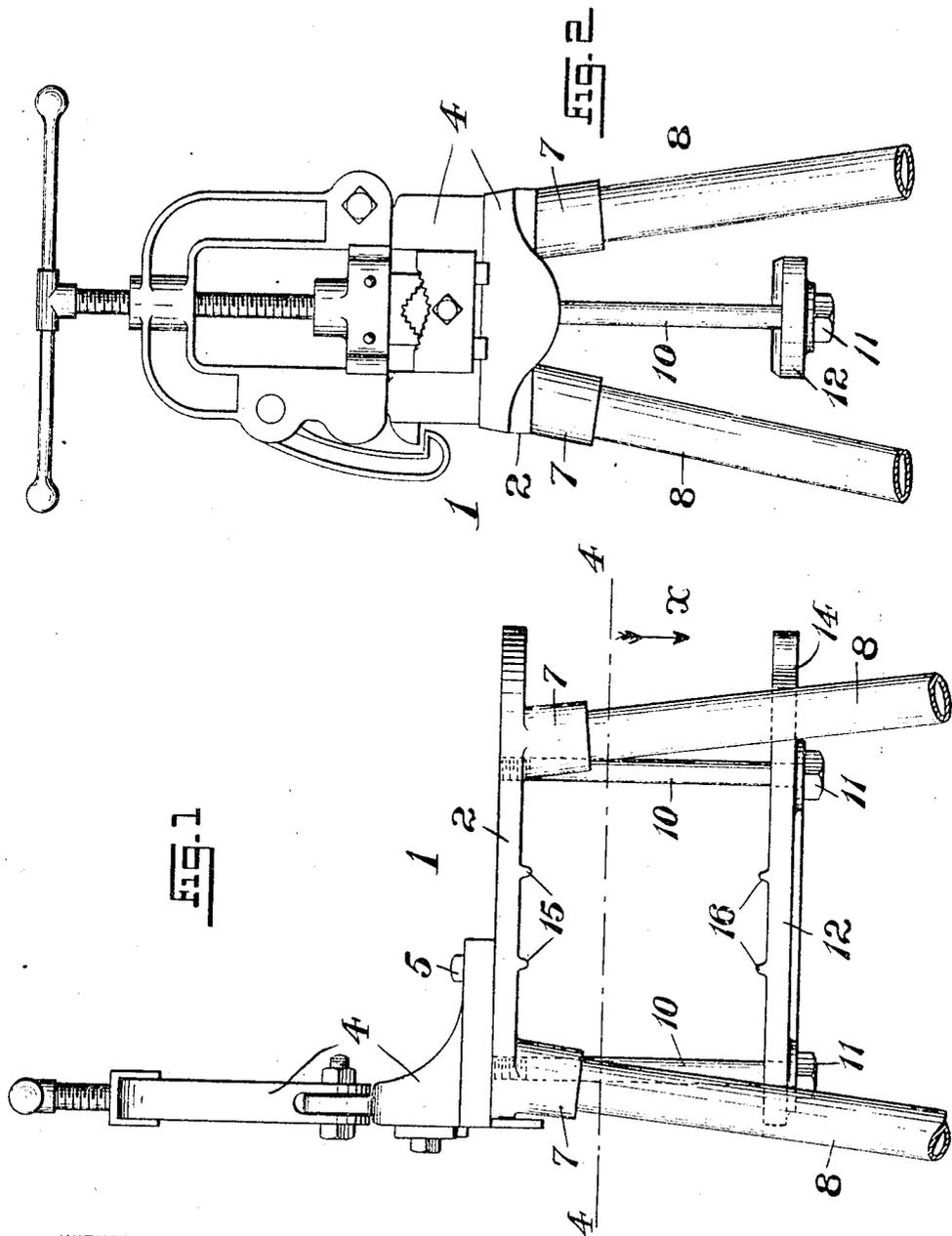


E. R. SOLEAU,  
 COMBINED VISE HOLDER AND ROD OR PIPE BENDING ATTACHMENT,  
 APPLICATION FILED JUNE 20, 1916.

1,286,134.

Patented Nov. 26, 1918.  
 2 SHEETS—SHEET 1.



