S. Sheldon,

Harness Tool,

No. 1,817. Patented Oct. 10, 1840.

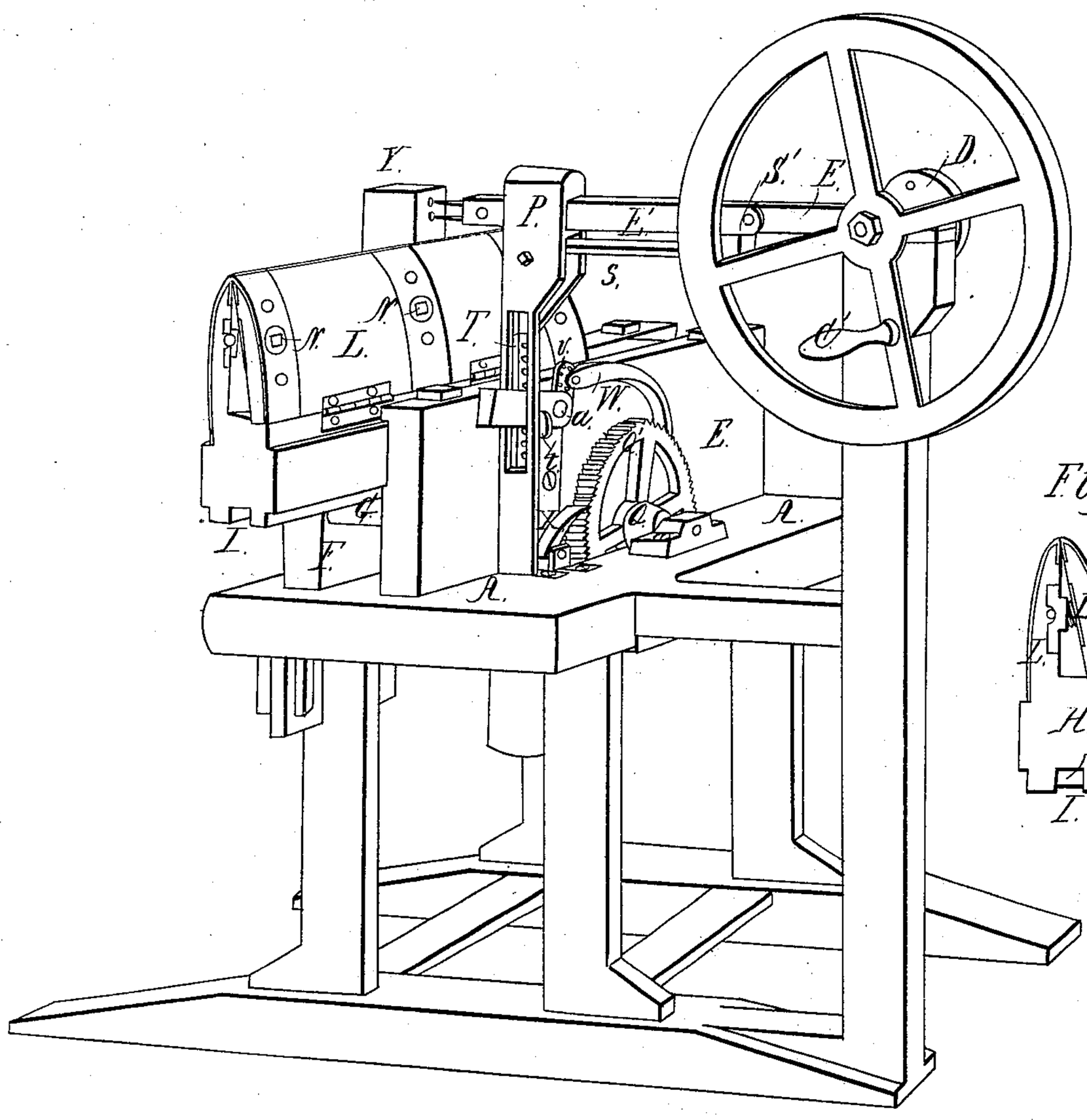


Fig. 3.

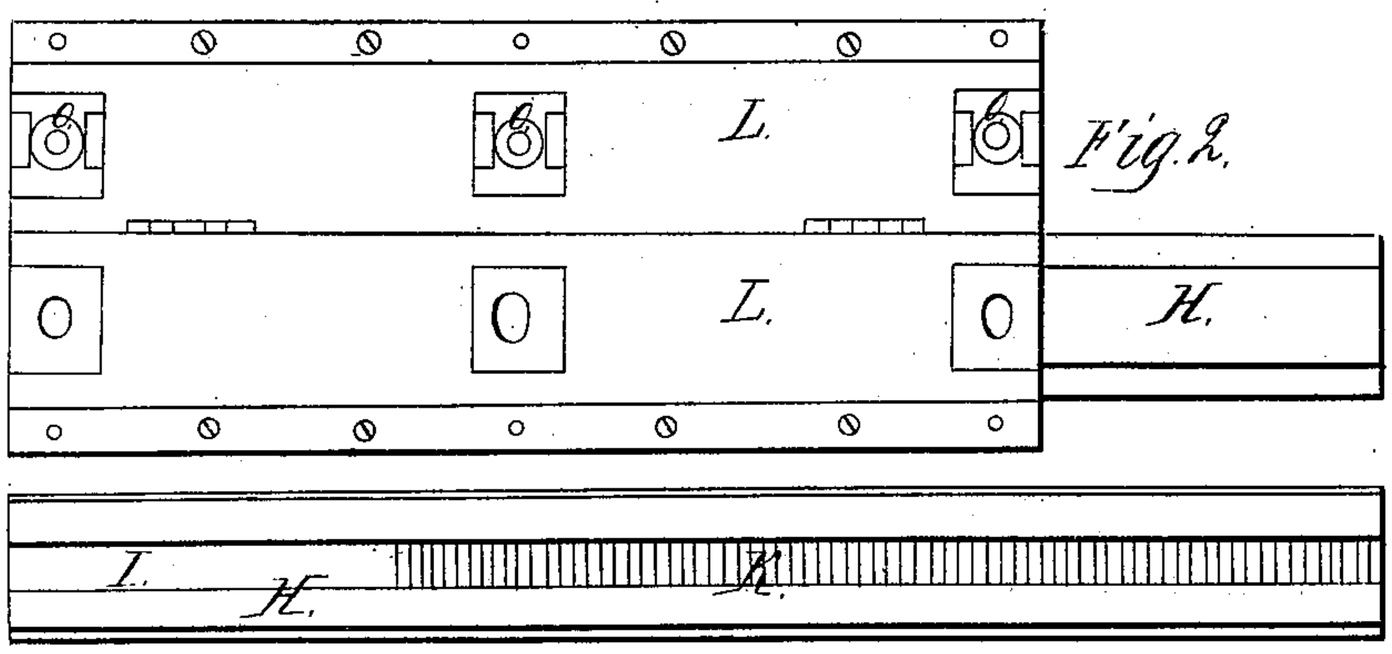
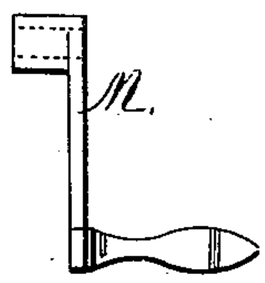


