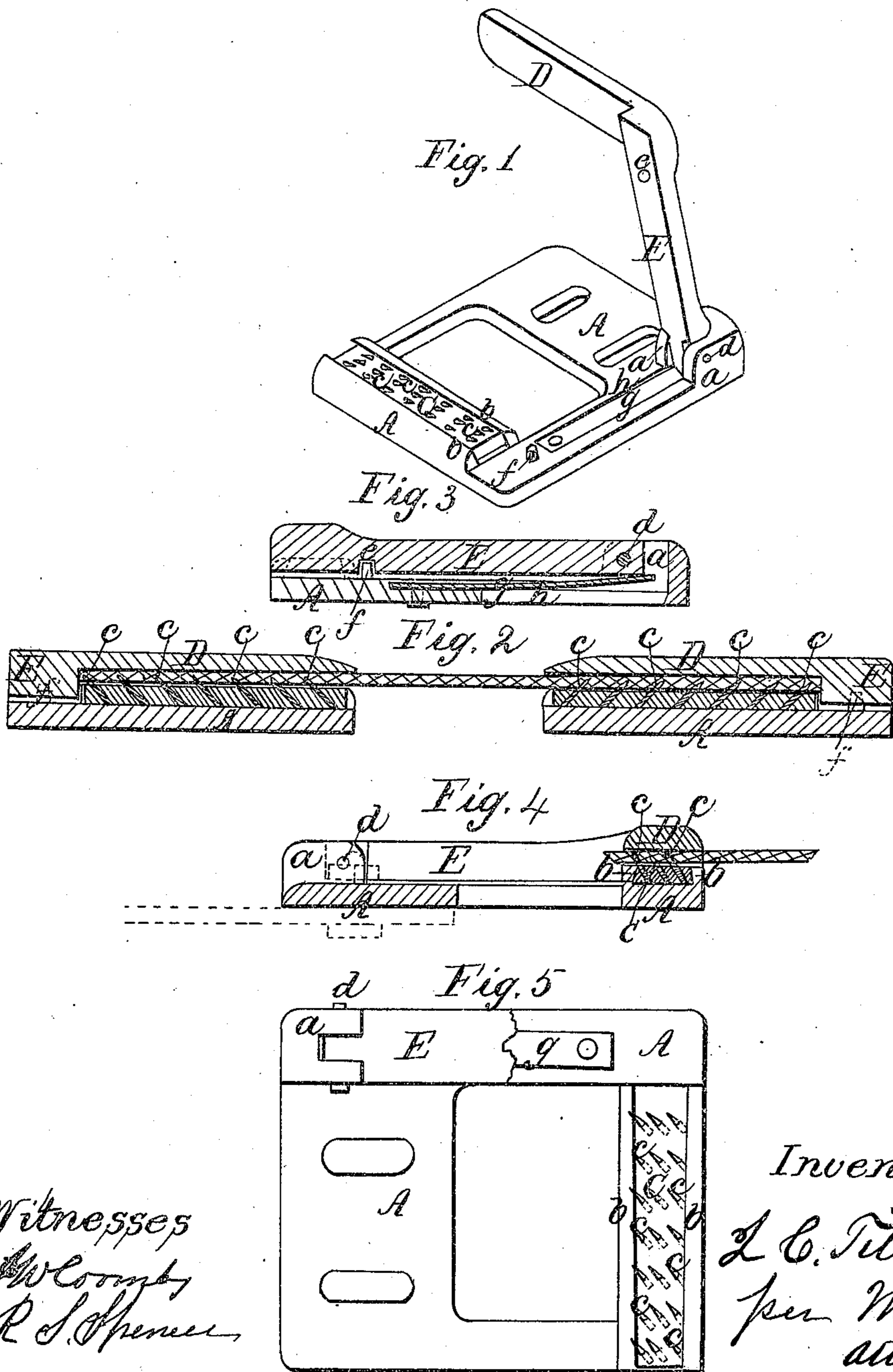


J. C. Tilton.
Loam Trencher.

N^o 30,896.

