J. J. HENNESSY.

Lumber-Hoist.

No. 223,227. Patented Jan. 6, 1880.

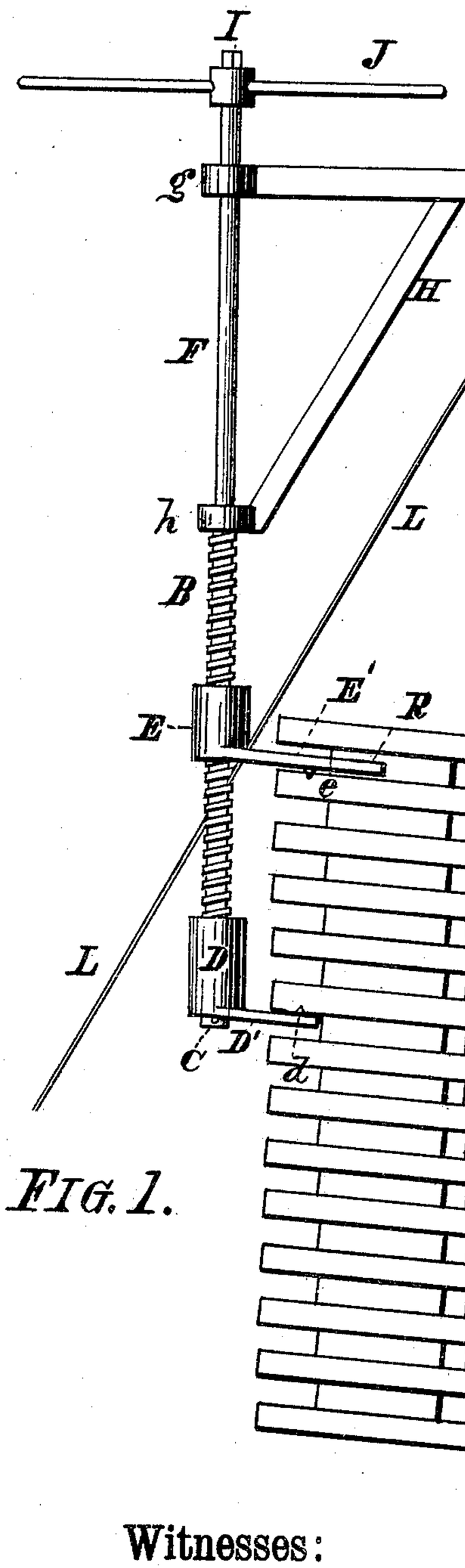

FIG. 1.

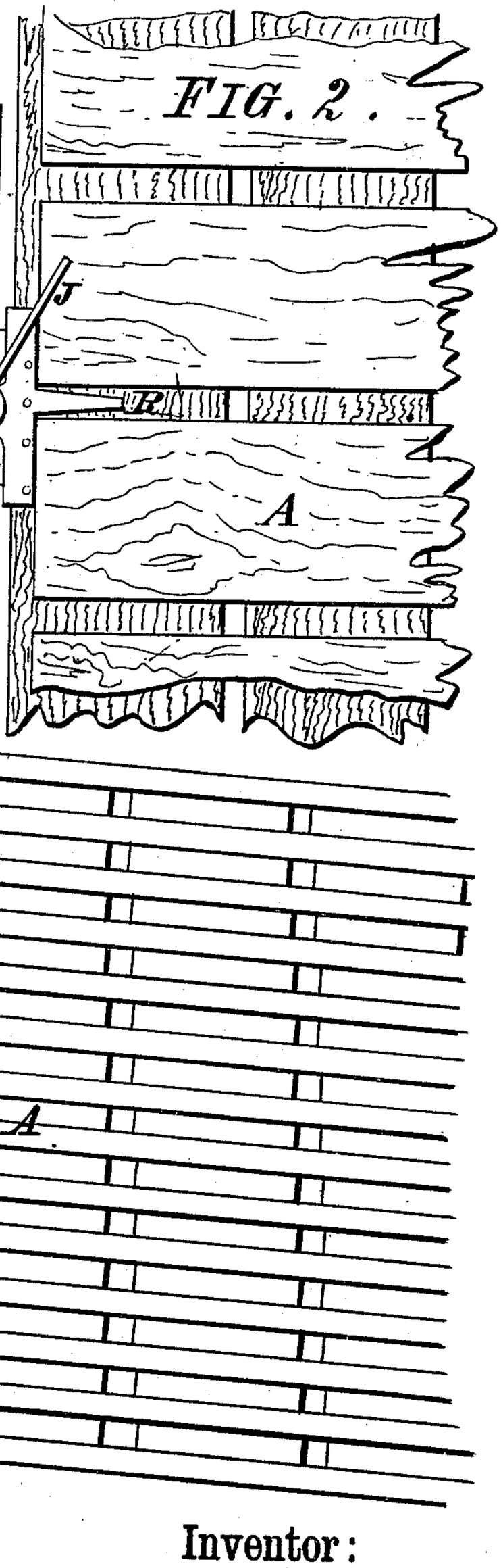

FIG. 2.

Witnesses:

Michael J Stark

Jno. Stark.

Inventor:

James J. Hennessy

by Michael J. Stark

Attorney.

UNITED STATES PATENT OFFICE.

JAMES J. HENNESSY, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO GEORGE F. FITZMYER, OF SAME PLACE.

LUMBER-HOIST.

SPECIFICATION forming part of Letters Patent No. 223,227, dated January 6, 1880.