WITNESSES:  
*Frederick W. Praentzel*  
*Eva E. Deuch*

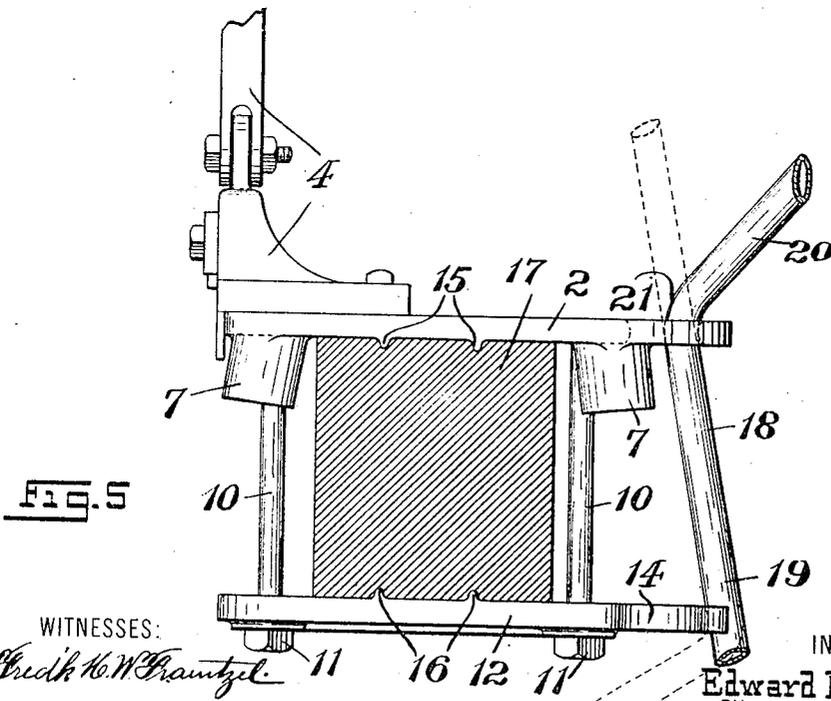
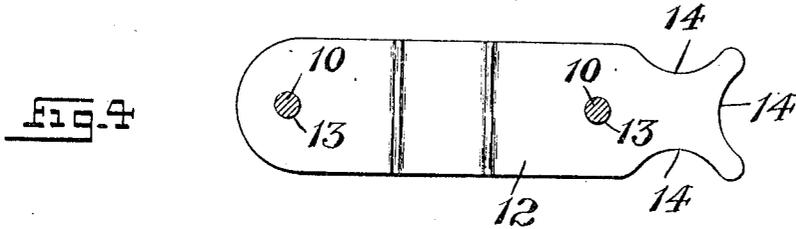
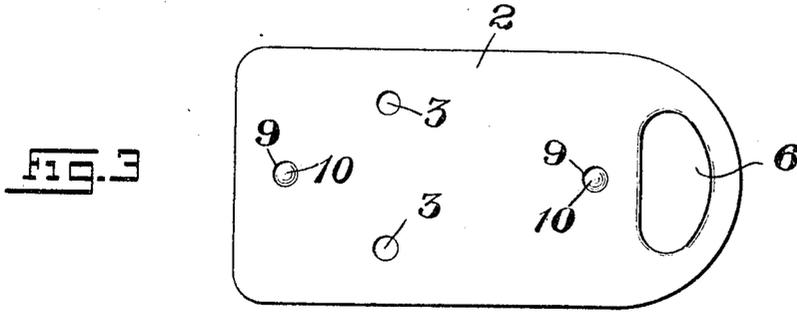
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 Edward R. Soleau  
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*Eva E. Desch*

INVENTOR:  
 Edward R. Soleau,  
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# UNITED STATES PATENT OFFICE.

EDWARD R. SOLEAU, OF BELLEVILLE, NEW JERSEY.

COMBINED VISE-HOLDER AND ROD OR PIPE BENDING ATTACHMENT.

1,286,134.

Specification of Letters Patent.

Patented Nov. 26, 1918.

Application filed June 20, 1916. Serial No. 104,663.

*To all whom it may concern:*

Be it known that I, EDWARD R. SOLEAU, a citizen of the United States, residing at Belleville, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Combined Vise-Holder and Rod or Pipe Bending Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

The present invention relates, generally, to that class of apparatus or tools for the use of steam or gas-fitters, plumbers, etc. and, this invention has reference, more particularly, to a novel apparatus in the form of a combined vise-bench or pipe-holder and rod or pipe-bending attachment, with a view of providing an apparatus of the general character hereinafter more fully set forth, which may be used in the form of a bench, or may be securely fastened or clamped upon a post, column or pillar, is readily portable, is rigid and strong in its construction, and can be readily manipulated as a bench-vise for threading pipes and rods, or for variously bending pipes or rods.

