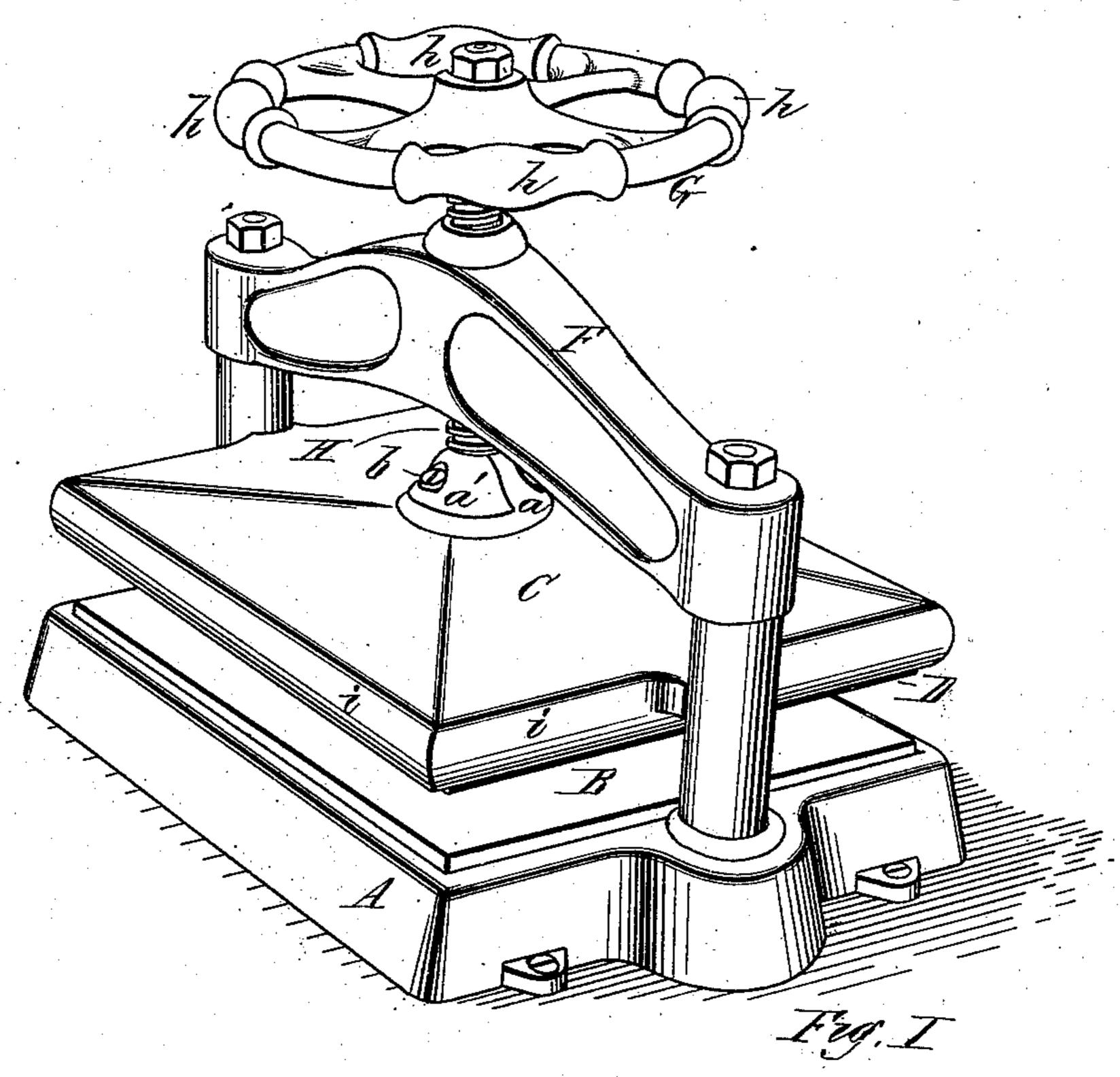
