No. 807,850. PATENTED DEC. 19, 1905.

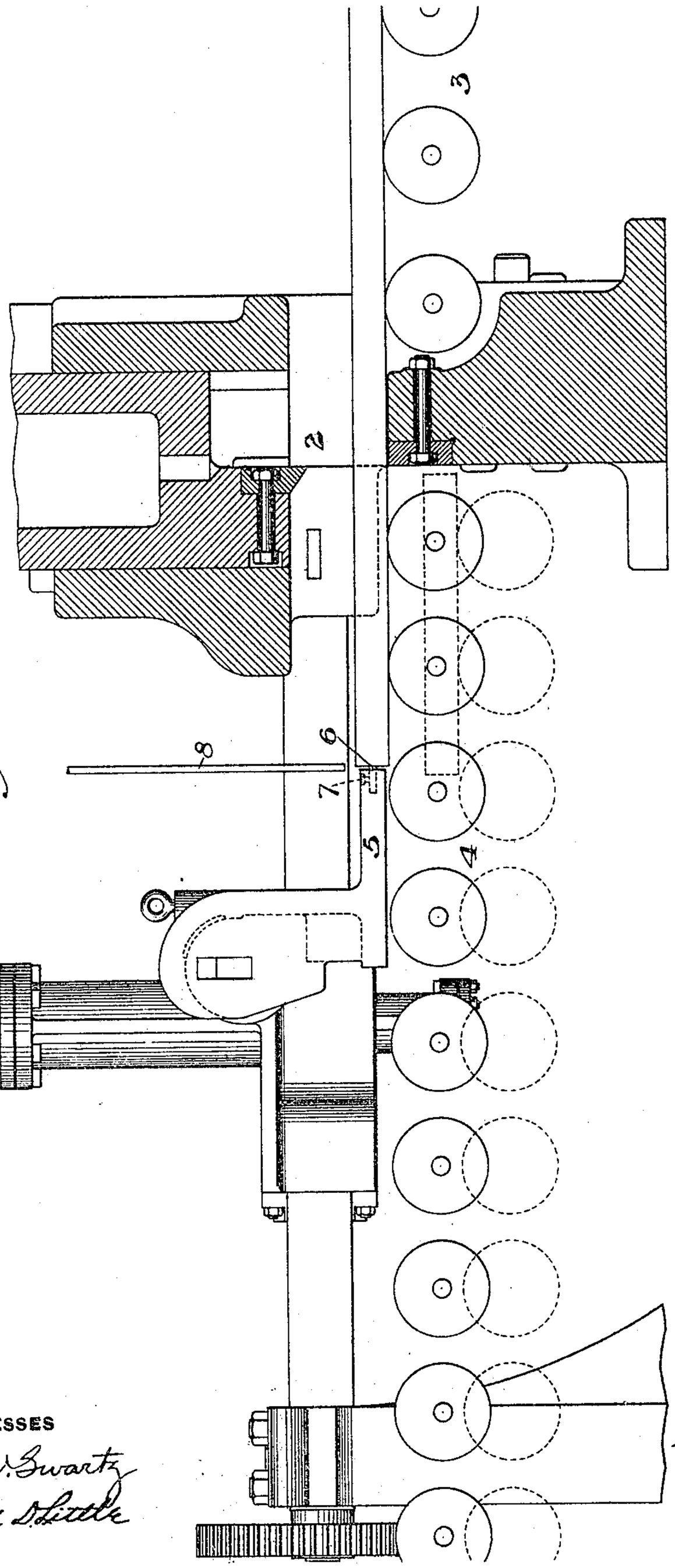
G. E. McCAFFREY.

APPARATUS FOR MARKING METAL BLOOMS, BILLETS, OR SLABS.

