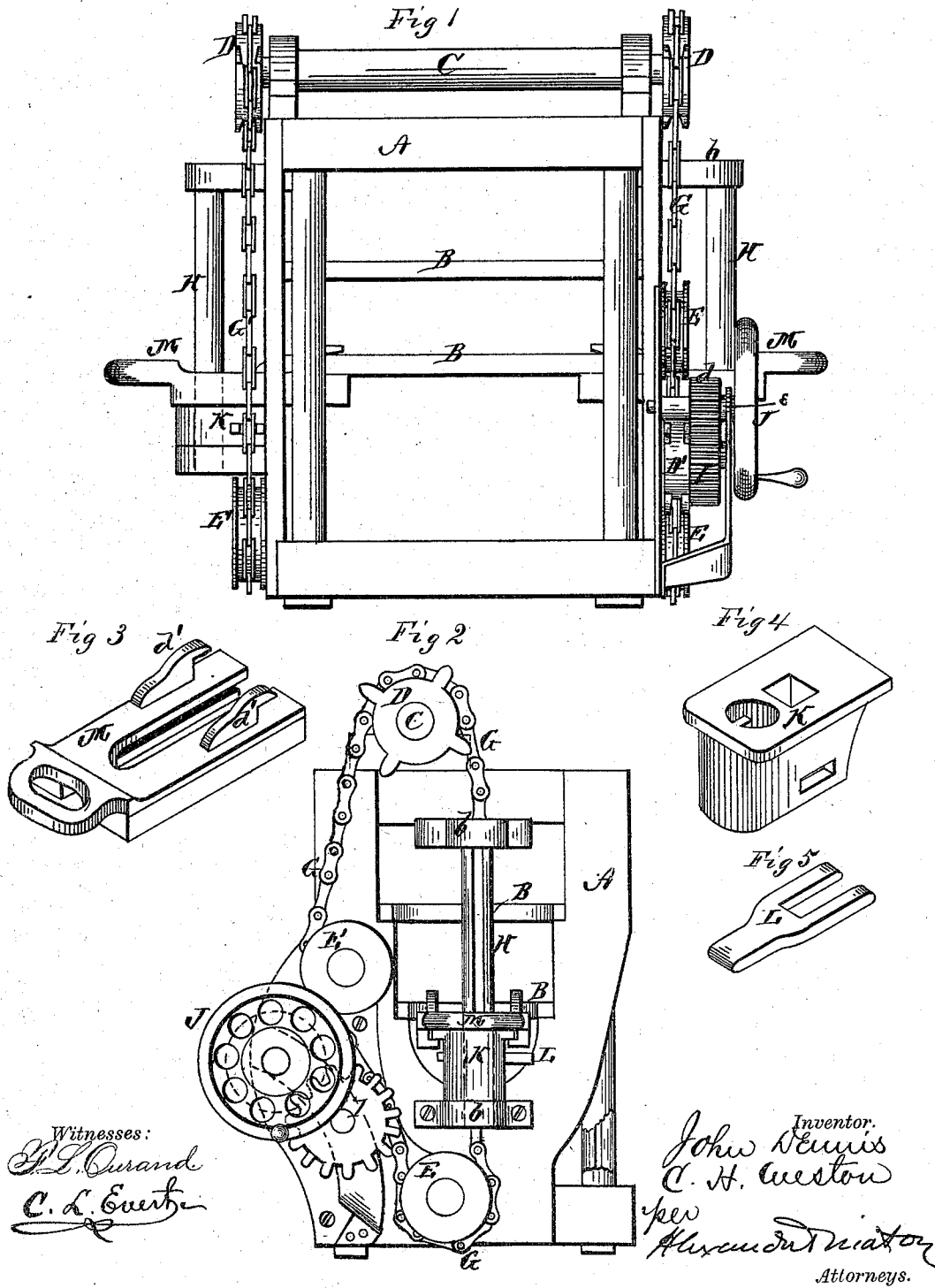


J. DENNIS & C. H. WESTON.

Steam Cloth Presses.

No. 142,006.

Patented August 19, 1873.



# UNITED STATES PATENT OFFICE.

JOHN DENNIS AND CHARLES H. WESTON, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN STEAM CLOTH-PRESSES.

Specification forming part of Letters Patent No. **142,006**, dated August 19, 1873; application filed June 26, 1873.

### *To all whom it may concern:*

Be it known that we, JOHN DENNIS and CHAS. H. WESTON, of Lowell, in the county of Middlesex and in the State of Massachusetts; have invented certain new and useful Improvements in Steam Cloth-Press; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the arrangement of a chain, spoked wheel, guide-shaft, and hand-power for lifting one or more plates at the same time in a steam cloth-press, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front view, and Fig. 2 a side elevation, of a steam cloth-press embodying our invention. Figs. 3, 4, and 5 are enlarged detached views of the device for connecting the chain with one of the plates.

A represents the frame of a steam cloth-press, with press-plates B B, constructed and arranged in any of the known and usual ways. On top of the press A, in suitable bearings, is a shaft, C, provided at each end with a wheel, D, which is at regular intervals provided with pairs of arms or spokes *a a* projecting radially from the circumference. Around one of these wheels is placed an endless chain, G, which also passes around two idle pulleys, E E, arranged on the side of the press in such a manner that a part of the chain will be perpendicular from the wheel D downward. This part of the chain passes through slots in projections or arms *b b* extending outward from the press, and forming supports for a vertical guide-shaft, H. That part of the chain G between the two idle pulleys E E passes partially around a spoke-wheel, D', constructed in the same manner as above described for the wheels D. On the shaft of the wheel D' is a

cog-wheel, I, which gears with and receives its motion from a pinion, *d*, on a shaft, *e*, provided with a crank-wheel, J, to be turned by hand. Over the wheel D, at the opposite end of the shaft C, passes another endless chain, G', said chain passing also around a single idle pulley, E', at the lower end of the press. This chain also passes through projections on that side of the frame which supports a guide-shaft, H. The guide-shafts H H are grooved longitudinally, and upon each shaft are placed one or more slides, K, which are feathered on the shaft, and capable of being moved up and down on the same. In each slide K is a slot for the passage of the chain, and there is also a horizontal slot for the insertion of a split key, L, which, when inserted, grasps the chain, and thus holds the slide to or on the chain, so that it will move up and down with the same. On the upper part of each slide K slides, horizontally, out and in, a tray, M, which is forked and grooved, as shown in Fig. 3, and provided on its upper side, near the inner end, with hooks *d' d'* to grasp the edge or end of either one of the press-plates B.

By this means several plates may be lifted at the same time by hand-power, when so desired, without moving or disturbing any of the remaining plates.

We are aware that guide-shafts have been used on steam cloth-presses, and therefore do not claim such broadly as our invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The arrangement of the chain G, spoked wheel D', guide-shaft H, and hand-power J *d* I, all as shown and described, and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 3d day of June, 1873.

JOHN DENNIS.  
C. H. WESTON.

Witnesses:

JAMES M. BATTLES,  
JAS. M. MASON.

750 wms