2 Sheets--Sheet 1.

E. VAN WINKLE.

Cotton-Press.

No. 163,900. Patented June 1, 1875.

Fig. 1.

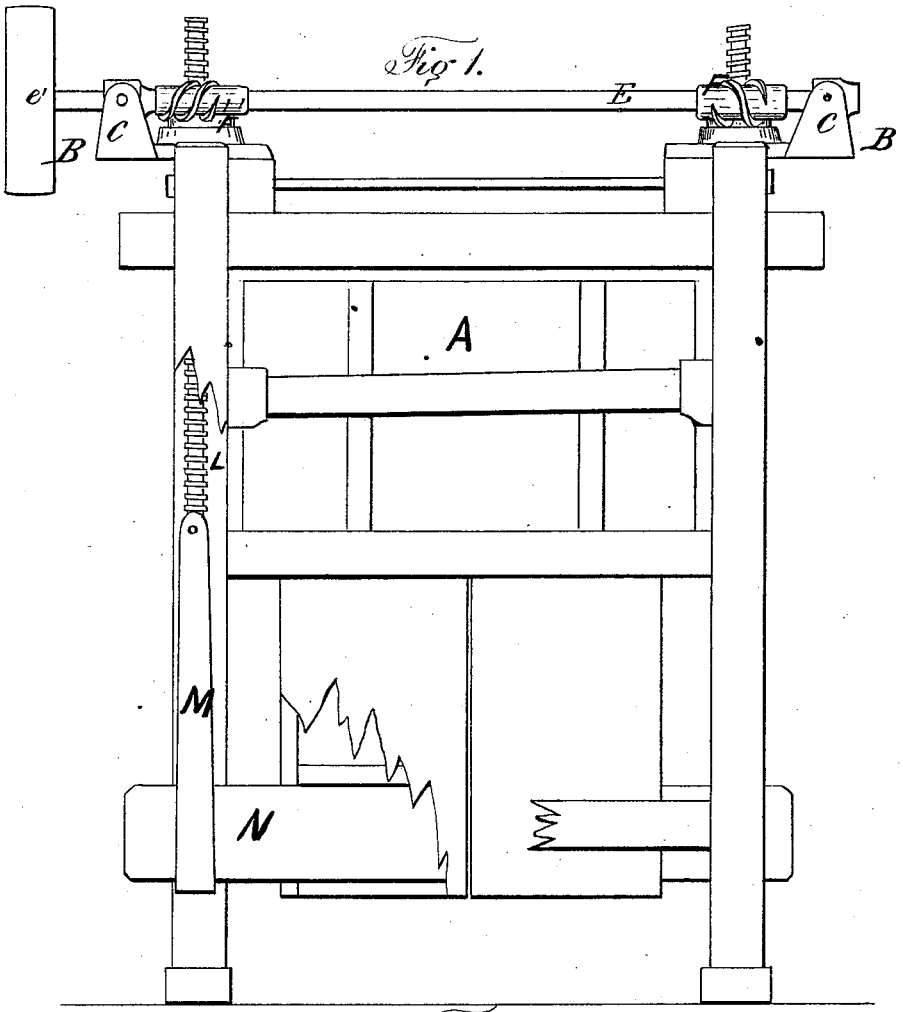
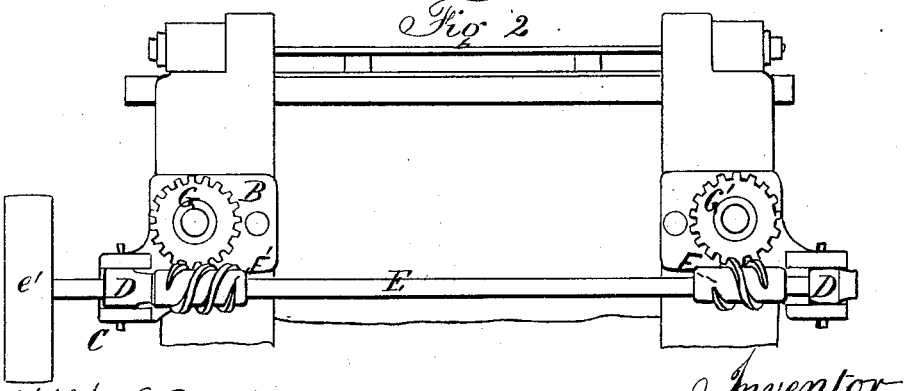


Fig. 2



Witnesses
Alvin K. Farris
C. A. Snitz

Inventor
Edward Van Winkle
by his Atty's Pole & Pike

2 Sheets--Sheet 2.

E. VAN WINKLE.

Cotton-Press.