APPLICATION FILED JULY 18, 1905.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

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Richard D. Little

INVENTOR

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his attys

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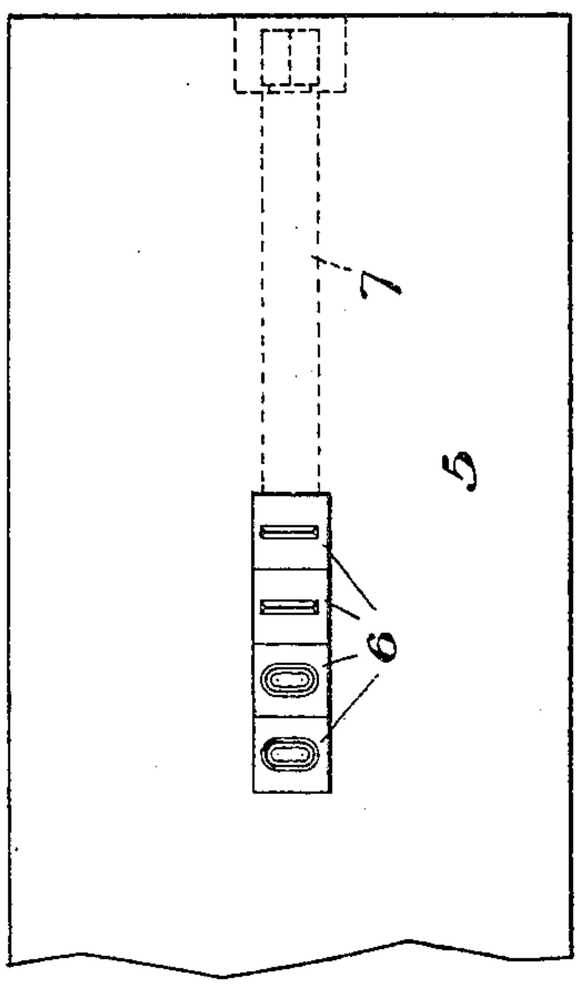

Fig. 5.

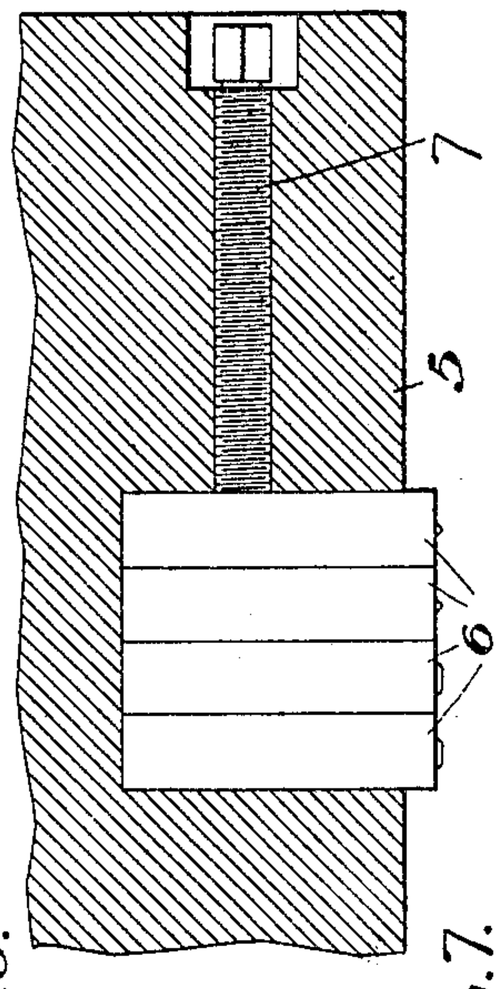

Fig. 6.