Application filed June 18, 1879.

To all whom it may concern:

Be it known that I, JAMES J. HENNESSY, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on a Lumber-Hoist; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to lumber-hoists; and it consists in the peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

The object of my present invention is the production of a cheap and convenient device for hoisting lumber to be stacked. Heretofore such lumber was elevated almost entirely without machinery or mechanical devices, by lifting the boards, planks, &c., by hand, which is a very laborious method, and far more costly than necessary, particularly when lumber is stacked very high, or say from twenty to forty feet. In such piles it was customary to build platforms by allowing some of the planks, &c., to project sufficiently to enable a laborer to stand upon the projecting portion, and then lift the lumber to the hand on the top of the pile distributing the same. This troublesome method of stacking lumber I propose to avoid, and to adopt one more convenient and time and labor saving, by employing a hoisting device constructed substantially as shown in the drawings already mentioned, in which—

Figure 1 is a front elevation of a portion of piled lumber, showing my hoisting device in position. Fig. 2 is a plan of the device shown in Fig. 1.

This device is readily applied to any stack, can be used for piling any sized lumber, and can, furthermore, be manufactured and sold at a comparatively low figure.

In these drawings, the letter A designates a pile of lumber stacked, but yet to be increased in height. B is a screw-spindle, of proper length, operating with its lower plain end or pivot, C, within a socket, D, and with its screw-threaded part in a nut, E. The upper end of this screw-spindle is reduced in size at F, and carries a crane consisting of the horizontal arm G and the inclined brace H, both provided with eyes *g h*, respectively, by means of which they are enabled to revolve upon the reduced part F. The upper extremity of said spindle B is shaped into a square or octagonal form, I, and fitted with a wrench, J, by means of which said spindle is turned, as hereinafter to be referred to.

From the crane is suspended a pulley-block, K, over which the hoisting-rope L is passed. To this rope is attached a pair of tong-shaped grapples consisting of the jaws N N′, the lower extremity of which is fitted with revolving disks O O′, having projecting points *p* in their opposite faces.

The clamping-socket D and the screw-socket E have plates D′ E′, respectively, provided with teeth *d e* in their opposite faces, by means of which said plates retain a secure hold upon the lumber to which they are affixed.

The spindle B revolves with its pivot C in the socket D, and with its screw-threaded portion in the nut E, whereby this latter is caused to move to or away from said socket D, according to the direction in which said screw is turned by the wrench J. The plates D′ E′ being formed integral with said socket and nut, it is evident that these plates can be clamped to the lumber A, already stacked, and thus securely hold the spindle B, to be securely held in an upright position, the apparatus being always secured to some of the upper courses or layers of lumber, to allow the crane to operate with perfect freedom.

To stack lumber, the lower courses are piled in the usual manner, and to a convenient height to apply my hoisting apparatus. This being fixed in position, the tong-shaped grapples are lowered and a plank, board, &c., placed between them, when the teeth *p p* will securely hold said plank, &c., which may now be elevated. The plates O O′, revolving upon the lower ends of the jaws N N′, allow the lumber being handled with the greatest freedom, and in a manner much easier and more satisfactory and in less time than with any other device or by any other method with which I am acquainted.

I prefer to construct this apparatus entirely of iron, in a strong and substantial manner, and it can be manufactured and sold at a low figure, owing to its simplicity of construction and fewness of parts.

I have provided the plate E′ with a spur, R, which engages two adjoining pieces of lumber, and thereby steadies the apparatus laterally, in addition to the teeth *e* on said plate E′, particularly when the apparatus is being placed in position and the planks, &c., intervening. The plates D′ E′ have not yet been sufficiently clamped to resist the turning of the nut-plate E′ likely to take place by the action of the screw-spindle B.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent of the United States—

1. In a lumber-hoist constructed to be temporarily affixed to a pile of lumber to be increased in height, a crane having clamping-plates constructed to be operated by means substantially as described, to support the crane in position as stated.

2. In a lumber-hoist constructed to be temporarily affixed to a pile of lumber in course of erection, a crane having clamping-plates and a screw-spindle, forming a support for said crane, as and for the object specified.

3. In a lumber-hoist constructed to be temporarily affixed to a pile of lumber in course of erection, a crane, substantially as described, fixed to an upright spindle with capability of revolving thereon, said spindle being fastened to the lumber already piled by means of clamps, substantially as stated.

4. In a lumber-hoist having clamping-plates by means of which the hoist is attached, the screw-spindle B, adapted to operate said clamping-plates, as specified, and to serve as a support for the crane, as stated.

5. The combination, in a lumber-hoist, of the screw-spindle B, the clamping-plates D′ E′, having the socket D and threaded socket E, respectively, and the crane composed of the members G H, movably fixed to said spindle B, as and for the object specified.

6. The combination, with the spindle B, having the reduced part F and pivot C, of the pivot-socket D, provided with the plate D′, the nut-socket E, having the plate E′, with the spur R, and the wrench J, as stated.

7. The screw-socket E, having the plate E′, provided with the points *e* and the spur R, in combination with the spindle B, as stated.

8. In a lumber-hoist, the grapples composed of the tong-shaped jaws N N′, having the disks O O′, pivoted to the lower extremity of said jaws N N′, as and for the object specified.

In testimony that I claim the foregoing as my invention I have hereto set my hand and affixed my seal in the presence of two subscribing witnesses.

JAMES J. HENNESSY. [L. S.]

Attest:
MICHAEL J. STARK,
GEO. F. FITZMYER.