The present invention, therefore, has for its principal object to provide a novel and simply-constructed, as well as a readily manipulated apparatus in the form of a combination rod or pipe-vise holder and a rod or pipe-bending attachment therefor, providing an apparatus which will take up but very little space, and being of a light but strong structural construction, can be readily carried from place to place.

Other objects of the present construction not at this time more particularly enumerated will be clearly understood from the following detailed description of the present invention.

With the various objects of the present invention in view, the said invention consists, primarily, in the novel apparatus hereinafter set forth; and, the invention consists, furthermore, in the novel arrangements and combinations of the several devices and parts, as well as in the details of the construction of the said parts, all of which will be more fully described in the following specification, and then finally embodied

in the clauses of the claims which are appended to and which form an essential part of the said specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a combination rod or pipe-vise holder and rod or pipe-bending attachment, in the form of a bench, illustrating one embodiment of the principles of the present invention; and Figure 2 is a front elevation of the same.

Figure 3 is a top or plan view of the table-ement of the said apparatus shown in Figs. 1 and 2, with the pipe-vise removed; and Figure 4 is a horizontal sectional representation of the apparatus, said section being represented as taken in a plane on line 4—4 in said Fig. 1, looking in the direction of the arrow  $\alpha$  in said Fig. 1, and with the legs or supports shown in said Fig. 1 omitted from said Fig. 4.

Figure 5 is a view of the apparatus, with the said legs or supports removed, showing the apparatus rigidly secured or clamped upon a post, column or pillar, the said post, column or pillar being represented in cross-section, and the apparatus showing in connection therewith one manner of bending a rod or piece of pipe or tubing.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the said figures of the drawings, the reference-character 1 indicates a complete combined rod or pipe-vise holder and rod or pipe-bending apparatus made according to and embodying the principles of the present invention, the same comprising a main plate-like element, as 2, see more particularly Fig. 3 of the drawings, the same providing a suitable table or support for a rod or pipe-vise of any suitable construction, as 4, and which may be secured upon the said table or support 2 by means of bolts or screws 5 which are screwed into screw-threaded holes 3 with which the said table or support is provided. It will be understood, however, that the said vise may be mounted and secured to said table or support in any other suitable manner, and that any other suitable fastening devices or means may be employed in lieu of the said screws or bolts 3.

The said main plate-like element 2, which may be of any suitable marginal configuration, is provided at its one end-portion with

a suitable opening 6 of any desirable configuration, and upon its under surface the said plate-like element 2 is made with a number of downwardly extending and angularly disposed leg or support-receiving sockets, as 7, in which are removably disposed the upper end-portions of suitable supports or legs, as 8. When thus provided with this arrangement of legs or supports, the apparatus is adapted for use as a bench or table, as will be clearly evident from an inspection of Figs. 1 and 2 of the drawings.

The previously-mentioned plate-like element 2 is also provided with another arrangement of screw-threaded holes, as 9, into which are screwed from the lower side of the said element 2, the screw-threaded end-portions of suitable rods or bolts 10 of any suitable lengths, said rods or bolts each being provided at their lower free ends with supporting enlargements or heads, as 11.

The reference-character 12 indicates a suitably-shaped bar or plate provided with holes 13 corresponding to the holes 9 in the plate-like element 2 for the purpose of mounting the said bar or plate 12 upon the said rods or bolts 10, the said bar or plate 12 being supported in its suspended relation beneath the main plate-like element 2 upon the said enlargements or heads 11 when the apparatus is used in the manner indicated in Figs. 1 and 2 of the drawings.

At its one end-portion, the said bar or plate 12 is formed with marginal recessed or depressed portions, as 14, the purposes of which will be presently explained. It will be evident that any desirable number of such recesses or depressions 14 may be employed.

If desired, the said plate-like element 2 may be made upon its lower surface with rib-like biting members, or the like, as 15, and the said bar or plate 13 may be provided upon its upper surface with rib-like biting members, or the like, as 16, the purposes of said members 15 and 16 being self-evident from an inspection more particularly of Fig. 5 of the drawings.

