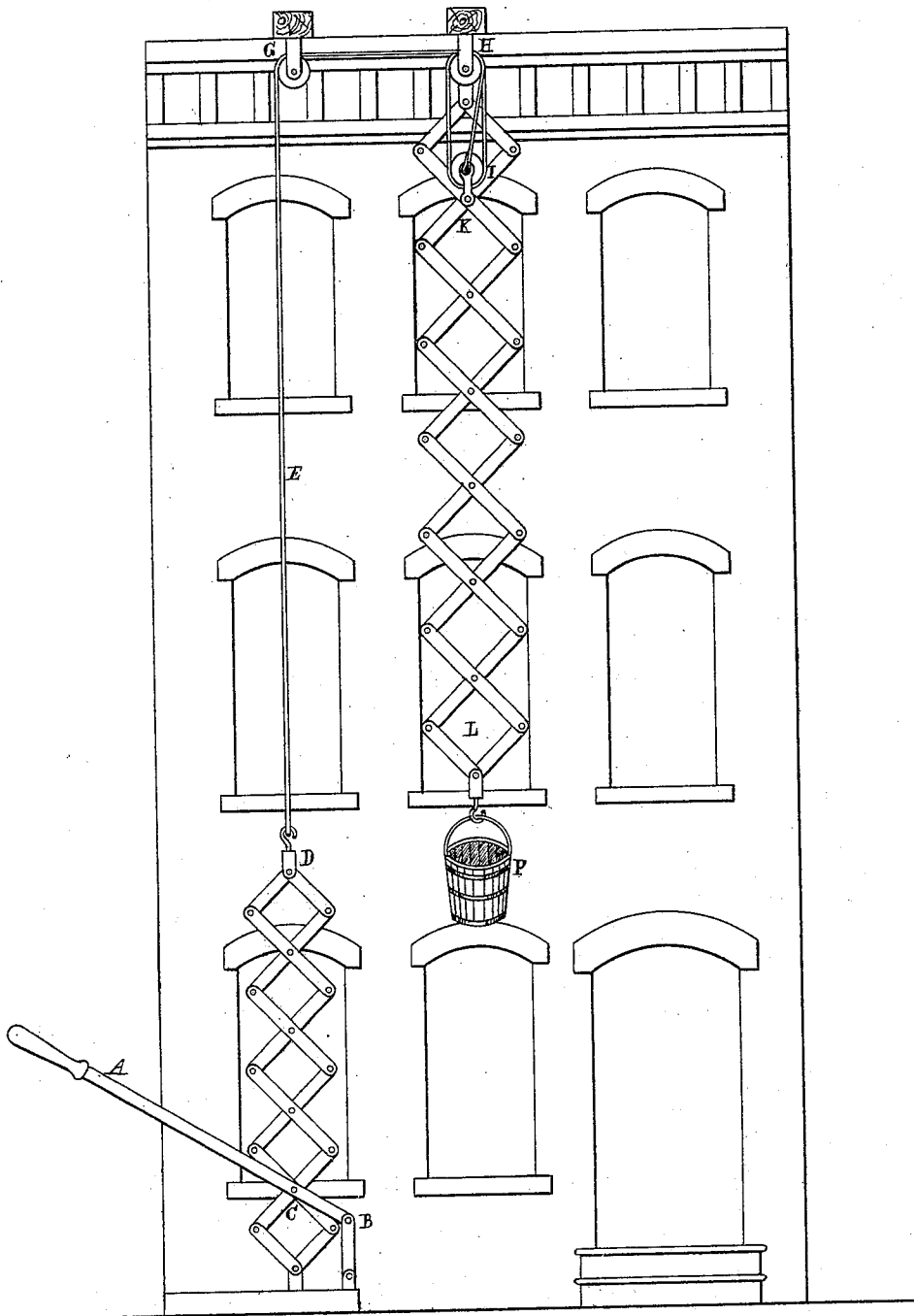


N. J. Wilkinson,

Elevator.

No. 102,345.

Patented Apr. 26. 1870.



Witnesses.

Thomas S. Crane

Charles H. Rogers

Inventor. N. J. Wilkinson

United States Patent Office.

NELSON J. WILKINSON, OF KALAMAZOO, MICHIGAN.

Letters Patent No. 102,345, dated April 26, 1870.

IMPROVEMENT IN HOISTING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, NELSON J. WILKINSON, of Kalamazoo, Michigan, have invented a new and useful Machine for Hoisting Purposes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and the letters of reference marked thereon.

The nature of my invention consists in so combining the power of the ordinary lever and fixed and movable pulleys with a lazy-tongs, that a quick, and at the same time powerful motion is produced.

Such a motion is greatly needed for hoisting purposes, and is especially adapted for lifting such weights as water from a well, mason's materials from the ground to the different stories of a building, merchandise in warehouses, and all light weights that need to be handled rapidly, and are at present carried by hand, like a hod of bricks, or hoisted by a windlass, like water and merchandise.

The nature of my invention is plainly shown in the drawing, which represents the hoisting-apparatus attached to the front of a dwelling, and in use lifting a bucket of mortar to the upper story window for the purpose of plastering walls inside.

The lever A is attached at one end to a link, B, which serves as a fulcrum; and at the point C to the first cross-joint of the "lazy-tongs" C D.

By depressing the outer end of the lever A the "lazy-tongs" C D are drawn downward and closed, the short motion of the lever at C sufficing to produce a great motion at D, depending upon the number of cross-bars in the lazy-tongs.

The motion produced at D pulls the rope E, and this rope being carried over the fixed pulleys G and H, and movable pulley I, operates to close the lazy-tongs K L, and raise the bucket P.

The action of this machine is so evident that any

one who examines the motion of a lazy-tongs will understand the results produced by my arrangement.

The lever I employ as a substitute for the crank employed in all ordinary hoisting-windlasses; and the rope and pulleys are necessary to adapt the device for convenient use in different localities.

The three mechanical elements are thus made to furnish a simple and efficient means for rapid elevation.

For raising a well-bucket, the lever A, lazy-tongs C D, and rope E might suffice if the well were shallow.

For raising meat in a slaughter-house, shingles, and other building materials, packages and boxes in stores, and many other purposes, arrangements differing a little from that shown in the drawing may be required, but enough has been said to enable any ordinary mechanic to build and apply the machine for any purpose.

In practice I find that the lazy-tongs can be made of wood very cheaply, and strong enough for any purpose.

And, for raising heavy weights, I find it necessary to employ pulley-blocks with a number of sheaves, so as to multiply the number of ropes in the last block, and increase the power applied to close the lazy-tongs that carries the load.

Claim.

What I therefore claim, and desire to secure by Letters Patent, is—

The improved hoister described, having in combination, the lever, lazy-tongs, rope and pulleys.

NELSON J. WILKINSON.

Witnesses:

THOS. S. CRANE,
CHARLES H. AGENS.