

No. 624,037.

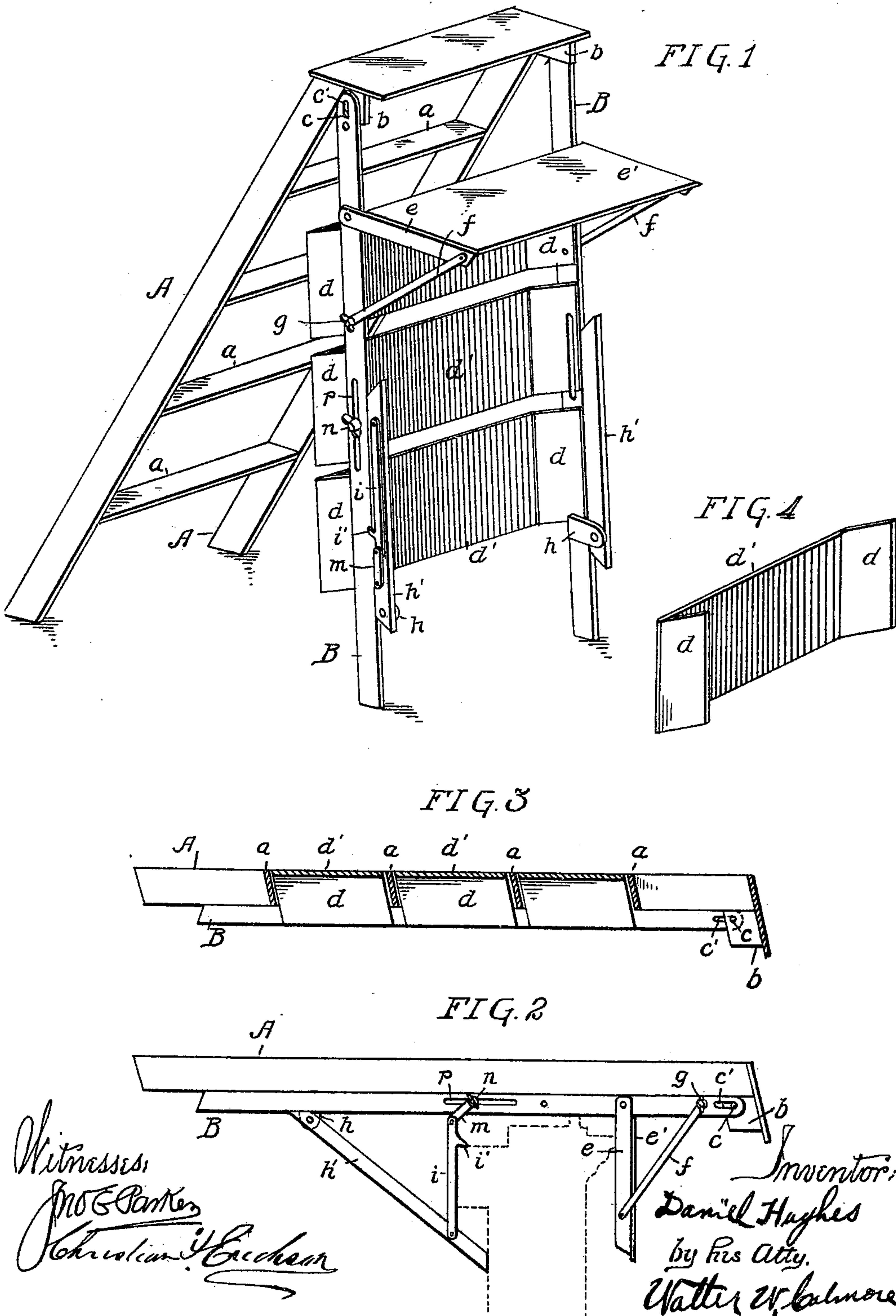
Patented May 2, 1899.

D. HUGHES.

COMBINED STEP LADDER AND JACK.

(Application filed Aug. 23, 1898.)

(No Model.)



UNITED STATES PATENT OFFICE.

DANIEL HUGHES, OF PHILADELPHIA, PENNSYLVANIA.

COMBINED STEP-LADDER AND JACK.

SPECIFICATION forming part of Letters Patent No. 624,037, dated May 2, 1899.

