Day & Day.

Jaw Tenyle.

No. 6,143. Patented Feb. 27, 1849.

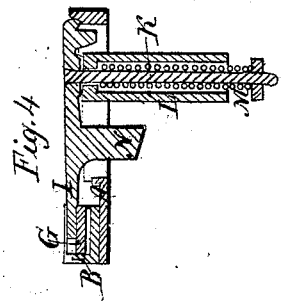

Fig. 4

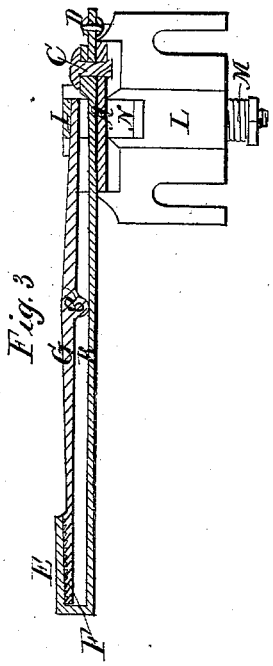

Fig. 3

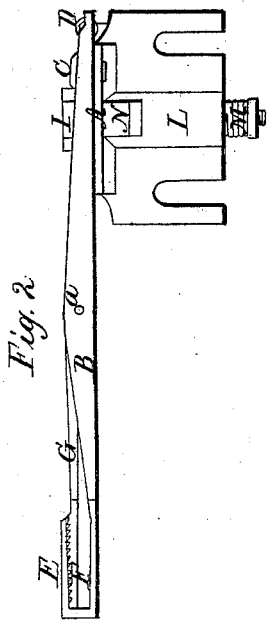

Fig. 2

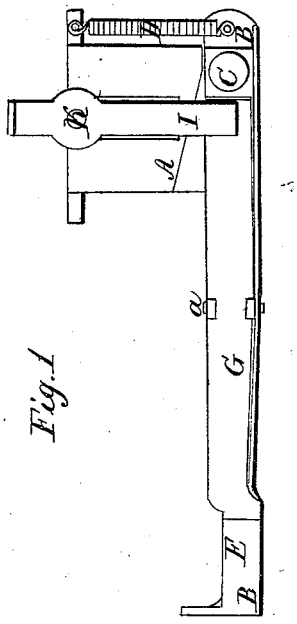

Fig. 1

UNITED STATES PATENT OFFICE.

LEWIS K. DAY AND PRESTON DAY, OF SACARAPPA, MAINE.

IMPROVEMENT IN WEAVERS' TEMPLES.

Specification forming part of Letters Patent No. **6,143**, dated February 27, 1849.

To all whom it may concern:

Be it known that we, LEWIS K. DAY and PRESTON DAY, of Sacarappa, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in the Stillman or Jaw Temple for Looms; and we do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

In the said drawings, Figure 1 denotes a top view of our improved temple; Fig. 2, a front elevation; Fig. 3, a longitudinal and vertical section taken through the jaws, jaw lever and arm; Fig. 4 is a transverse and vertical section.

In the said figures, A represents a cast-iron or metallic tablet or support-piece, which is bolted or fastened to the inner face of the breast-beam of the loom, and projects horizontally therefrom and toward the lay. A long bar or arm B, arranged parallel to the breast-beam, is attached by a fulcrum-pin C to the front part of the tablet A, and at or near one corner of it, as seen in the drawings. The said fulcrum-pin passes down through the arm B, and is screwed or otherwise properly fixed into the tablet or support-piece. The arm B should be made to turn or move freely back and forth in a horizontal direction on the said fulcrum-pin. A spring D has one end affixed to the tablet and the other to the inner end of the arm B, as seen in Fig. 1, the object of the said spring being to restore the arm to its position parallel with the breast-beam directly after each beat of the lay. The outer end of the arm B is bent upward, and is also bent horizontally over and parallel to the rest of the arm, so as to form the superior jaw, as seen at E, the inferior jaw F being extended underneath it, and made upon the end of a lever G, which is jointed at or near its middle to the arm B and in such manner as to till in vertical directions, the joint being seen at *a*. At right angles to the said lever and directly over and upon one end of it a horizontal arm I is disposed. The said arm is arranged directly over the tablet A, and is affixed to the top of a vertical rod K, which extends down through a socket L, and has a spring M so applied to it and the said socket as to draw it (the rod) and the arm I downward, and cause the said arm to so press upon the lever G as to close the jaws. A stud N extends down from the under side of the arm I and passes through the tablet A, and has its lower end beveled off, as seen in Fig. 4 of the drawings. This stud is intended to be met and lifted by a counter-stud or inclined plane applied to the lay of the loom, the lifting operation taking place while the lay beats up. That arm of the lever G to which the jaw is affixed is made somewhat heavier than the other arm, in order that when the arm I is lifted up the superincumbent weight of the jaw-arm of the lever G may cause said arm of said lever and the jaw thereof to descend, so as to permit the cloth to move a little between the jaws. Directly on the return or retraction of the lay, so as to carry the inclined plane out of action on the stud N, the spring M will cause the arm I to descend upon the lever G, and thereby move it so as to close the jaws upon the cloth between them. Although this temple is somewhat similar in appearance to the Stillman temple, (viz., that patented by O. S. Stillman on or about the 30th day of January, A. D. 1826, and since generally used and known by the name of the "Stillman" temple,) yet it is essentially different in its construction and operation. In the Stillman temple the jaws are opened by a wedge forced between them, the said wedge being fixed upon one end of a long lever, whose other end has a projection extending from it, which is struck by the lay when it beats up. At or about the same time the lay also strikes against another projection from from the vibrating arm which supports the jaws. The momentum or effect of the blow of the lay on the fulcra or joint-pins of the lever and arm is very serious, and soon causes them to work loose or become deranged. In our improved temple the beat of the lay is received only against one stud N, which is not connected with either the arm of the superior jaw or the lever of the inferior one. No wedge is used to force open the jaws, as in the Stillman temple.

Besides the above we could enumerate several other important advantages which our improved temple possesses over the Stillman temple or many others in use. Its simplicity, together with the pecular construction, adap-

tation, and arrangement of its parts, renders it peculiarly serviceable, durable, and efficient in its operation.

We claim as our invention—

The combination and arrangement of the following parts, viz: first, the jaws; second, the arm B and its joint-pin; third, the lever G; fourth, the spring D; fifth, the tablet or support-piece A; sixth, the arm I, with its spring M and stud N, the whole being constructed and applied together as described, and so as to operate essentially as above specified.

In testimony whereof we have hereto set our signatures this 5th day of July, A. D. 1848.

LEWIS K. DAY.
PRESTON DAY.

Witnesses:

W. G. CHADBOURNE,
DAVID ELDER.