## J. CARLILE. Floor-Clamps.

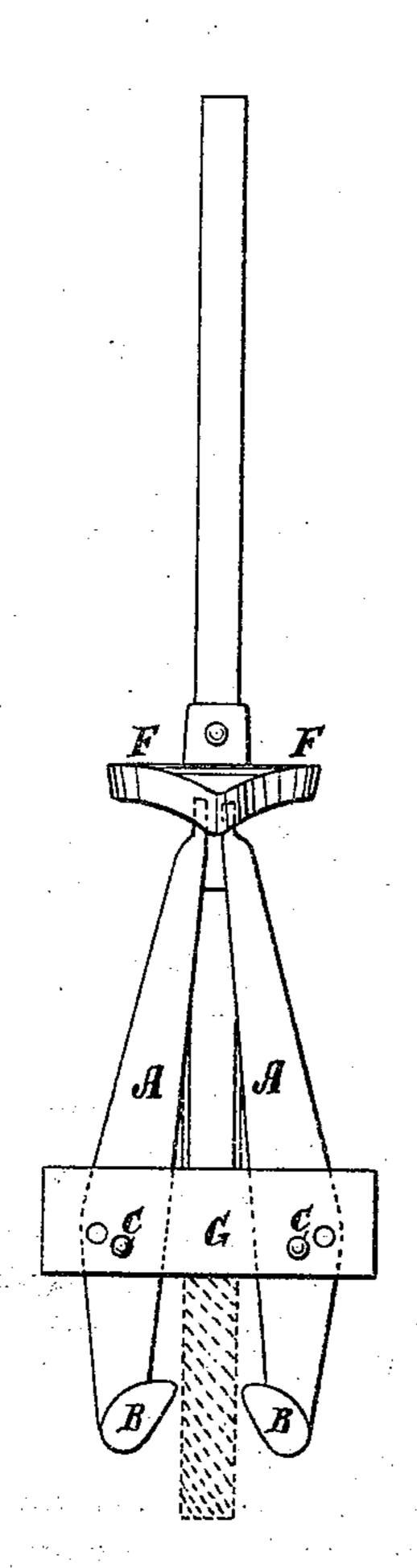
No.153,238.

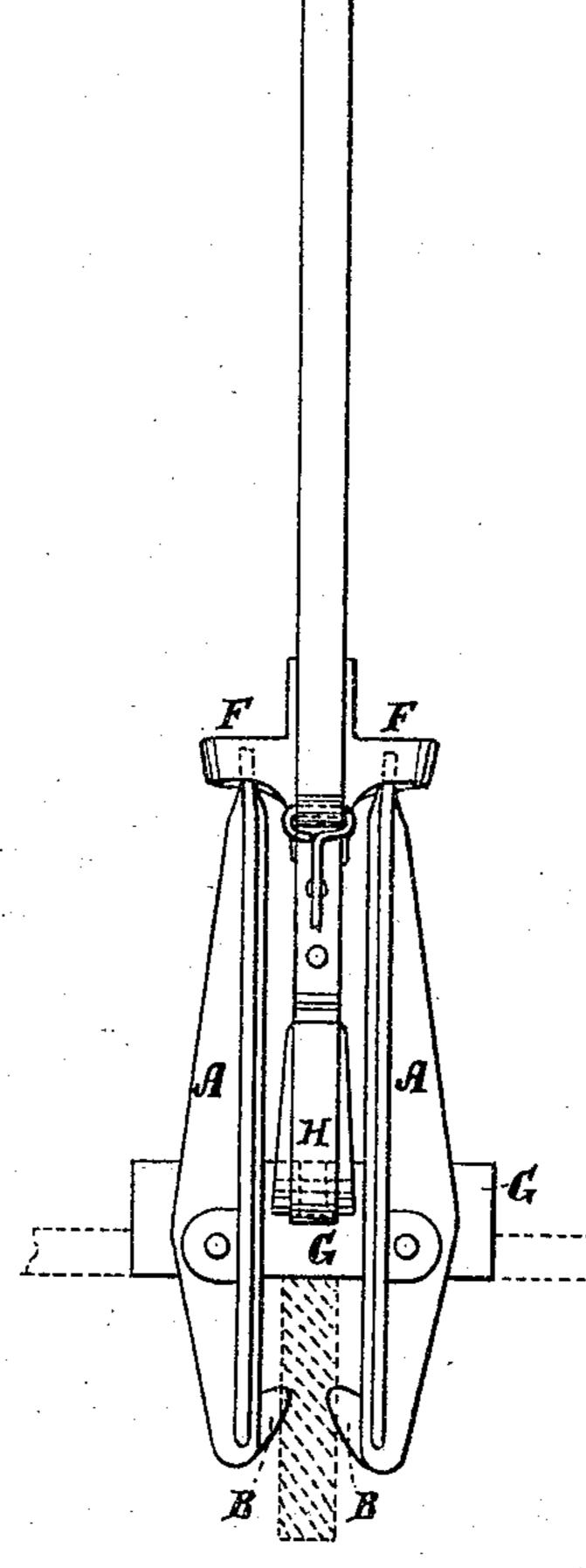
Patented July 21, 1874.

