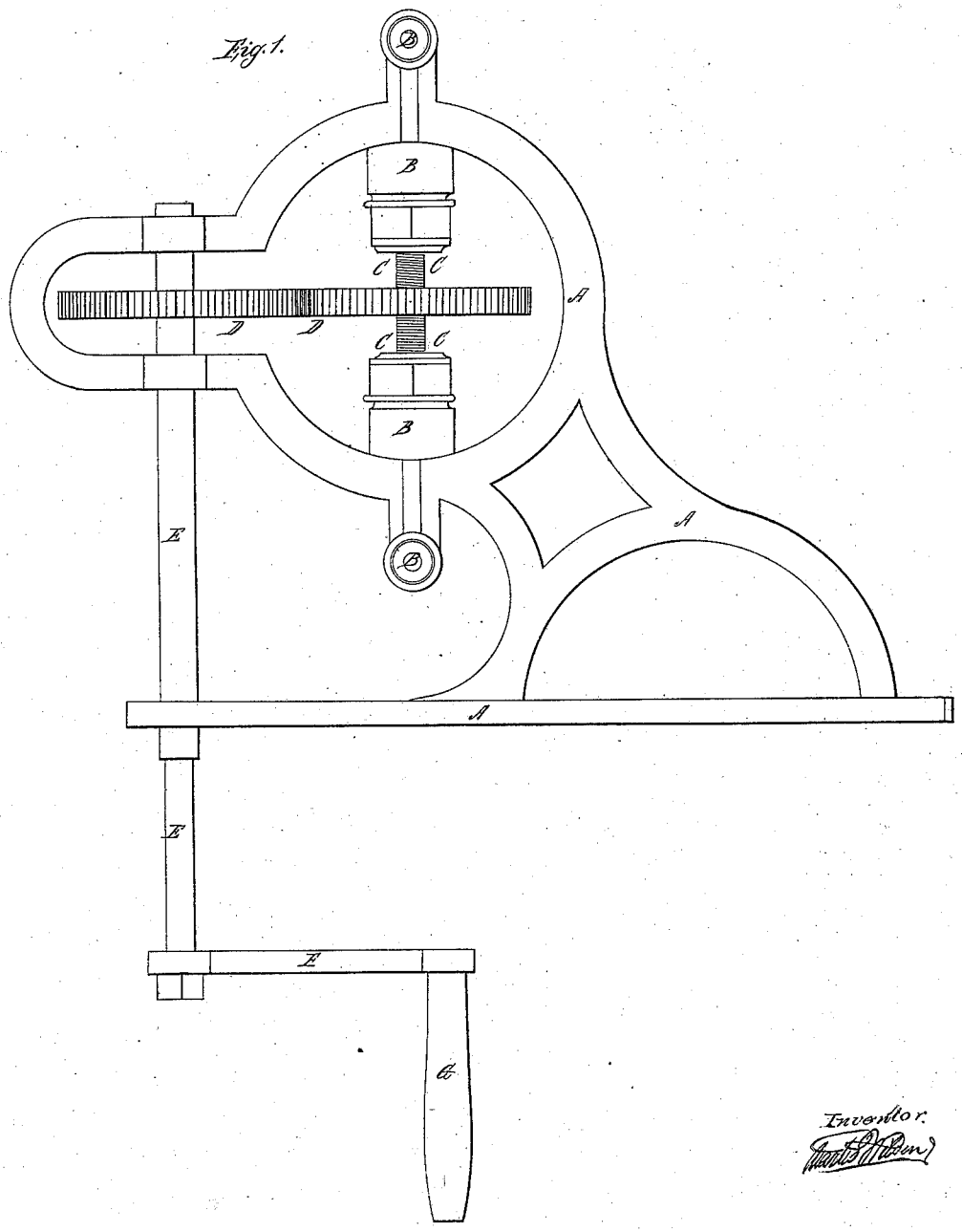
Sheet 1 - 2 Sheets.

C. Wilson,

Hydraulic Press,

No. 3319. Patented Oct. 28, 1843.

Fig. 1.