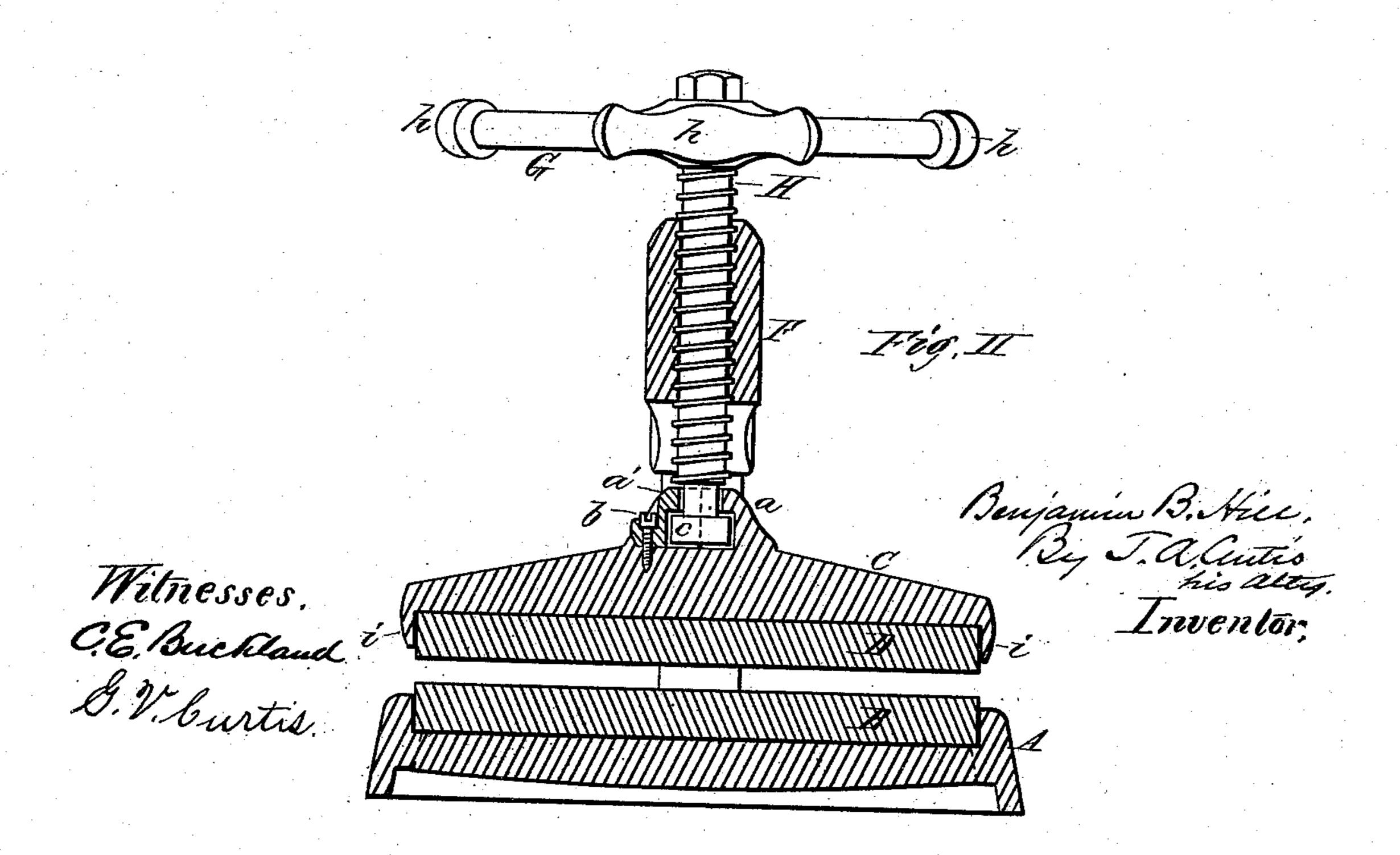
B. B. HILL.
Copying-Press.

