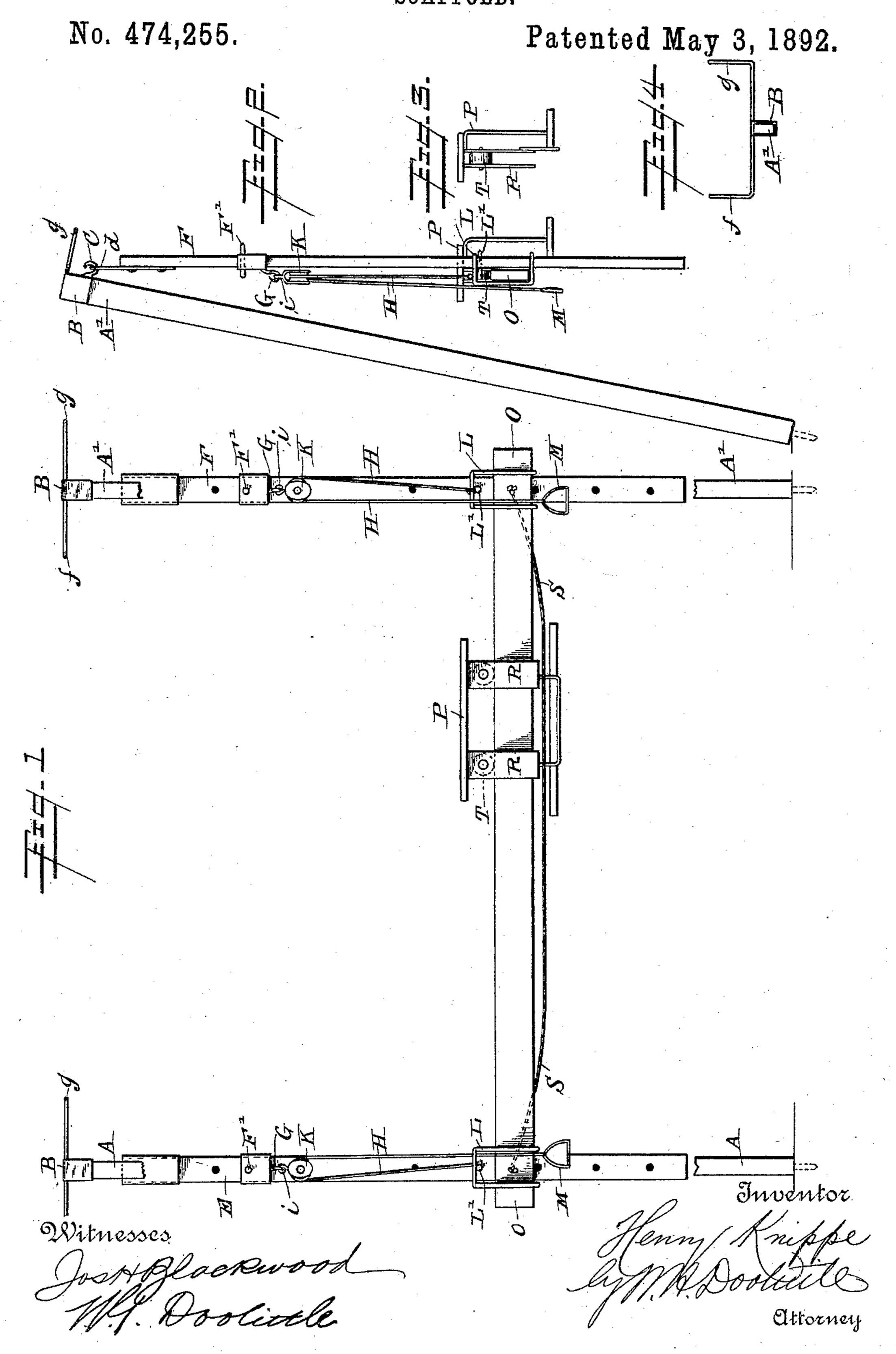
H. KNIPPE. SCAFFOLD.



## United States Patent Office.

## HENRY KNIPPE, OF POLAND, INDIANA.

## SCAFFOLD.

SPECIFICATION forming part of Letters Patent No. 474,255, dated May 3, 1892.

Application filed August 18, 1891. Serial No. 402,982. (No model.)

To all whom it may concern:

Be it known that I, Henry Knippe, a citizen of the United States, residing at Poland, in the county of Clay and State of Indiana, have invented certain new and useful Improvements in Scaffolds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in scaffolds; and it consists of the arrangement of parts, as hereinafter described and claimed. It is illustrated in the accompanying draw-

15 ings, in which—

Figure 1 is a front elevation; Fig. 2, a side elevation; Fig. 3, a detail of the seat or carriage; Fig. 4, a detail plan view of one of the castings used to support the uprights against

20 the building.

Referring to the drawings, A A' are side uprights of any desired height, on the top ends of which are secured square castings B, havings arms f g to support the uprights 25 against a building and to hold them a certain distance therefrom. Also secured to each of the castings B is a hook C, on which hooks are suspended two side standards E F, and for this purpose the latter are provided at 30 their upper ends with eyes d. On the standards E F are adjustable sliding blocks a, provided with hooks G. These blocks and hooks are raised or lowered and fixed at any desired height on the standards E F by means of a 35 pin L', passing through the block and also through holes in the standards.

K K are the pulleys, the sheaths of which are provided with a hook *i*, by which they are suspended from hooks G on the blocks.

end of which is secured a holder L and to the other end a stirrup M. Through the holders L is passed a cross-bar O. The holders L are adapted to be shifted to any desired height on the standards E F. When the desired height is determined, a pin L' is passed through the standard at each end, the outer end of the pin resting on the cross-bar O, and the holders rest on the pins.

S is a rope which runs parallel with the

cross-bar O throughout its whole length, and is for use when it is desired to move the carriage laterally to different positions on the cross-bar O.

P is a seat or carriage for a workman, and 55 is provided with hangers R to fit over the cross-piece O, and between these hangers are hung rollers T, which bear on the cross-piece. By this arrangement the seat is easily slid along on the cross-piece to one side or the 60 other or to any desired position between the standards by pulling upon the rope and without compelling the workmen to leave the same.

When the operator desires to raise the scaffold to any desired height, he puts his foot in the stirrup and throwing his weight on it raises the cross-bar on which the carriage is situated and puts a pin in its proper place in the standards. After adjusting one end the 7c operator pulls his carriage to the opposite side of the scaffold and adjusts that end in the same way. Thus a workman can ascend to the top of the building without getting off the scaffold.

What I claim is—

In a scaffold, the combination of the uprights provided at their upper ends with castings, said castings having arms to support the uprights against a building, with the side 80 standards having holes and pins and provided at their upper ends with eyes to engage with hooks on the said uprights, a cross-piece, and holders embracing said cross-piece and side standards, an adjustable sliding block pro- 85: vided with a pulley on each standard, and a cord over said pulley, to one end of which is connected a holder and to the other end a stirrup, the sliding carriage provided with rollers mounted on said cross-piece, and a 90 rope connected to the cross-piece for pulling the carriage along the cross-piece, substantially as described.

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

HENRY KNIPPE.

Witnesses:

JOHN H. SCHROER, WILLIAM F. KEISER.