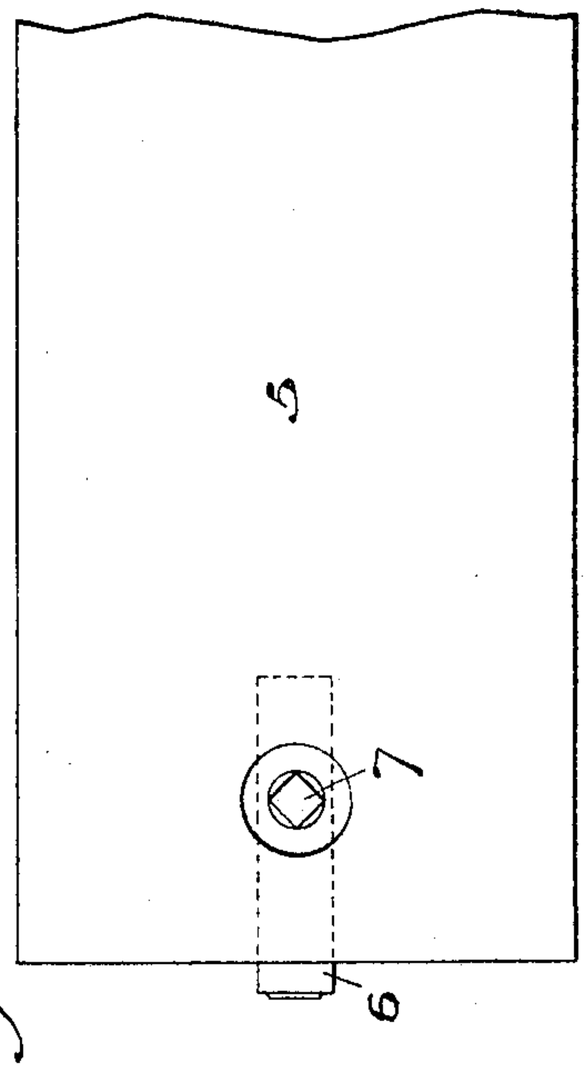

Fig. 7.

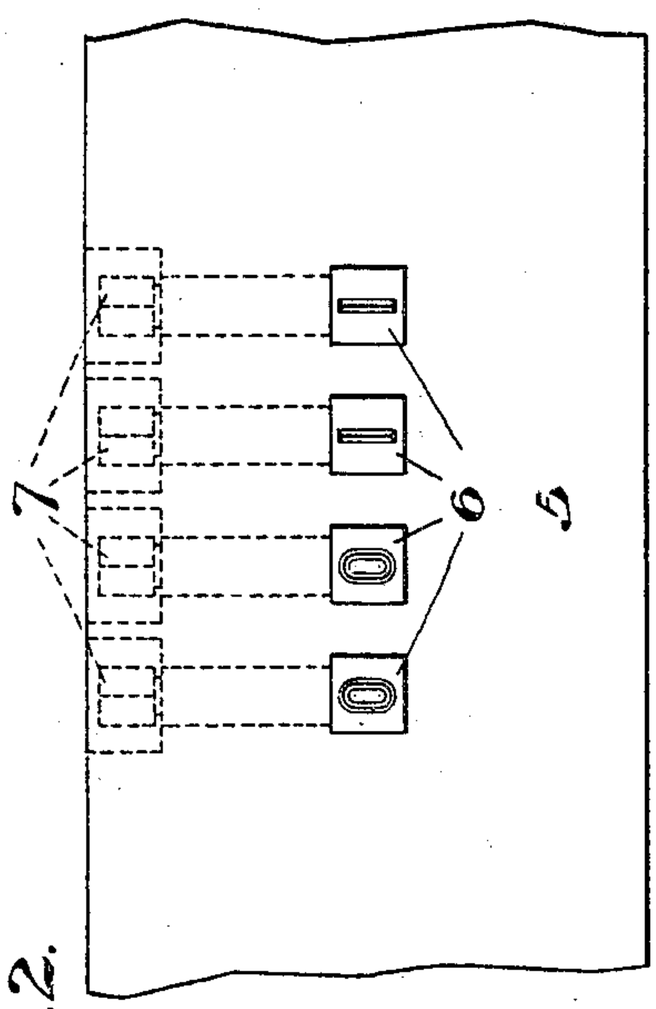

Fig. 2.