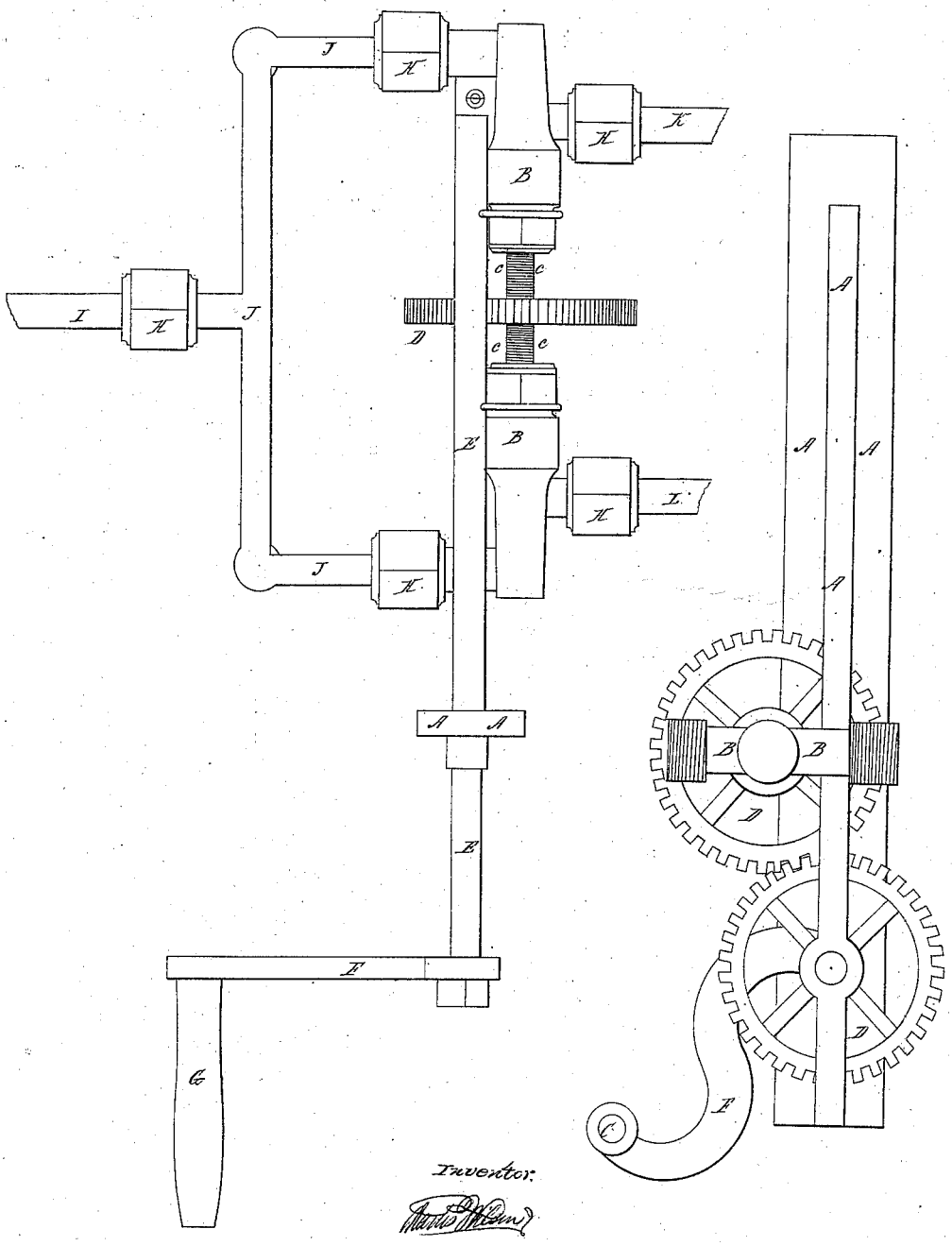
Inventor.
Charles Wilson

Sheet 2 - 2 Sheets.

C. Wilson,

Hydraulic Press

No. 3,319. Patented Oct. 28, 1843.



UNITED STATES PATENT OFFICE.

CHARLES WILSON, OF NEW YORK, N. Y.

CONNECTING STOP-COCK FOR HYDRAULIC PRESSES.

Specification of Letters Patent No. 3,319, dated October 28, 1843.

To all whom it may concern:

Be it known that I, CHARLES WILSON, of the city, county, and State of New York, have invented a new and useful Improvement on Hydraulic Presses for all Purposes for which Two or More Presses are Required to be Kept in Operation by the Same Prime Mover; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view; Fig. 2 a longitudinal elevation; Fig. 3 a transverse section.

The same letters in each figure refer to the same parts of the machinery, and the drawings are on a scale of one half the dimensions of the machine in practical operation, which is constructed in such a manner as to afford the greatest facility and convenience to the operator, and perfect security to the engine and presses from injury in consequence of the wrong, or both stop cocks being closed at the same time, through the mistake or inadvertence of the workmen employed.

A A A A is a bracket which holds the stop cocks B B B, and which may be secured by bolts to any upright or other convenient part of the premises.

C C C C is the screw the ends of which pass through the caps and extend very nearly to the beds, or seats, of the stop cocks, against which seats the ends are made to press alternately by the revolution of the screw, (either way,) but never both at the same time, the same revolution, which opens one aperture for the current of water to pass to one press necessarily closing the other aperture at the same instant, thereby allowing the engine and pumps to be kept in constant motion without fear for the safety of the machinery.

D, D, are cog wheels which communicate the motion from the crank shaft E E. The crank is shown at F, and the handle at G, two revolutions of which either way are sufficient to change the direction of the current of water from one press to the other press.

In Fig. 2, H H H H H show the connections between the pipes and the stop cocks.

I, is the pipe which conducts the water under great pressure from the pumps, branching at J J J, to the stop cocks B, B, and the sections at K, and L, lead to the two presses.

This improvement is not merely visionary, or untried, or unimportant, the practical operation of it having demonstrated to my mind the very great facility and perfect security afforded by its use. Especially for the purpose of compressing cotton with this improvement the hydraulic is the best press and without it the hydraulic press is inferior to others in use for that purpose.

I do not claim the hydraulic press, but in order to keep two or more presses in constant operation by an engine or other prime mover, it becomes necessary to be able to change the direction of the current of water, from one press to the other at pleasure, with unerring certainty, at the same instant, while under a pressure of several tons on the inch, and while the engine and pumps continue in motion.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of two stop cocks, with the Beamah or other hydraulic presses, when two cylinders, or presses, are to be used, in the manner, and by the mechanical means, substantially as above described. The said cocks being so connected with such presses, and with each other, as that one of them, will be opened into one cylinder, at the same time and with the same motion, that the other is closed upon the other cylinder; the mechanical means of doing so, above described, being susceptible of various modification, and yet the combination, or the manner of accomplishing the object, in effect being substantially the same.

CHARLES WILSON.

Witnesses:

JONAH N. CLARK,

B. TUCKER.