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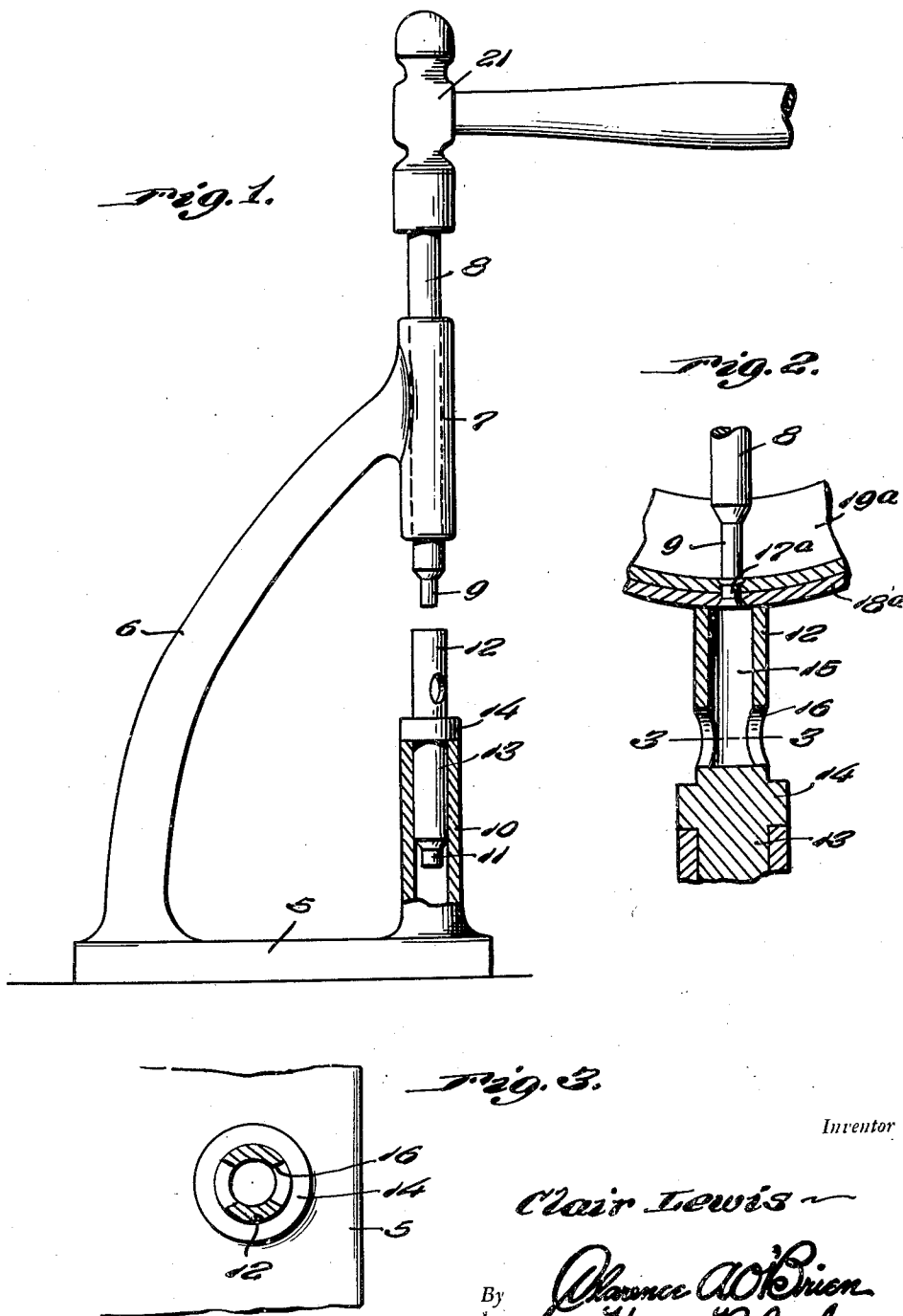
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2,491,119

RIVET SETTING AND REMOVING TOOL

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2 Sheets-Sheet 1



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RIVET SETTING AND REMOVING TOOL

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1 Claim. (Cl. 218—1)

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This invention relates to new and useful improvements in a rivet setting and removing tool and more particularly to a tool adapted for use in removing a brake lining from a brake shoe or for riveting a brake lining on a brake shoe.

