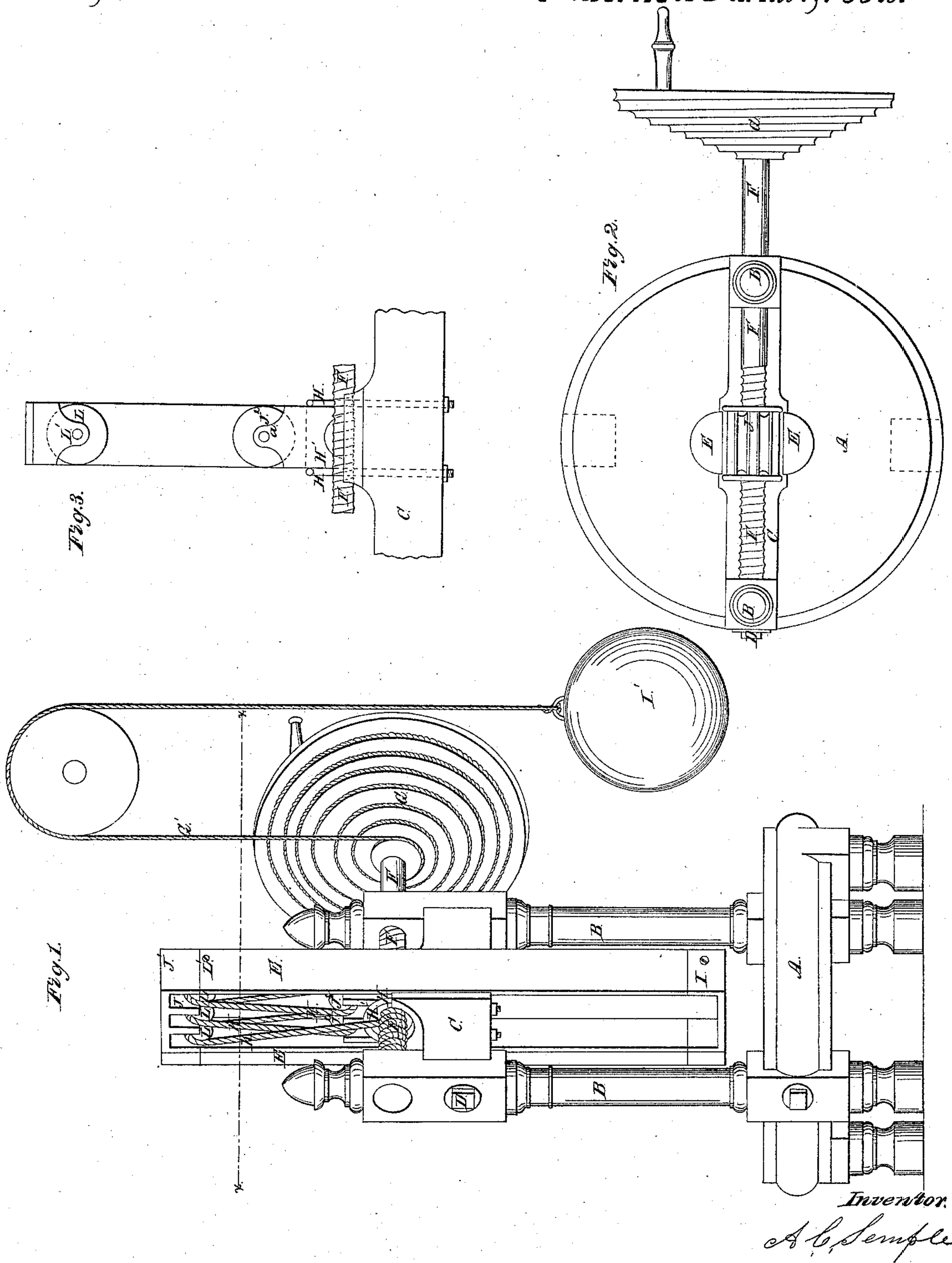


A. C. Semple,

Cotton Press.

N^o 8,695.

Patented Jan. 27, 1852.



UNITED STATES PATENT OFFICE.

AMZI C. SEMPLE, OF CINCINNATI, OHIO.

IMPROVEMENT IN WINDLASSES.

Specification forming part of Letters Patent No. 8,695, dated January 27, 1852.

To all whom it may concern:

Be it known that I, A. C. SEMPLE, of Cincinnati, in the county of Hamilton, State of Ohio, have invented a new and Improved Spiral Windlass; and I do hereby declare that the same is described and represented in the following specification and accompanying drawings.

The nature of my improvement consists in winding the rope upon a screw as it is turned through a fixed nut, thereby drawing the rope always in the same direction and position as the rope winds upon the screw as fast as it passes through the fixed nut and in close proximity to the nut, thus lessening the danger of bending or breaking the screw, while it lessens the labor of operating the press, the said screw having a concave score between the threads that fits and supports it in its proper form and lessening the wear of the rope and its liability to be broken in the operation of pressing.

To enable others to make and use my invention, I will proceed to describe its construction and the mode of using it in connection with the accompanying drawings, of which—

Figure 1 is a perspective view of the windlass as applied to a press. Fig. 2 is a top view of the lower section as cut through the line *x x*, and Fig. 3 represents a section of the top beam-screw and the parts containing the pulleys.

The same letters refer to the same parts in each drawing or figure.

A is the base of the press, with two posts, B B, fastened to it, and these posts are also fastened to the top C. E E are two spars which traverse in scores in the top C, and are connected together by the piece I at the bottom and the piece J' at the top. There are projections J upon the last-named piece, with spaces between them for the pulleys L L L, which turn upon a pin, L', passing through the spars, pulleys, and projections. The nut H' is fastened to the top C by the staples H H, and has projections upon it with spaces between them for the pulleys J² J², which turn upon a pin, *a*, passing through them and through the projections. One end of the rope

K is fastened to the top C and passes around the pulleys L and J², being fastened to and wound up around the screw F, which screw has a concave score between the threads that fits the rope and preserves it in a proper form, which screw turns in the fixed nut H' and posts B, and the rope winds upon the screw as fast as it passes through the nut and close to it, so as to draw the rope always in the same position. The screw F has the spiral lever G fastened to it, which is in the form of a fusee, and the rope G' is fastened to its circumference and wound in toward the center nearly to the shaft of the screw F, the weight I' being attached to it to turn the spiral lever and screw and operate the press.

The press being completed, as above described, the substance to be pressed is put upon the table under the piece I, that connects the spars at the bottom, and the weight I' being attached to the rope G' it turns the spiral lever G and the screw F, which last turns forward in the nut H, winds up the rope K, and, drawing down the spars E E, presses the substance upon the table. When the weight I' is first attached, the rope acts upon the spiral lever near its fulcrum, and only a gentle pressure is applied to the substance upon the table; but as the spars descend the effective length of the lever increases, and the pressure upon the substance pressed is consequently increased.

What I claim as my invention in the above-described press is—

Winding the rope upon a screw with a concave score between the threads that fits the rope and supports it in its proper form, thereby lessening the wear of the rope and its liability to be broken in the operation of pressing when the said screw is made to work through a fixed nut, so as to always draw the rope in the same position, substantially as described.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

A. C. SEMPLE.

Witnesses:

EBENEZER HARRISON,
A. G. NOYES.