No. 227,976.

Patented May 25, 1880.





## United States Patent Office.

BENJAMIN B. HILL, OF SPRINGFIELD, MASSACHUSETTS.

## COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 227,976, dated May 25, 1880.

Application filed January 14, 1879.

To all whom it may concern:

Be it known that I, Benjamin B. Hill, of Springfield, in the State of Massachusetts, have invented a new and useful Improvement in Copying-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

The object of my invention is to provide a screw copying-press having a follower and a bed, whose faces will readily adjust themselves to a plane parallel with each other when brought together, and also to obtain a firmer gripe of the hand-wheel in forcing down the follower.

To this end my invention consists, first, of a screw copy-press having a recessed follower 20 provided with a strengthening-flange around its edge and a wood piece secured therein; and, second, of the base or bed of a screw copy-press having a wood bed-piece secured thereto, combined with a follower having a strengthening-flange around its edge, a wood piece secured to said follower, and an operating-screw; and it also consists of an operating-screw provided with a hand-wheel having handles extending along the rim, all which will be more fully hereinafter described.

Figure I is a perspective view of my invention, and Fig. II is a vertical transverse section of the same on a plane at the axis of the operating-screw.

In the drawings, A is the base or bed, having a recess in its upper part, into which is fitted snugly a wood bed-piece, B, secured therein by cement of any suitable character, or by pins driven through holes made in the edge of the base and into the wood, and the upper surface of the wood piece is made plane and smooth.

The follower C is made with a recess in its lower side, so that a flange, i, is formed, extending around its edge, and a wood piece, D, is snugly fitted into said recess and secured either by suitable cement or by pins driven through holes in the flange and into the wood, or by both.

The hand-wheel G, attached to the operating-screw, is of the ordinary form, except that at certain points the handles h are made upon the rim, extending in the same general direction with it. I prefer to cast these handles with the rim; but it is evident that 55 they may be made in halves or parts and secured together upon the rim by screws or other suitable means. These handles are of great benefit, as they are made of a proper form to nearly fill and fit the hand, which 60 enables the operator to obtain a much firmer hold on the hand-wheel and bring greater force to bear in the operation of taking a press copy.

This construction of screw copy-presses is 65 of great advantage, because in the ordinary cast beds and followers the iron warps out of its original form in the process of cooling, and to obtain a flat face to either or both it is necessary to plane off, in a planing-machine, 70 the contact-faces of the follower and bed. This requires time and labor, and is expensive.

My invention of the recessed follower and wood piece secured therein, and the recessed 75 bed and its wood piece secured therein, obviates any unevenness of surface in either the bed or the follower, and allows them to be brought together perfectly parallel, and at the same time only the lower face of the wood 80 piece in the follower and the upper face of the wood piece in the bed being exposed, their other surfaces are protected from dampness and other injurious influences. The exposed surfaces of the wood, if left projecting slightly 85 from the follower and bed, may be dressed off again quickly by a wood-planing machine, if it should ever be desirable by reason of injury from any cause.

Having thus described my invention, what 90 I claim as new is—

1. In an improved screw copying-press, the combination of the recessed follower C, provided with a flange, i, around its edge, and the wood piece D, secured to said follower, 95 substantially as set forth.

2. In an improved screw copying-press, the combination of the base or bed A, the wood

piece B, secured thereto, the follower C, provided with the flange i, the wood piece D, secured to said follower, and the operatingscrew H, all substantially as described.

3. In an improved screw copying-press, the hand-wheel G, having the handles h made thereon, extending in the same general direc-

tion as the rim of said wheel, in combination with an operating-screw for operating the follower, substantially as set forth.

BENJAMIN B. HILL.

## Witnesses:

T. A. CURTIS,

G. V. Curtis.