The primary feature of this invention is to provide a portable device of this character which is simple and durable in construction and one that can be quickly operated with ease.

Another important feature of this invention is to provide a device of this character that is efficient and reliable in operation, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view of the tool set to punch out rivets, certain parts being shown in vertical section.

Figure 2 is an enlarged side elevational view in part showing the device in operation for removing rivets.

Figure 3 is an enlarged sectional view taken on line 3—3 of Figure 2.

Figure 4 is a top plan view of the tool.

Figure 5 is a perspective view of the plunger formed at its lower end into a pin punch.

Figure 6 is a perspective view of the plunger formed at its lower end into a set punch.

Figure 7 is an enlarged side elevational view in part showing the set punch in use, and

Figure 8 is a perspective view of the anvil.

Referring now to the drawings in detail, wherein, for the purpose of illustration, I have disclosed a preferred embodiment of the invention, the numeral 5 represents a base plate having an upwardly extending and forwardly curved arm 6 which carries a vertically extending sleeve 7 at its upper end.

A plunger 8 is slidably mounted in the sleeve 7 and extends vertically above the sleeve 7. The lower end of said plunger is provided into a pin punch 9.

Extending upwardly from the end of the base plate opposite from the lower portion of the arm 6 is a hollow cylinder 10 open at its top and adapted to interchangeably receive the set end 11 or punch or socket end 12 of a removable circular anvil 13. A circular flange 14 is formed on the anvil intermediate its ends, said flange being of

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the same relative circumference as cylinder 10 so that the flange rests on the upper edge of cylinder 10 and prevents the anvil from sliding downwardly in said cylinder. The punch end 12 of said anvil is provided with a vertical bore 15 that extends to an opening 16 in the punch end slightly above the flange 15 so that a rivet 17a of a brake shoe 19a and lining 18a punched through bore 15 will fall out of opening 16.

When the tool is to be used to set rivets 17 in a brake lining 18 to a brake shoe 19 a plunger 20 having its lower end formed into a rivet socket 20a is used in cooperation with the set end 11 of the anvil 13, as shown in Figure 7, the plunger being driven downwardly by a conventional hammer 21 striking on the upper end of the plunger.

To use the tool to remove rivets 17a from a brake lining 18a and a brake shoe 19a plunger 8 having its lower end formed into a punch 9 is used in cooperation with the cylinder or bored end 12 of the anvil, as shown in Figure 2. The plunger being driven down by the blow of a hammer 21 on the upper end of plunger 8.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claim.

What I claim:

In a device of the class described, a base plate, a hollow cylinder supported on the forward portion of the base plate and upstanding vertically therefrom a substantial distance, a reversible cylindrical anvil of substantial length adapted to snugly fit into said hollow cylinder and having one end solid with its tip of smaller diameter than the body portion to form a set punch, the opposite end of said anvil being hollow to form a socket, a circular flange carried by the anvil substantially centrally of its ends and adapted to rest on the upper surface of the cylinder to support the anvil thereon, an upwardly extending and forwardly curved arm secured to the rear of the base plate, a vertical sleeve carried by the upper end of the arm and spaced axially above the cylinder, openings in the sides of the socket end of the anvil slightly above the circular flange adapted to per-

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mit the expulsion of rivets punched out of material and into the socket of the anvil, and a removable plunger slidable in the sleeve, the lower end of the plunger comprising a punch with a solid end and having a tip of smaller diameter than the body portion for cooperating with the socket end of the anvil for removing rivets and with the solid end for upsetting a rivet.

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