J. ROSSELL.

Cotton and Hay Press.

No. 218,777. Patented Aug. 19, 1879.

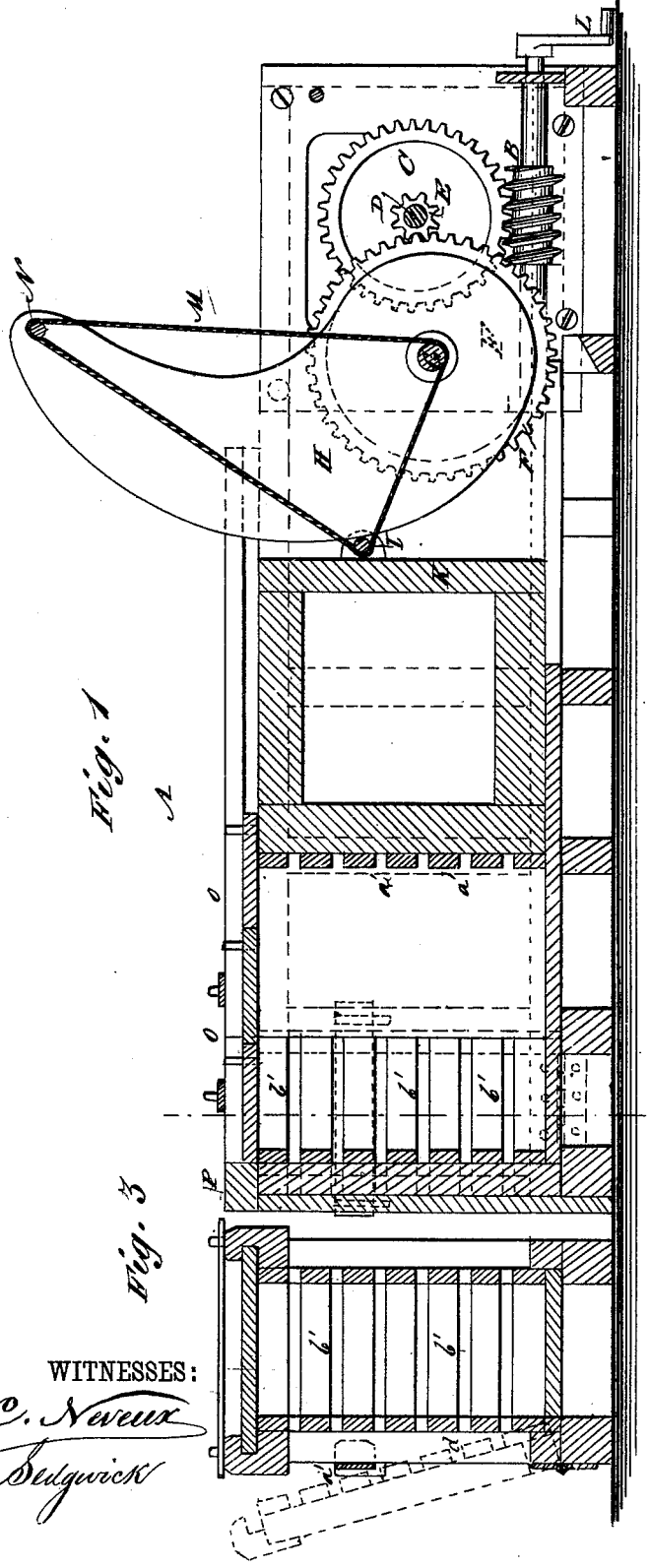

Fig. 1

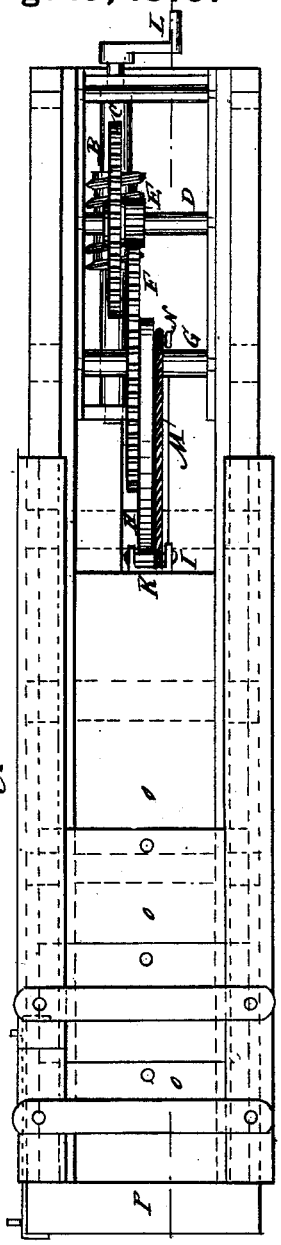

Fig. 2

Fig. 3

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN ROSSELL, OF GALVESTON, TEXAS.

IMPROVEMENT IN COTTON AND HAY PRESSES.

Specification forming part of Letters Patent No. **218,777**, dated August 19, 1879; application filed June 3, 1879.

To all whom it may concern:

Be it known that I, JOHN ROSSELL, of Galveston, in the county of Galveston and State of Texas, have invented a new and Improved Cotton and Hay Press, of which the following is a specification.

Figure 1 is a longitudinal sectional elevation on line *x x*, Fig. 2. Fig. 2 is a plan of the press. Fig. 3 is a sectional elevation on line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an economical and powerful press for cotton, hay, rags, &c., that may be worked by hand, horse, or steam power, in field, farm, or factory.

The invention consists in combining a worm, cog-wheel, pinion, toothed wheel, eccentric cam provided with pin, a friction-roll, and a rope, as hereinafter described.

The horizontal press A is provided with a worm, B, that is secured in a horizontal position in bearings set within one end of the press, against a side thereof, and a cog-wheel, C, with which the worm engages, and which is keyed on a shaft, D, that is set at right angles to and above the worm, and has its bearings in the opposite sides of the press. Upon this shaft is a pinion, E, which engages in the toothed wheel F, which is secured on a shaft, G, parallel to D; and upon this same shaft is the eccentric-cam H, placed in contact with and preferably pinned to the wheel F, for the purpose of strength and stability. This cam may be either solid or of open spoke-work, as taste or fancy may suggest. For an ordinary press it is made with an edge or rim about five inches broad, and is long enough to make a thrust of nine feet, or thereabout.