Application filed August 23, 1898. Serial No. 689,339. (No model.)

To all whom it may concern:

Be it known that I, DANIEL HUGHES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Step-Ladder and Jack, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to construct an improved form of combined step-ladder and jack which may also, when occasion requires, serve as a bench, the invention residing principally in the construction of the parts, which enables the user to readily convert the article from one use to another.

In the accompanying drawings, Figure 1 is a perspective view of a combined step-ladder and jack constructed in accordance with my invention, illustrating the position of the parts when in use as a step-ladder. Fig. 2 is a side view with the parts adjusted to form a jack. Fig. 3 is a longitudinal sectional view of a portion of the same, and Fig. 4 is a detached perspective view of a detail of construction.

Referring to the drawings, A represents the sides of the ladder, *a* the usual steps, and B the rear supporting-legs, pivoted to extensions *b* of the ladder sides. The extensions are provided with pins *c*, which fit into slots *c'* in the legs, to permit a slight longitudinal movement of the latter for a purpose described hereinafter.

On the inner sides of the legs B are secured projecting plates *d*, and extending across the ladder and secured to these plates are flat plates *d'* of a width about equal to the distance between the steps of the ladder and adapted to fit between the same when the device is used as a jack or bench.

Pivoted to the legs B near their upper ends are bars *e*, carrying a platform *e'*, such as are common to step-ladders; but in the present instance this platform is supported by diagonal brace-bars *f*, which may be secured to the legs either in the position shown in Fig. 1 or in that shown in Fig. 2, a thumb-screw *g* being employed in order to facilitate ready adjustment to either position.

To the inner sides of the legs B are secured pivot-lugs *h*, to which are pivoted jack-legs *h'*,

the opposite ends of which are inclined, as shown, so that they may snugly fit against the rear of the legs and the outer face of a wall below a window-sill, as shown in Fig. 2. To these legs are pivoted bars *i*, connected at their outer ends to links *m*, which are held to the supporting-legs by thumb-screws *n*, the latter being adjustable in slots *p* in the sides of the legs, so that by adjusting their positions the lower ends of the jack-legs can be raised and lowered to suit the wall or window. The bars *i* are hooked at *i'*, so that they may engage on the window-ledge, as shown in Fig. 2.

When the device is to be used as a ladder, the parts are adjusted as shown in Fig. 1. To form a jack, the bars *f* are adjusted to the position shown in Fig. 2. The parts A and B of the device are pressed flat together, so that the plates *d'* will enter between the steps, this being permitted by the slotted connection *cc'*, which allows of slight longitudinal movement of the part B, so that said plates *d'* may enter between the inclined steps. The plates *d'* will form a flat level surface, as shown in Fig. 3, on which a man may stand. The jack-legs *h'* are then turned down and the hooks *i* engage on the window-ledge. The device is then locked in position by properly adjusting the screw *n* along the slot *p*.

When used as a bench, the parts are arranged as for a jack, and the legs *h'* and bars *e* form supports for the said bench.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, in a combined step-ladder and jack, of the ladder sides, the steps, the legs pivoted to said sides, plates carried by said legs and adapted to fit between the steps when the device is folded, a platform pivoted near the top of the legs, and a brace pivoted to said platform and adapted to be secured to the legs at a point either above or below said platform, substantially as specified.

2. In a combined step-ladder and jack, the combination of the ladder sides, the steps, the rear supporting-legs having a pin-and-slot connection with the sides, plates carried by said legs and adapted to fit between the ladder-steps, a platform carried by said legs,

jack-legs pivoted to the supporting-legs, and hook-bars carried by said jack-legs, substantially as specified.

3. The combination of the ladder sides Λ ,
5 the steps a , the legs B having slotted connection with the ladder sides, plates d secured to the legs B, plate d' carried by the plates d and adapted to enter between the ladder-steps, bars e and devices for supporting the same,
10 the jack-legs h' pivoted to the legs B, hook-

bars i connected to said jack-legs, links m pivoted to said hook-bars, and an adjustable screw n for confining said links, substantially as specified.

In testimony whereof I affix my signature 15
in the presence of two witnesses.

DANIEL HUGHES.

Witnesses:

DAVID M. RICHARDS,
ISAAC C. YOCUM.