Patented Dec. 11, 1860.



UNITED STATES PATENT OFFICE.

JEREMIAH C. TILTON, OF SANBORNTON BRIDGE, NEW HAMPSHIRE.

TEMPLE.

Specification of Letters Patent No. 30,896, dated December 11, 1860.

To all whom it may concern:

Be it known that I, JEREMIAH C. TILTON, of Sanbornton Bridge, in the county of Belknap and State of New Hampshire, have
5 invented certain new and useful Improvements in Loom-Temples; 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,
10 forming part of this specification, in which—

Figure 1 is a perspective view of a temple constructed according to my invention. Fig. 2 is a section of a pair of temples taken transversely of the loom showing their application to the cloth. Fig. 3 is a horizontal
15 section of one of the temples at right angles to Fig. 2. Fig. 4 is a horizontal section of the opposite temple to that shown in Fig. 3. Fig. 5 is a plan of the lower plate
20 of one of the temples.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to that kind of temple known as the spur plate temple.

25 It consists in inserting the teeth of the temple into a piece of wood which is fitted to the plate of the temple in such a manner as to be removable for the purpose of being renewed with a new set of teeth when the
30 teeth are worn out or for the purpose of renewing the teeth singly when injured.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

35 A, is the bottom plate of the temple, of cast or malleable iron or other metal made flat with the exception of its having raised above its upper surface a slotted lug *a*, to form part of the joint by which the arm E, which carries the cap D is connected, and
40 having two dovetail shaped projections *b, b*, between which is received the taper flat dovetail-edged piece of wood C, in which the teeth *c, c*, are inserted; the said projections approaching each other in taper form toward the side of the plate which is arranged next the center of the loom to allow the piece of wood which is also tapered in the direction of its length to be secured by
50 being driven tightly in between them. The said plate is intended to be attached to the breast beam by a stout spring part of which is represented in blue color in Fig. 4.

The teeth *c, c*, are composed of sharp

pointed steel pins inserted through the wood 55 from the under side and projecting upward to a suitable length above the upper side, the said teeth being inserted diagonally as shown in Fig. 5 in such manner as to give them an upward inclination in a forward 60 direction or toward the breast beam as illustrated in Fig. 4, and an upward inclination in an outward direction or toward the side of the loom as illustrated in Fig. 2. This peculiar diagonal or double inclination not 65 only prevents the cloth slipping back but prevents it slipping off the teeth in a lateral direction as it is stretched by the action of the reed when the latter beats up the filling. When the teeth are all worn out the piece of 70 wood C, can be easily slipped out and a new piece with a new set of teeth inserted without removing the plate from the loom; or when one or more teeth are broken or accidentally injured the removal of the piece of 75 wood permits such tooth or teeth to be taken out of it and replaced by new ones.

D, is the cap which confines the cloth to the teeth *c, c*, and E, the carrier to which it is attached made of a single piece of metal. 80 The carrier E, is jointed by a pin *d*, to the lug *a*, and when the temple is closed, fits down close upon the bed plate A. The cap D, is raised so far above the carrier E, that its under surface cannot touch the teeth *c, c*. 85 The carrier E, has a hole *e*, in its under side to fit a short fixed pin *f*, secured in the plate A, to keep the cap in position when closed. *g*, is the spring which holds the carrier down when the temple is closed as shown in 90 Fig. 3, or up when the temple is open as shown in Fig. 1, the said spring being arranged in a cavity *h*, in the plate A, and riveted to the said plate, and pressing up against the carrier in rear of the joint pin 95 *d*. When the cap is down, the spring allows it to yield and rise to any inequalities in the thickness of the cloth.

What I claim as my invention and desire to secure by Letters Patent is— 100

Inserting the teeth *c, c*, into a removable piece of wood C, fitted and secured in the plate A, substantially as and for the purpose herein specified.

JEREMIAH C. TILTON.

Witnesses:

L. HUNT,

K. WADLEIGH.