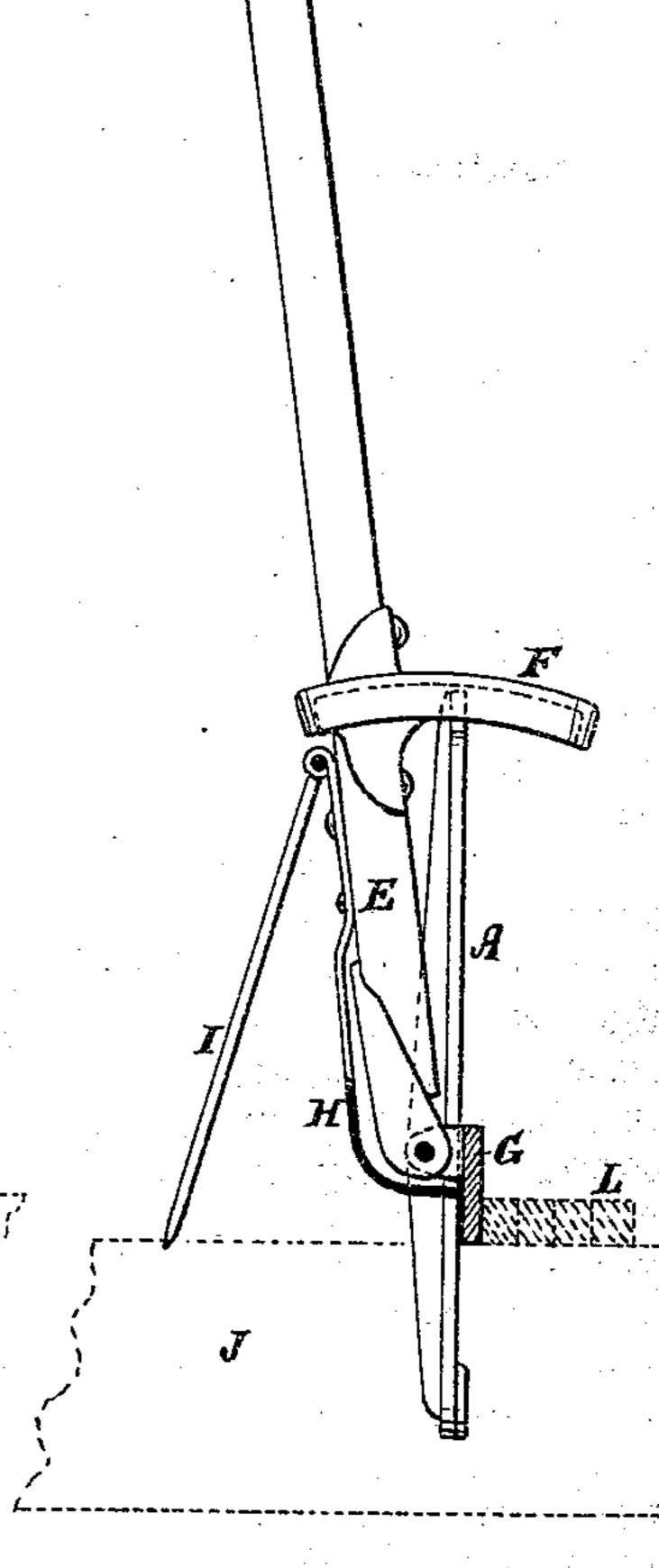
Jig.1.

