

(No Model.)

B. ELMORE.

SCREW PLATE.

No. 325,790.

Patented Sept. 8, 1885.

FIG. 1.

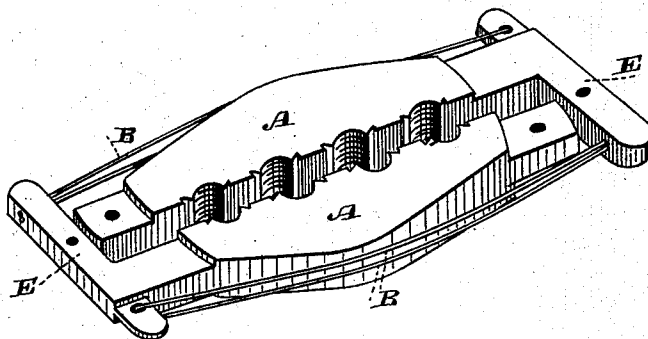
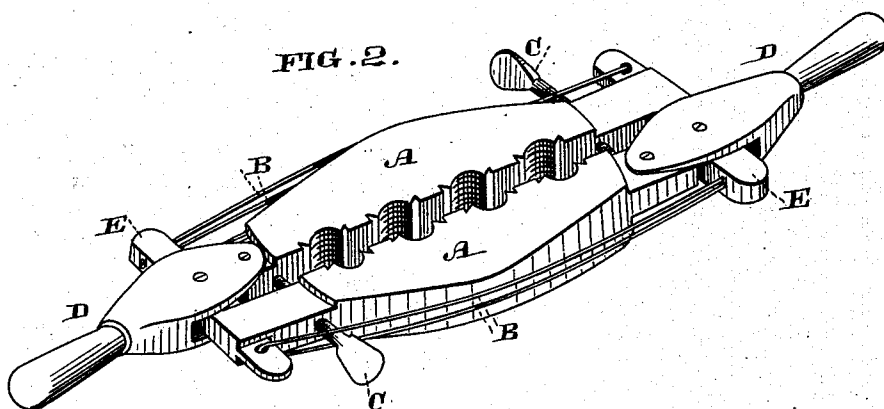


FIG. 2.



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UNITED STATES PATENT OFFICE.

BENTON ELMORE, OF SHASTA, CALIFORNIA.

SCREW-PLATE.

SPECIFICATION forming part of Letters Patent No. 325,790, dated September 8, 1885.

Application filed June 29, 1885. (No model.)

To all whom it may concern:

Be it known that I, BENTON ELMORE, of Shasta city, Shasta county, State of California, have invented an Improvement in Screw-Plates; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a novel construction of screw-cutting plates.

10 It consists of two parallel jaws or plates having the adjacent faces grooved and formed so as to cut threads upon any bolt or piece of metal which may be inserted between them, the opposite end of each plate having trans-
15 verse extensions, and levers are fulcrumed to the plates and to these extensions, so that the plates may be opened or closed by the movement of the levers. Strong springs are so attached as to press upon the backs of the plates and force them together, and adjusting-screws
20 determine the space which shall be left between them while at work.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a view showing the plates
25 with their transverse extensions and the springs. Fig. 2 shows the completed mechanism with the levers and regulating-screws.

A A are two plates of metal having their
30 adjacent faces threaded, the screw-threads being of proper size and pitch so that they perform the work of the dies which are used in ordinary screw-plates. One end of each of these plates A is formed with or has secured
35 to it at right angles an extension, F, the extension on one passing by the opposite end of the other plate, as shown, and they extend also a short distance beyond the backs of the plates.

40 A strong spring, B, has one end secured in the extension of one of the plates, this spring passing over the back of the plate, and having the other end fitted to slide through an opening in that part of the extension of the
45 opposite plate which projects beyond the end of the first one. A similar spring is fitted to press upon the back of the opposite plate in a like manner.

50 C C are adjusting or gage screws, which pass through the plates near the end, so that the point of one screw may abut against the inner

ends of the opposite plate. By adjusting these screws the plates will be held as far apart as may be desired, so that in cutting a thread upon the bolt, if it be desired, only one half
55 of the depth of the thread may be cut at the first operation, and it may be completed at the second, as might be necessary sometimes on account of the poor quality of the iron.

In order to separate the plates A against
60 the pressure of the springs, for the purpose of admitting the bolt or article upon which the thread is to be cut, levers D are fulcrumed upon the transverse portions E, the inner end of each lever being pivoted to the free end of
65 the plate which stands opposite to it. By pulling the right-hand lever toward the person, and pushing the left-hand lever in the opposite direction, the plates may be opened or separated so as to be applied to the bolt
70 upon which the thread is to be cut. The plates are then allowed to close upon the bolt, and the pressure of the springs holds them with sufficient force so that they will cut a thread
75 to the desired depth, this being regulated by the gage-screws C before described.

As many openings may be made in the adjacent faces of the plates as may be desired—as, for instance, two sets of plates may be used,
80 one having sizes numbered 10, 12, 14, and 16, and the other 12, 14, 16, and 18, these covering about all the threads which are generally used or needed in the ordinary blacksmith's shop.

The whole device is very simply made, the parts being all plain work, and being only
85 eight in number.

The jaws or plates may be separated whenever the thread is finished, at whatever point they may be upon the bolt, without waiting to
90 run them off, and they will never clog or strip the thread off the bolt.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The screw-plates having their adjacent
95 faces threaded, and having transverse extensions at their opposite ends, as shown, in combination with the springs B, passing over the backs of the plates, having one end attached, and the other sliding loosely in the opposite
100 extensions, substantially as and for the purpose herein described.

2. The parallel plates having their adjacent faces threaded and the transverse extensions at their opposite ends, in combination with the compressing-springs B, attached as shown, and the gage-screws C, substantially as herein described.

3. The plates having their adjacent faces threaded, and having the transverse extensions from their opposite ends, with the gage-screws and compressing springs B, as shown,

in combination with the levers D, fulcrumed in the transverse extensions, and connected with opposite ends of the plates A, substantially as herein described.

In witness whereof I have hereunto set my hand.

BENTON ELMORE.

Witnesses:

ISAAC SIMON,

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