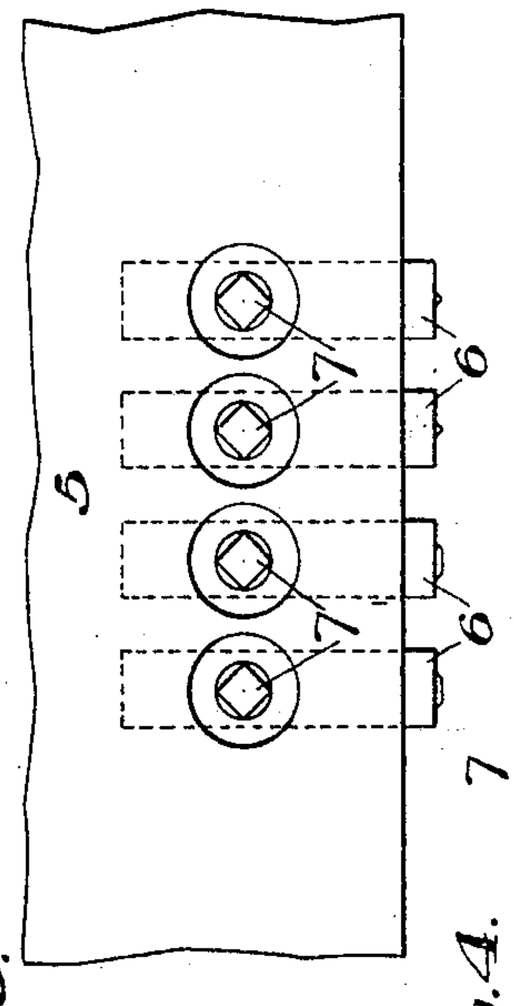

Fig. 3.

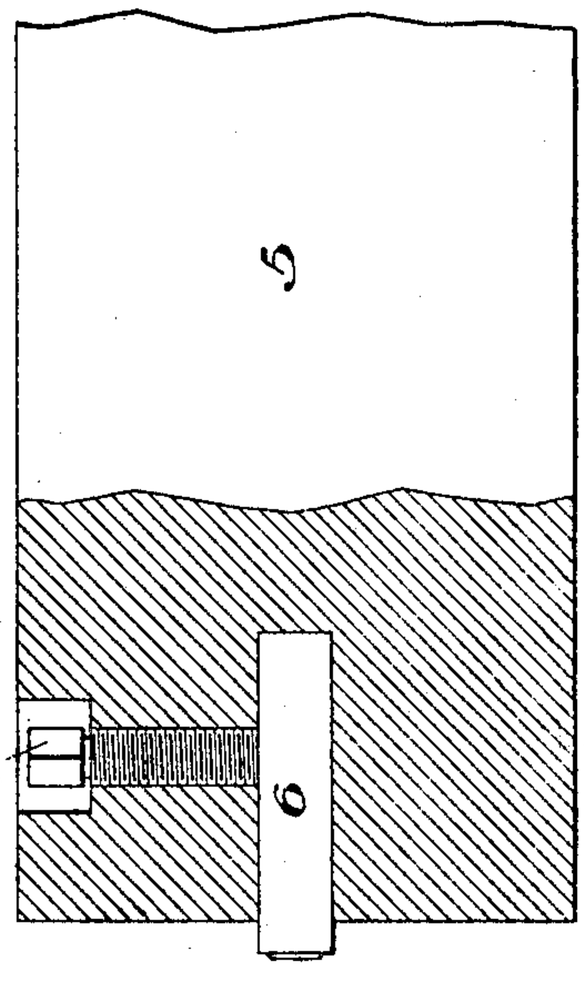

Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE E. McCAFFREY, OF STEUBENVILLE, OHIO.

APPARATUS FOR MARKING METAL BLOOMS, BILLETS, OR SLABS.

No. 807,850. Specification of Letters Patent. Patented Dec. 19, 1905.

Application filed July 18, 1905. Serial No. 270,220.

