

I. C. SHUSTER.
 STOCK AND DIE.
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1,382,392.

Patented June 21, 1921.

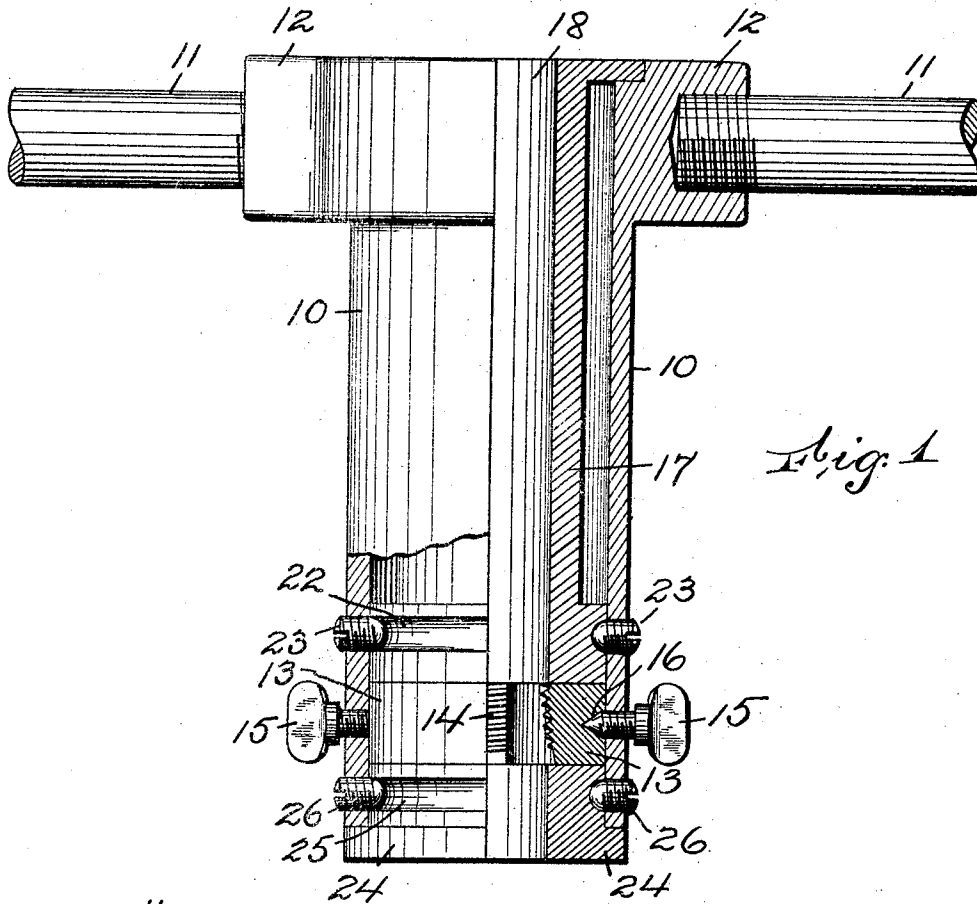


Fig. 1

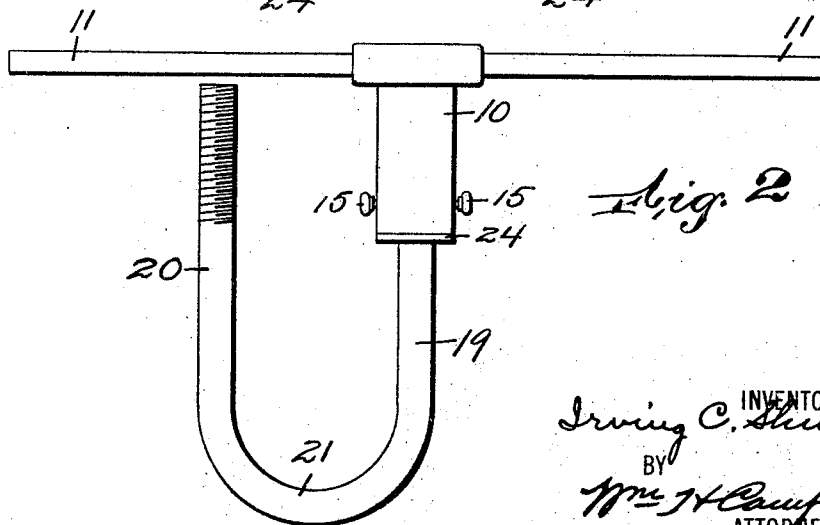


Fig. 2

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To all whom it may concern:

Be it known that I, IRVING C. SHUSTER, a citizen of the United States, and a resident of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Stocks and Dies, of which the following is a specification.

