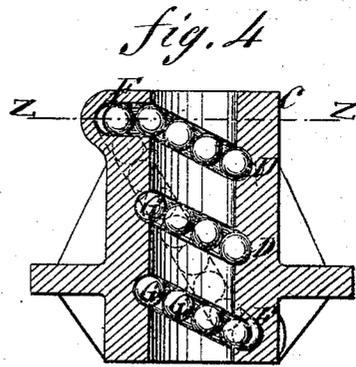
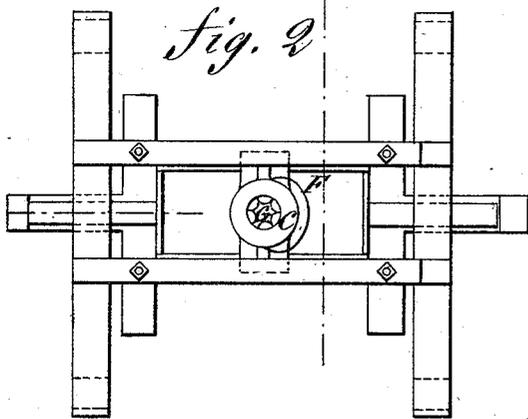
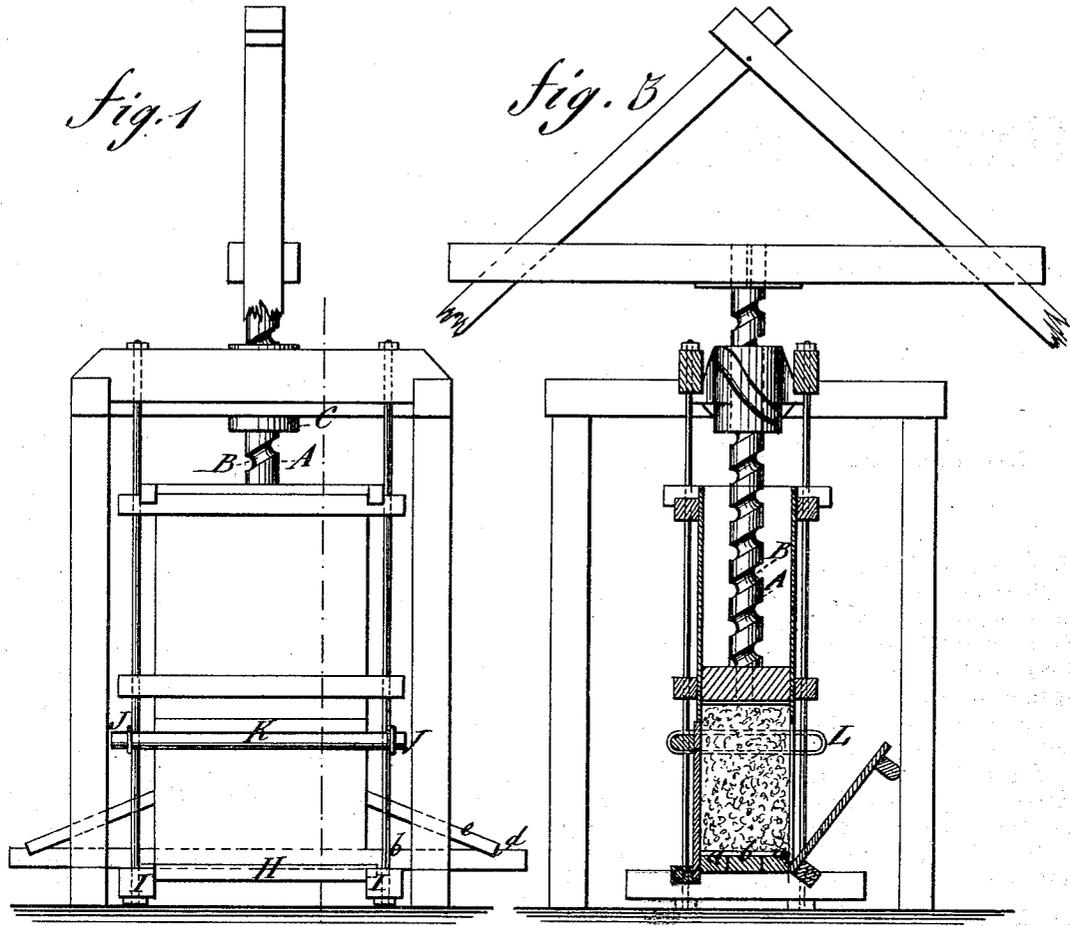


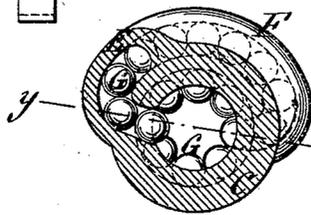
C. W. CRENSHAW.
Screw-Presses.

No. 155,862.

Patented Oct. 13, 1874.



WITNESSES:
C. Newell
A. Sedgwick



INVENTOR:
C. W. Crenshaw
BY *M. M. [Signature]*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CYRUS W. CRENSHAW, OF ATHENS, ALABAMA, ASSIGNOR TO HIMSELF AND
J. M. TOWNSEND, OF SAME PLACE.

IMPROVEMENT IN SCREW-PRESSES.

Specification forming part of Letters Patent No. **155,862**, dated October 13, 1874; application filed
July 25, 1874.

To all whom it may concern:

Be it known that I, CYRUS W. CRENSHAW, of Athens, in the county of Limestone and State of Alabama, have invented a new and Improved Press, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is a side elevation of my improved press. Fig. 2 is a plan view. Fig. 3 is a sectional elevation taken on the lines *x x* of Figs. 1 and 2. Fig. 4 is a sectional elevation of the nut, taken on the line *y y* of Fig. 5; and Fig. 5 is a horizontal section taken on the line *z z* of Fig. 4.

Similar letters of reference indicate corresponding parts.

A represents the screw, which has a semi-circular groove, B, instead of the usual screw-thread; and C represents the nut, which also has a semicircular groove, D, instead of the usual thread, and besides it has a circular spiral channel, E, connecting each end of the spiral groove through the nut, which has a hollow spiral flange, F, to provide for the passage. G represents the balls, with which the spiral groove and the return-channel are filled, so as to form a continuous row of balls on which the screw rolls, instead of sliding on threads, to lessen the friction.

When the screw turns downward the balls roll down into the channel E and return to the top of the nut, those being forced down by the screw pushing those in the channel E up to the top, and when the screw turns upward the balls roll up in the groove and pass down in the channel.

I propose to make the bottom of the press of three timbers, *a, a,* and *b,* and to extend the middle one beyond the case, and provide a notch, *d,* for the support of the foot of a brace, *e,* for holding the end door shut; and the side doors I propose to pivot by arranging the ends of the lower batten H in bearings in the foundation at I, and fasten them shut by means of extensions J of the upper battens K, of each side, connected by hooks or links L. These arrangements for fastening the doors are very simple and cheap.

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

The combination, with screw A B, of the spirally-grooved nut C, return-channel E, and continuous line of balls G, as and for the purpose described.

CYRUS W. CRENSHAW.

Witnesses:

SILAS R. HINE,
T. J. TURVENTINE.