The friction-roll I, secured on the moving head K of the press, is intended to receive the direct pressure of the cam and make its movement easy and free from excessive friction. Power applied to the crank L, to move it in one direction, will cause the cam pressing against the friction-roll to thrust the moving head K toward the opposite end of the press, while if the crank be turned in the other direction, the movement of the cam is reversed, and it draws back the head K by means of the rope M, that passes around the friction-roll, the shaft G, and the pin N at the upper extremity of the cam.

The cotton, hay, or other substance to be pressed and baled is introduced through the top of the press, when the moving head is drawn back as far as possible; then the sliding covers O O are replaced and power applied to the mechanism above described, with the result of compressing the cotton or hay, &c., to the desired degree within the end of the press, which is provided with the grooves *a'* and slots *b'*, for the straps or bands to be used in the baling. When the bands are secured the door P is opened, and further movement of the cam drives the bale from the press.

It will be seen that the above-described arrangement of the mechanical parts insures a most powerful and irresistible pressure, and to so moderate a speed can the motion of the cam be geared that all required pressure can be applied through or by it by the application of hand-power.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The within-described press A, provided with worm B, cog-wheel C, pinion E, toothed wheel F, eccentric cam H, provided with pin N, friction-roll I, and rope M, constructed and arranged substantially as herein shown and described.

JOHN ROSSELL.

Witnesses:

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