T. BURKE.

Device for Swaging Screw-Threads on Eye-Bolts.

No. 228,033.

Patented May 25, 1880.

Patented May 25, 1880. INVENTOR Showas Burke Luderson his WITNESSES

United States Patent Office.

THOMAS BURKE, OF PORTSMOUTH, VIRGINIA.

DEVICE FOR SWAGING SCREW-THREADS ON EYEBOLTS.

SPECIFICATION forming part of Letters Patent No. 228,033, dated May 25, 1880. Application filed November 18, 1879.

To all whom it may concern:

Be it known that I, THOMAS BURKE, of Portsmouth, in the county of Norfolk and State of Virginia, have invented a new and 5 valuable Improvement in Hot-Metal Screw-Cutters and Eyebolt-Formers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to ro the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical central section of this invention. 15 Fig. 2 is a vertical transverse section of the same. Fig. 3 is a horizontal section of the bed-die and circumscribing band. Fig. 4 is a bottom view of the slide-die, and Fig. 5 is a perspective view of the eyebolt.

This invention has relation to an improved bolts, especially eyebolts, designed to be subjected to great strain; and it consists in the construction and novel arrangement of parts, 25 as hereinafter shown, described, and particularly pointed out in the claim.

In the accompanying drawings, the letter A designates the bed-die, which is rectangular in plan, having a bifurcated form vertically, 30 its upright side walls or branches, b, having their inner and outer surfaces all parallel, as shown in the drawings.

The score of the bed-die is formed between the branches b at their lower ends, and connects therewith by horizontal shoulders c, which form stops for the end of the upper or movable die, D, which slides between the branches b of said bed-die. This slide-die is of rectangular plan, and its scored sides are 40 flush with the edge e of the branches of the bed-die.

The die-surfaces are tapered slightly from the entrance to the other end in order to form a tapered screw. The die-surfaces are not full 45 semicircles, but arcs of about one-third the circumference, so that they have a somewhat flattened or elliptical appearance when the die-stops are in contact. Along the lowermost portion of the bed-die score is a deep 50 scale-groove, g, which keeps the scores clear.

The bed-die is usually provided with a square tang or projection, t, whereby it may be attached to an anvil or other bed-block, and the slide-die extends above the branches of the bed-die a sufficient distance to form a han- 55 dle, h, the upper end of which is squared, as shown at k, to receive the strokes of the hammer.

L represents a circumscribing guide-box, rectangular in form and open at each end. 60 This is slipped over the branches of the beddie, and forms the main guide for the slide-die as it is moved up and down in its operation. This guide-box is provided with circular openings m at the ends of the die-scores, the cen- 65 ters of said openings being in line with the centers of the arcs of the die-scores.

The dies are made of best steel, and are designed to work on a heated rod, so as to preserve the outer fibrous formation, the thread 70 means for forming the threaded portions of | being formed, by hammering, with the slide-die as the rod is turned, the box serving to guide the work and to keep the dies in line, as well as to prevent the branches of the bed-die from spreading.

This improvement is especially designed for the construction of eyebolts used in lumber-hauling, as it is essential that such bolts should have great strength in the threaded portion and be easily removed from the wet 80 logs.

I am aware that the dies themselves, their mode of operation, and the results of their use are not new, and I do not claim them; but

I do claim as my improvement— Jointly with the dies, the groove g, the open-ended box or sleeve L, and the broad, plain, and parallel-faced side walls or branches, \bar{b} , in virtue of which obstruction of the dies by scale is prevented and the hammer-die is 90 accurately guided in its movements, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

THOMAS BURKE.

Witnesses:

V. A. HAYNES, C. W. HIGGINS.