This invention relates to an improved stock and die, and is designed to provide a handy means for cutting threads and also for repairing threads on the end of bars or pipes that project adjacent to elements that are approximately as long as the pipe or rod to be threaded.

In order to fully describe the invention and clearly demonstrate its possibilities, it is described and illustrated herein as applied to a clip for fastening springs to the axles of vehicles. Such clips are of large size on the larger form of trucks, and in the case of a five or ten ton truck, when, due to the necessity of repair or replacement, it is necessary to remove the spring clips so that the spring can be taken from the axle, in most cases it is found that, due to a very tight fit, or due to the accumulation of rust, when the nuts are taken from the projecting ends of the U-shaped clips the threads are damaged, or they are damaged when, after the nuts are removed, the clips are driven out backward through the perforations in which they have been seated.

When the threads are so mutilated it is very difficult to place a nut on the end of the clips, especially as workmen are in uncomfortable positions, usually on their backs under these trucks, and valuable time of skilled labor is wasted in sometimes hopeless attempts to place these nuts back on the clip when they are again put in place. The clips then have to be taken and the thread followed by a file, which is slow and tedious work, especially in a long thread, and the threads thus cleared and roughly recut.

With my improved invention the stock and die is placed on the end of the clip and the thread can be cut as with the usual stock and die by rotating the stock, and the handles, which are at the other end of the stock from the end at which the die is situated, do not come in contact with the other arm of the clip until the necessary, and in many cases considerable, length of thread has been cut or re-cut.

The invention is illustrated in the accompanying drawing in which Figure 1 is

a part side view and part section of the improved stock and die, and Fig. 2 is an elevation of the stock and die on a reduced scale, and showing it as applied to a clip for springs.

In the form shown in the drawing the stock is elongated and consists of a body portion 10, which is usually cylindrical, although other forms in cross-section can be used, the stock 10 having on one end suitable handles 11 which, in the illustration, project radially and laterally from the top end of the stock, the stock having bosses or enlarged parts 12 to provide sufficient material for adequate attachment of the handles, which are usually screwed into the bosses 12 and are thus easily attached or detached, and when detached permit the easy assembling of the device for transportation or storage.

The die is secured adjacent to the end opposite the end at which the handles are placed. In the form shown the die 13, which has the thread cutting projections 14 on its inner face, is held against rotation by the set screws 15 which pass through the walls of the stock and the ends of which enter the depressions 16 in the die. To assist in holding the die against longitudinal movement, and also to form guiding means for the bar or pipe to be threaded, I use inserts, one of the inserts, as 17, being of considerable length and preferably extending for a major portion of the length of the stock and having a bore 18 for the passage of an element such as an arm 19 of the clip 21, which is shown in Fig. 2, so as to make the use of the device clear.

The insert 17 is provided with an annular groove 22 which receives the ends of the screws 23 which pass through the walls of the stock, and a shorter and smaller insert 24 has a groove 25 which receives the screws 26 which pass through the walls of the stock and the inner ends of which are seated in the groove 25. This manner of fastening saves time, as when a die is to be replaced by another and it is necessary to use other inserts, they can be quickly secured in position because the insert can be secured in any rotative position and it is not necessary to waste any time finding a depression in which the screws 23 or 26 are to be seated.

The use of the device is evident from Fig. 2 of the drawing, the stock being shown well down on the arm 19 of the clip 21, and a

considerable length of thread is cut before the handles 11 are stopped in their rotation by contact with the arm 20 of the clip 21.

Minor changes can be made in the arrangement and construction of the parts without departing from the scope of the invention.

I claim:

1. An improved stock and die comprising
10 ing a stock of material length open from end to end, a die secured transversely at one end of the stock, and a handle secured at an angle to the other end of the stock without entering the opening in the stock, whereby
15 the stock can be continuously rotated in its application to the arms of U-shaped elements.

2. An improved stock and die comprising
20 an elongated stock, inserts having alined bores and being removably secured in said stock, a die secured between the inserts near one end of the stock, and a handle projecting from the opposite end of the stock.

3. An improved stock and die comprising
25 an elongated stock, a long insert inside the stock and extending for a major portion of its length, the insert having a bore and having a peripheral groove, screws passing through the walls of the stock with their ends in the grooves, a second and smaller
30 stock having a bore alined with the bore in the first mentioned insert, the second insert having a peripheral groove, screws passing through the walls of the stock with their inner ends in the grooves, a die fitting be-
35 tween the ends of the inserts and having indentations in its periphery, screws passing through the walls of the stock and entering the indentations, and a handle projecting laterally from the end of the stock oppo-
40 site the end at which the die is placed.

In testimony that I claim the foregoing, I have hereto set my hand, this 11th day of March, 1920.

IRVING C. SHUSTER.