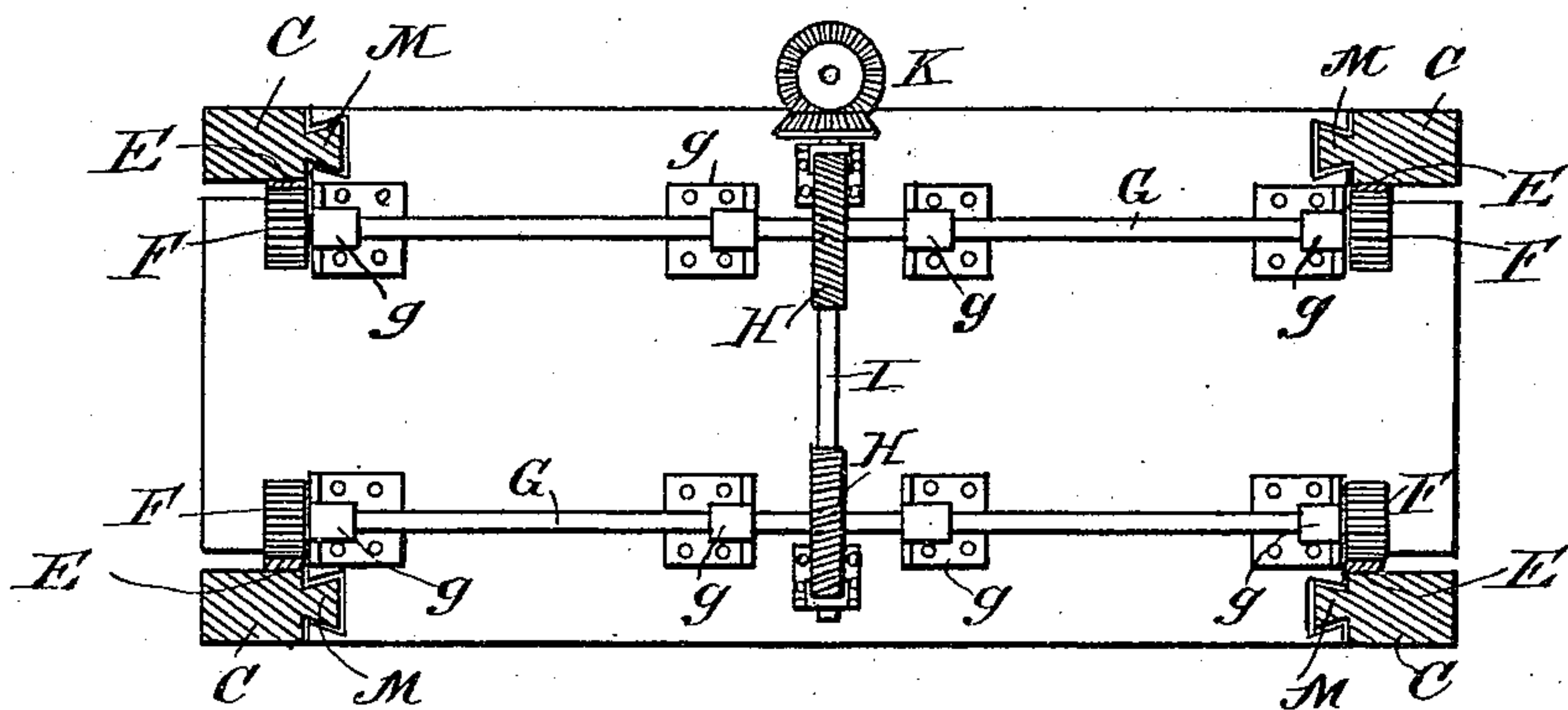


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JOHN HARPER, OF LONDON, ENGLAND.

## PORTABLE SCAFFOLD.

**SPECIFICATION** forming part of Letters Patent No. 467,096, dated January 12, 1892.

Application filed October 2, 1891. Serial No. 407,528. (No model.) Patented in England January 18, 1889, No. 977.

*To all whom it may concern:*

Be it known that I, JOHN HARPER, engineer, of 129 King's Road, Camden Town, London, England, have invented a new and useful and an Improved Portable Scaffold, (for which I have obtained Letters Patent in the following country, namely: Great Britain, dated January 18, 1889, No. 977,) of which the following is a full, clear, and exact description.

This invention relates to a portable scaffold particularly adapted for use in repairing, decorating, or cleaning buildings internally or externally, as well as for constructional purposes, in lieu of the ordinary cumbersome and expensive fixed scaffolding. This portable scaffolding is entirely self-contained and is constructed in sections, so that it may be adapted in height to the requirements of the work, and mounted on wheels in order that it may be easily moved from place to place, and it comprises a rising platform fitted to move up and down in the said framing, and provided with gear operated from the platform itself, whereby it may be raised to and maintained at the required elevation.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is an elevation of the lowermost section of the framing, partly broken away to show the rising cage or platform and its gearing. Fig. 2 is a vertical cross-section of same. Fig. 3 is a plan of the cage or platform, and Fig. 4 is an under side plan thereof.

The same letters of reference indicate like parts in all the figures.

The main framing comprises a bottom fixed platform A, mounted on wheels B, and four corner posts or columns C, fixed in shoes c, and constructed in lengths or sections halved together at their abutting ends and secured by bolts, the four columns being braced together by diagonal tie rods or cramps D, furnished with screw-couplings at the middle. Upon an inner face of each of the four posts C is fixed a rack E, these racks extending the whole height of the several lengths or sections, and with these racks gear-pinions F on

a pair of shafts G, mounted in brackets g, fixed to the under side of the floor T of the cage or platform, these shafts being geared by worm-gear H, with a transverse shaft I common to both, and operated through bevel-gear K from a winch-handle L, mounted at a convenient height to be worked by a person standing on the platform. Upon the other inner faces of the corner-posts C are guides M, of dovetail or T section, with which engage shoes on the ends of the platform, whereby all outward deflection of the corner-posts is prevented, and the pinions F are held in gear with the racks E. The traveling wheels B, on which the framing is mounted, have peripheral holes n, in which engage locking-bolts O, mounted to slide in guides o, fixed to the under side of the base-platform A, the bolts being in pairs, each pair being in alignment with a pair of the wheels B and being coupled to opposite arms P, fixed on a common rock-shaft Q, operated by a lever-handle R, engaging with a rack S for the purpose of holding the scaffold stationary when in use.

The cage comprises the platform T, uprights U, and cross-braces V, the platform only engaging with the guides M, and the horizontality of the platform being maintained by the coupling together of the two pairs of pinions F, while the fixity of the cage at any height to which it may be raised is insured by the pinions being always in gear with the racks and by the use of worm-gear, which prevents the cage descending by its own weight.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The herein-described portable scaffold, consisting of the upright framing composed of corner-posts constructed in lengths and erected on a wheeled base and braced together, as described, the said posts being provided with racks and guides, as described, in combination with a cage or platform adapted to be moved up and down the said guides, and provided with toothed gear engaging with the racks and coupled by worm-gear to in-

sure horizontality and fixity of the cage, as specified.

2. The combination, with the notched traveling wheels of the herein-described portable scaffold, of pairs of bolts adapted to engage therewith and coupled to and operated by a single hand-lever, as specified.

The foregoing specification of my improved

portable scaffold signed by me this 9th day of September, 1891.

JOHN HARPER.

Witnesses:

W. J. NORWOOD,

T. T. BARNES,

*Both of No. 17 Gracechurch Street, London,  
E. C., Notary's Clerks.*