Fig. 2.



UNITED STATES PATENT OFFICE.

SAMUEL SHELDON, OF CINCINNATI, OHIO.

MACHINE FOR PRICKING LEATHER PREPARATORY TO STITCHING.

Specification of Letters Patent No. 1,817, dated October 10, 1840; Antedated September 30, 1840.

To all whom it may concern:

Be it known that I, SAMUEL SHELDON, of Cincinnati, in the State of Ohio, have invented a new and useful improvement in the manner of constructing the machine for pricking leather preparatory to the stitching it for harness, the same being a further improvement on the machine originally patented by J. W. Briggs, Luther C. Carner, and Joseph S. Carner, and for improvements upon which I obtained Letters Patent of the United States, dated on the 3d day of August, 1839, and for further improvements on which I have also obtained Letters Patent bearing date the 21st day of September, 1840.

The improved machine of which the following is a description or specification, I denominate the "thorough brace pricker;" and this machine is the same in its general construction with those above alluded to; but it is so modified as to adapt it to work of a heavier kind than that which can be conveniently performed by the power of the foot applied upon a treadle; such for example as the piercing or pricking the holes for stitching through thorough braces, which are frequently from an inch to an inch and a quarter in thickness.

In the accompanying drawing A, A, is the bench upon which the principal operating parts of the machine are sustained.

B, is a post, or upright, firmly connected with the other parts of the frame work, and carrying a fly, or balance wheel C, which is to be turned by the handle C′. Upon the shaft of this fly wheel there is a crank or pitman wheel D, to which the pitman E, is attached by means of a joint or crank pin, said wheel having several holes in it at different distances from its center, so as to lengthen or shorten its action as a crank, in a manner well known to machinists; by this means the motion of the awl-shaft is regulated. This pitman is jointed to the awl-shaft E′, which slides back and forth through the awl-shaft guide, or head P; the head or brace *y*, being that which sustains the trace, or other article of leather to be pierced, as in my other machines. S, is a strap of leather which is fastened at one end to the stud S′, on the outer end of the awl shaft. This strap passes over a roller in the head P, and bending down on the inner side of this roller, is attached to a slide, or flat rod of metal T, which has a weight U, on its lower end, to cause it to descend as the awl-shaft advances. The slide T, serves to regulate the feeding motion of the clamp L, which has a rank on the under side of its carriage part H, said rack being operated on by a pinion on the shaft Q, of the ratchet wheel Q′, as described in my former patents.

The slide T, is pierced with a number of holes, one above another, and into either of these holes is inserted a pin *t*, and this pin coming into contact with the feed arm, or lever R, which works on a joint pin at *a*, carries the pawl W, and consequently the ratchet wheel Q′, forward, thus sliding the clamp to a distance governed by the lift of the pin *t;* the feed of the clamp is also regulated by the shifting of the pitman E, on its crank pin, as this regulates the lift of the slide T. The catch X, serves to check the ratchet wheel as the pawl W, returns.

F, F, are the standards which support the clamp and serves as guides to its carriage, or sliding part H. As this machine is for the largest class of work, the clamp L, must be made proportionately strong and heavy, I therefore, to decrease its friction, and enable it to slide readily, place under it several friction rollers, one of which is seen at the end G.

The jaws of this clamp are to be secured in the manner described by me in the specification of the Letters Patent granted to me under date of the twenty-first of September, 1840, and does not need therefore, to be here particularly explained.

N, Fig. 1, are the heads of the screws. Fig. 2, is the clamp opened out. Fig. 3, a transverse section of it, and Fig. 4, its under side, with the rack K, let into the groove I.

Having thus fully described the construction and operation of my thorough brace pricker, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The arrangement for regulating the feed by which the clamp is moved, and the distances of the stitches governed; that is to say,

2. I claim the mode of combining the awl-slide, the strap S, the slide T, and its pin *t*, and the weight U, as described.

3. And in combination therewith I claim the auxiliary means of regulating the feed, by means of the pitman E, combined with the pitman wheel D, and the strap S, connected with the other parts of the apparatus as herein set forth.

SAMUEL SHELDON.

Witnesses:
THOS. P. JONES,
W. THOMPSON.