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Fig. 3

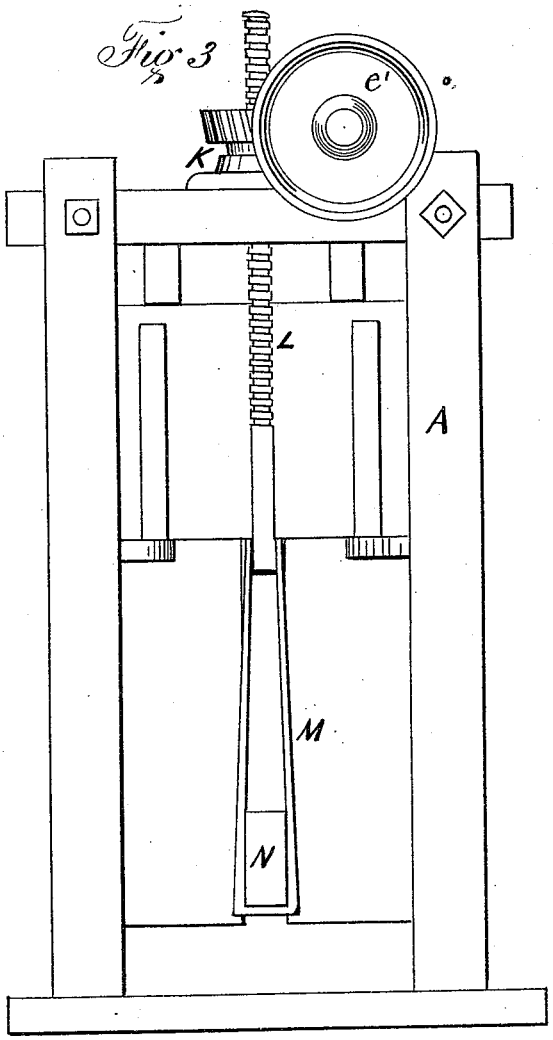


Fig. 4

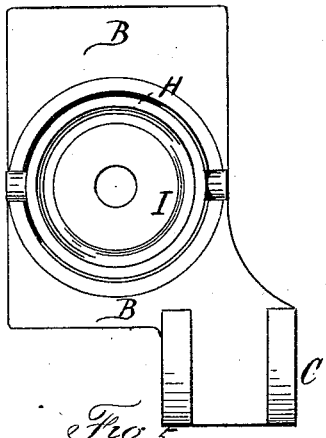
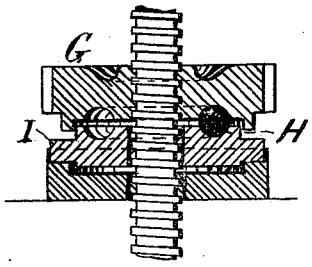


Fig. 5



Witnesses
Albion H Parris
C. F. Smith

Inventor
Edward Van Winkle
by his Attys
Pole & Pike

UNITED STATES PATENT OFFICE.

EDWARD VAN WINKLE, OF ATLANTA, GEORGIA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **163,900**, dated June 1, 1875; application filed March 23, 1875.

To all whom it may concern:

Be it known that I, EDWARD VAN WINKLE, of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in a Cotton-Packing Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to produce a simple, cheap, and easily-handled cotton-press, and to combine certain improvements with a view to gain this result, all of which is hereinafter described.

In the corresponding drawings, Figure 1 is a front elevation of my cotton-press. Fig. 2 is a part plan of the top. Fig. 3, Sheet No. 2, is a side elevation. Fig. 4 is a plan of the friction apparatus. Fig. 5 is a side of the friction apparatus.

And in all the same letters refer to the same parts.

The cotton-press is an upright casing, *a*, stoutly held together by beams, and upon the upper side are the bearings B, the lower plate of which is firmly bolted to the frame of the press. Projecting out are the lugs C, and into these lugs C are placed the journals D, through which the driving-shaft and pulleys E *e'* work. This shaft is provided with two worms, F and F′, which are right and left—that is to say, draw inward or force outward, according to the direction of the revolving of the shaft E. The worms engage with horizontal screw pinion-wheels G and G′, which rest upon balls H or friction-rollers, or are permitted to move upon lubricated surfaces K. In the center of these screw pinion-wheels G is cut a thread, and in this thread works the draft-bolts L. The bolts L are connected with a strap, M, through which is hung the cross-head or draw-bar N. These bolts L are also right and left threaded, as is also the pinion-wheel from which they gain their motion.

It is hardly necessary to explain the operation of this elegant, cheap, and simple device, sufficient only to say, that upon motion being given to the pulley, this, being firmly attached to the shaft E, gives it motion, and the worms also firmly attached to E revolve in this revolution, causing the pinion-wheels F and F′ to work in the opposite direction to each other, and again the screw-thread in the pinion-wheels cause the right and left bolts to rise, drawing up the cross-heads, and pressing the cotton. There is no necessity for the machine to stand upon the ground, but the cross-head, with the length of the machine, may be set in a pit, and only the feeding-doors be upon the level with the floor, or a platform may be erected up to these doors. The press can be set in any corner of the lint-room, and occupies very little space. It can be driven from above or below the floor, or from either end.

Having thus described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a cotton-press, the stationary draw-bolts L, having right and left screw-threads, in combination with the pinion-wheels G and G′, which form the nuts thereof, and a screw pinion-shaft, E, having right and left thread-worms, substantially as and for the purposes described.

2. A combined pinion-wheel and screw-nut, in combination with a friction-ball and oscillating trunnion, as and for the purposes set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

EDWARD VAN WINKLE.

Witnesses:
L. A. MORRISON,
LOUIS MARSH.