Jig. 2.

Jig.3.







Jig. 4.

WITNESSES:

A Bennemen Tonf Estquier E F

INVENTOR:

RY

Municipal Lander & ATTORNEYS.

THE GRAPHIC CO. PHOTO-LITH.39& 41 PARK PLACE, N.Y.

## UNITED STATES PATENT OFFICE.

JAMES CARLILE, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO HIM-SELF AND J. H. HASKINS, OF SAME PLACE.

## IMPROVEMENT IN FLOOR-CLAMPS.

Specification forming part of Letters Patent No. 153,238, dated July 21, 1871; application filed May 16, 1874.

To all whom it may concern:

Be it known that I, JAMES CARLILE, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and Improved Floor-Clamp, of which the fol-

lowing is a specification:

My invention consists of a pair of gripinglevers pivoted to a hand-lever, or to a pressure plate or board on it, for acting upon the edge of the flooring, and arranged in connection with cam-grooves in a plate also attached to the lever, so that the gripers being placed on the joist with the points near the lower edge, and the hand-lever above, with the pressure-plate against the flooring, and the hand-lever being pressed forward in the direction to clamp the flooring together, such action will cause the gripers to bind firmly against the joist, and hold for a fulcrum for the hand-lever, and will let go and release the hand-lever when the latter is moved back after pressing the flooring.

Figure 1 is a front elevation of my improved floor-clamp, showing the position of the griping-jaws when the clamp is applied to the joist. Fig. 2 is a rear elevation, showing the position when clamping up the flooring. Fig. 3 is a side elevation, showing the clamp in the act of clamping the flooring; and Fig. 4 is a section of the hand-lever and plan of the camplate for causing the griping-lever to gripe the joists when the hand-lever is pressed for-

ward.

Similar letters of reference indicate corre-

sponding parts.

A represents the griping-levers. They have a blunt point, B, near the lower end, pointing toward each other, and are pivoted at C to a pressure plate or bar, G, so as to swing toward and from each other in the same plane, and at

the upper end they are fixed to work in the inclined slots or cams D in a horizontal camplate, F, attached to the hand-lever E. The lever E is pivoted at the lower end to the pressure-plate G, and has a spring, H, connecting it with the plate, and set so that it tends to keep the hand-lever in the plane of the griping-levers and the pressure-plate. A holding pawl or brace, I, is pivoted to the back of the hand-lever to catch in the joist J and hold the lever when pulled forward to clamp the flooring. L represents the flooring to be clamped together.

It will be seen that this clamp will require no other fixing than to hold it over the joist at the place where it is to be attached, drop it down with a griping-jaw on each side of the joist until the pressure-plate strikes the top, and then force it forward against the flooring; and that it releases itself by the back movement of the lever for removing the clamp from

the front of the flooring.

The spring is not an essential part of the contrivance, and may be dispensed with; but I prefer to use it.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent—

1. The combination of griping - levers A, pressure-plate G, hand-lever E, and cam-plate

F, all substantially as specified.

2. The combination of griping-levers A, jaws B, pressure-plate G, hand-lever E, camplate F, and spring H, substantially as specified.

JAMES CARLILE.

Witnesses:

E. B. MAYNARD, FRANK G. LEWIS.