As has been stated, when the apparatus has the legs or supports 8 attached thereto, then the apparatus may be employed as a bench, as will be evident from an inspection of Figs. 1 and 2 of the drawings; but in some cases, as in the erection of new buildings, it may be desirable to mount the apparatus, in a manner shown in Fig. 5, upon a post or column, as 17, in which case the bolts 10 are removed from the plate-like element 2, the said element 2 and the bar or plate 13 being made to embrace the said post or column, and the screw-threaded end-portions of the rods or bolts 10 being again connected with the said plate-like element 2. The said rods or bolts 10 are thereupon tightly screwed up, so that the said plate-

like element 2 and the bar or plate 12 will be brought into a positive clamped relation with the said post or column, as will be fully understood.

The apparatus may in this manner be attached to vertical posts or columns of different cross-sections, or may be similarly mounted upon horizontally disposed beams, or the like.

In Fig. 5, I have represented one manner of bending a piece of pipe or tubing, as 18, this being accomplished by inserting the pipe or tubing 18 through the opening 6 in the plate-like element 2 and placing the inserted portion 19 of the pipe or tube against any one of the recessed or depressed portions 14 of the said bar or plate 12. Force applied to the portion 20 of the pipe or tube 18, in the proper direction, will then cause the pipe or tube to be bent the desired degree, as at 21.

The mode of operation of bending the pipe or tube 18 may also be reversed, the pipe being bent in the manner indicated by the dotted lines in said Fig. 5 of the drawings.

Of course I am fully aware that changes may be made in the general arrangements and combinations of the various devices and parts, as well as in the details of the construction of the said parts, without departing from the scope of the present invention as set forth in the foregoing specification, and as defined in the clauses of the claims which are appended thereto. Hence, I do not limit my present invention to the exact arrangements and combinations of the various devices and parts as described in the said specification, nor do I confine myself to the exact details of the construction of said parts as illustrated in the accompanying drawings.

I claim:—

1. In a device of the character specified, a main plate-like element provided with a rod or pipe-receiving portion, a bar suspended beneath said main plate-like element, and a clamping means connected with the means of suspension of said bar for clamping said main plate-like element and bar about a post, or the like.

2. A steam-fitter's bench comprising a table-like element formed with a rod or pipe-receiving opening, a bar suspended beneath said table-like element, said bar being also provided with a rod or pipe-receiving portion and a clamping means connected with the means of suspension of said bar for clamping said table-like element and bar about a post, or the like.

3. A steam-fitter's bench comprising a table-like element formed with a rod or pipe-receiving opening, a bar suspended beneath said table-like element, said bar being provided at its one end beneath the rod or pipe-

receiving opening in said table-like element with marginal rod or pipe-receiving portions, and a clamping means connected with the means of suspension of said bar for clamping said table-like element and bar about a post, or the like.

4. A steam-fitter's bench comprising a table-like element formed with a rod or pipe-receiving opening and screw-threaded holes, bolts provided with heads and screw-threaded end-portsions screwed into the said screw-threaded holes of the table-like element, a bar mounted upon said bolts, said bar being also provided with a rod or pipe-receiving portion and a clamping means connected with the means of suspension of said bar for clamping said table-like element and bar about a post, or the like.

5. A steam-fitter's bench comprising a table-like element formed with a rod or pipe-receiving opening and screw-threaded holes, bolts provided with heads and screw-threaded end-portsions screwed into the said screw-threaded holes of the table-like element, a bar mounted upon said bolts, said bar being provided at its one end beneath the rod or pipe-receiving opening in said table-like element with marginal rod or pipe-receiving portions and a clamping means connected with the means of suspension of said bar for clamping said table-like element and bar about a post, or the like.

6. A steam-fitter's bench comprising a table-like element, leg receiving sockets ex-

tending downwardly from the lower surface of said table-like element, legs detachably connected with said sockets, said table-like element being provided with a rod or pipe-receiving opening, a bar suspended beneath said table-like element, said bar being also provided with a rod or pipe-receiving portion and a clamping means connected with the means of suspension of said bar for clamping said table-like element and bar about a post, or the like.

7. A steam-fitter's bench comprising a table-like element, leg-receiving sockets extending downwardly from the lower surface of said table-like element, legs detachably connected with said sockets, said table-like element being provided with a rod or pipe-receiving opening, a bar suspended beneath said table-like element, said bar, being provided at its one end beneath the rod or pipe-receiving opening in said table-like element with marginal rod or pipe-receiving portions and a clamping means connected with the means of suspension of said bar for clamping said table-like element and bar about a post, or the like.

In testimony that I claim the invention set forth above I have hereunto set my hand this 5th day of June, 1916.

EDWARD R. SOLEAU.

Witnesses:

FRED'K C. FRAENTZEL,  
FRED'K H. W. FRAENTZEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."