G. H. Clemens,

Saw-Mill Head-Block.

No. 52,533. Patented Feb. 13, 1866.

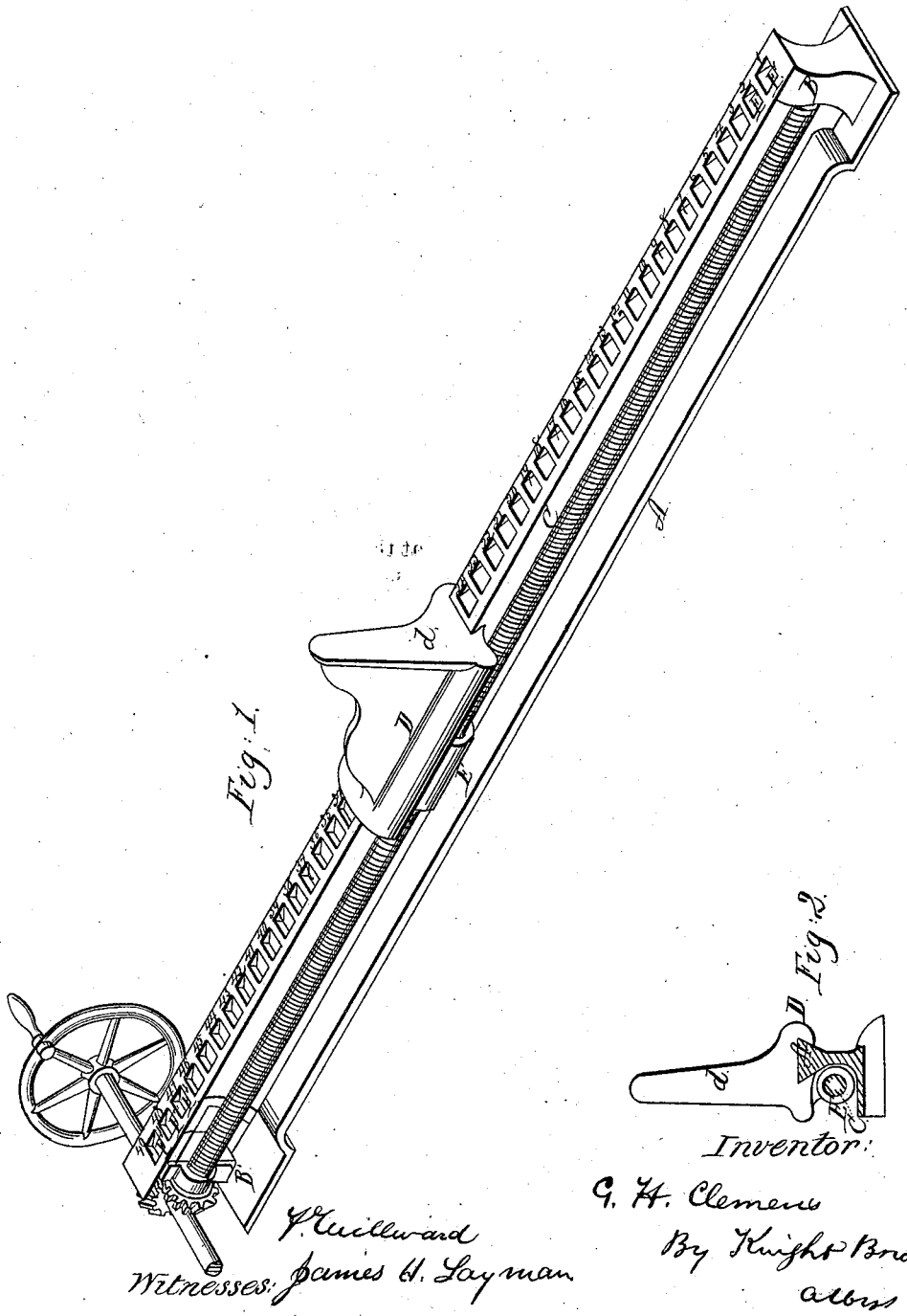

Fig. 1.

Fig. 2.

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UNITED STATES PATENT OFFICE.

GILBERT H. CLEMENS, OF UNITED STATES ARMY.

IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

Specification forming part of Letters Patent No. **52,533**, dated February 13, 1866; antedated August 13, 1865.

To all whom it may concern:

Be it known that I, GILBERT H. CLEMENS, (United States Army,) of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Head-Blocks of Saw-Mills; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to an arrangement of knee and setting-screw on one side of a solid head-block provided with a series of indentations on its upper side, for the several purposes of prying the log forward or backward on the head-block, for starting the knee backward or forward, and for gaging the set of the knee.

Figure 1 is a perspective view of a head-block and knee formed on my plan. Fig. 2 is a transverse section thereof.

A is the head-block, composed of a single solid casting, having bearings B B′ on one side of it for the setting-screw C.

The standard *d* of the knee D is extended so much to one side of the head-block as to rise perpendicularly over the setting-screw.

The nut E may be one piece attached to the under side of the knee, or may consist of two jaws capable of being separated, so as to release the screw when desired, as shown in my patent of July 10, 1860, and the standard *d* may be hinged to the base of the knee, as shown in my patent of January 3, 1865, such arrangement of the knee being facilitated by the represented location of the screw C and standard *d* in a plane to one side of the head-block. The said location of the screw and knee also enables the use of a solid head-block, which may consequently have greater strength within given dimensions than those which have been weakened by the customary middle slot for the passage of the setting-nut, which slot has been very objectionable as a harbor for dust and trash, causing the screw to become clogged and interrupted in its operations.

The head-block being solid, I am enabled to form notches, indentations, or cavities F F′ in its top surface. The cavities F at the front end of the head-block are sunk vertically downward at their ends nearest to the corresponding end of the block, and shoal out toward their other ends, while those F′ at the rear end are sunk and shoaled in the opposite direction. This formation of the cavities enables them to be used to receive the point of a pry or crow-bar for shifting the log forward or backward on the head-blocks, and, when the setting-screw is released, for shifting the knee itself.

Another use of the notches is as a scale or rule, which enables the sawyer to see whether both knees have been equally advanced and whether parallel with the path of carriage.

The notches also serve as a gage for setting the knees accurately forward for any desired thickness of parallel or tapering boards.

The notches may be numbered from front to back, in the manner shown.

I claim herein as new and desire to secure by Letters Patent—

The head-block A F, knee D E, and setting-screw C, when constructed and arranged substantially as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

GILBERT H. CLEMENS.

Witnesses:

A. G. GARRETT,

L. B. PITTS.