To all whom it may concern:

Be it known that I, GEORGE E. McCAFFREY, of Steubenville, Jefferson county, Ohio, have invented a new and useful Improvement in Apparatus for Marking Metal Blooms, Billets, Slabs, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional side elevation of a shear and its feed-tables and showing my improvement as it is applied to the shear-stop. Figs. 2, 3, and 4 are detail views showing the manner in which the types used for marking are removably fixed in the end of the shear-stop. Figs. 5, 6, and 7 are similar detail views showing a modification of the means for securing the types in the stop.

The object of my invention is to provide means by which blooms, billets, slabs, and similar articles are stamped or marked with a heat-number or other mark of identification in a simple and effective manner without loss of time and in which the difficulties heretofore met with in the stamping of such articles are overcome.

In the drawings, 2 represents a shear having a roller feed-table 3, on which the metal to be sheared is fed forward between the knives of the shears, and a vertically-movable delivery-table 4, on which the metal is removed from the shear after being cut into the required lengths. The shear 2 is provided with a stop 5, which is longitudinally adjustable with the shear-knives, to permit the metal to be sheared into various lengths as is required. The stop is preferably adapted to be moved by the operator into and out of the path of the sheared metal. The end of the stop 5 is provided with a recess or recesses, in which the types 6 6, by which the metal is marked, are removably held, the types being secured in place by means of set-screws 7. The types 6 are kept cool and prevented from becoming overheated by means of water which is supplied to the types through suitable spray-pipes 8.

The operation of the apparatus is as follows: The desired type 6 6 are secured in the recesses located in the end of the stop 5. By means of the roller-table 3 the end of the metal to be sheared is fed forward between the cutting-knives on the shear and the crop end is cut off. The metal is again fed forward until its front end comes into contact with the types 6, located in the end of the stop 5, the momentum of the hot metal piece as it is fed forward being sufficient to imprint the types clearly upon its end when it comes into contact with the stop. The metal is then sheared to the desired length, when it drops upon the delivery-table 4, which is then lowered into the dotted position shown, and the sheared metal is transferred to the cars to be loaded or is otherwise disposed of. The operation as described above is repeated until the metal has been cut into as many lengths as possible. When the piece of metal upon the delivery-table 3 becomes too short to be fed forward by the action of the feed-rollers, it remains on this table until another bar is received on the table, when it is pushed forward by the new bar, which is behind it, with sufficient force to stamp the impression of the types upon its end. In this way each billet or slab is automatically stamped by its forward movement into contact with the types located in the end of the stop.

The types being placed in the recesses of the stop and being held by means of set-screws are easily removed and replaced whenever required. The invention may be applied to existing shears provided with a stop against which the end of the metal to be sheared strikes to determine the length of the sheared piece.

The advantages of my invention will be appreciated by those skilled in the art. The apparatus is simple, and it avoids the uncertain stamping, and the frequent delays heretofore experienced in the operation of stamping are avoided.

Variations may be made in the arrangement and location of the types without departing from my invention, since

What I claim is—

1. Apparatus for marking metal bars, &c., comprising means for moving the metal bar forward, and a stationary support having types set in the path of the bar and adapted to make an impression on the metal under the momentum imparted to the bar by said moving means; substantially as described.

2. Apparatus for marking metal bars, &c., comprising a roller feed-table for moving the metal bar forward, and a stationary support having types set in the path of the bar and adapted to make an impression on the metal under the momentum imparted to the bar by said feed-roller table; substantially as described.

3. Apparatus for marking metal bars, &c.,

comprising a shear having a stop, types on the stop, and means by which the bars are fed forward into engagement with the types to mark the bars; substantially as described.

4. Apparatus for marking metal bars, &c., comprising a shear having a stop, removable types located on the stop, and means by which the bars are fed forward into engagement with the types to mark the bars; substantially as described.

In testimony whereof I have hereunto set my hand.

GEO. E. McCAFFREY.

Witnesses:
W. A. TAPPE,
JOHN A. KANE.