UNITED STATES PATENT OFFICE.

JOHN F. TAYLOR, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN HYDRAULIC PRESSES.

Specification forming part of Letters Patent No. 165,801, dated July 9, 1875; application filed May 13, 1875.

To all whom it may concern:

Be it known that I, JOHN F. TAYLOR, of the city and county of Charleston and State of South Carolina, have invented a new and Improved Hydraulic Press; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a front elevation with portion of base-frame broken away; Fig. 2, a side elevation.

This invention relates to certain improvements in cotton-presses; and it consists in the combination, with the platen and cross-head, of continuous links of tenacious wrought metal, which encompass said platen and cross-head lengthwise thereof, and constitute of themselves the frame and receive all of the strain of the press whereby the construction of the press is greatly simplified and rendered capable of standing a much greater strain than the ordinary cast frames. It also consists in a filling of wood or other elastic material interposed between the links and the platen and cross-head to make a cushion which absorbs any jar or shaking.

In the drawing, A A represent wrought-iron links, made long enough to include all the operating parts of the press, and containing at one end the platen C, and at the other the cross-head B, which said platen and cross-head are encompassed lengthwise of them by the links, so that, being surrounded, the only strain that comes upon them is one of compression, and they cannot break as they might if the links encompassed them transversely. These links are made of continuous rods, which constitute the frame and receive all of the strain whenever the bale is compressed by the introduction of water between the rams and cylinders, thus producing a much stronger and more durable press than those constructed of iron castings. W are keys or wedges interposed between the links and the cross-head, and also between the links and the movable platen, for the purpose of forming an elastic cushion which absorbs any jar or shaking. The said wedges may be made of wood or other suitable material, and are held in position between ribs or tongues b upon the curved faces of the cross-head and platen.

Having thus described my invention, what I claim as new is—

1. The combination, with the platen and cross-head, of continuous links of wrought metal, which encompass the said platen and cross-head lengthwise, and constitute of themselves the frame, and receive all the strain, of the press, substantially as described.
2. An elastic filling, in combination with the links and platen or cross-head, as and for the purpose set forth.
3. The wooden keys W, in combination with the links A A, and the cross-head or platen, having transverse ribs or tongues b as, and for the purpose specified.

JOHN F. TAYLOR.

Witnesses:

A. BROTHERHOOD,
SOLON C. KEMON.