T. C. FYHRIE.

STOVEPIPE CUTTER.

APPLICATION FILED MAR. 22, 1911.

1,086,286. Patented Feb. 3, 1914.

Fig. 1.

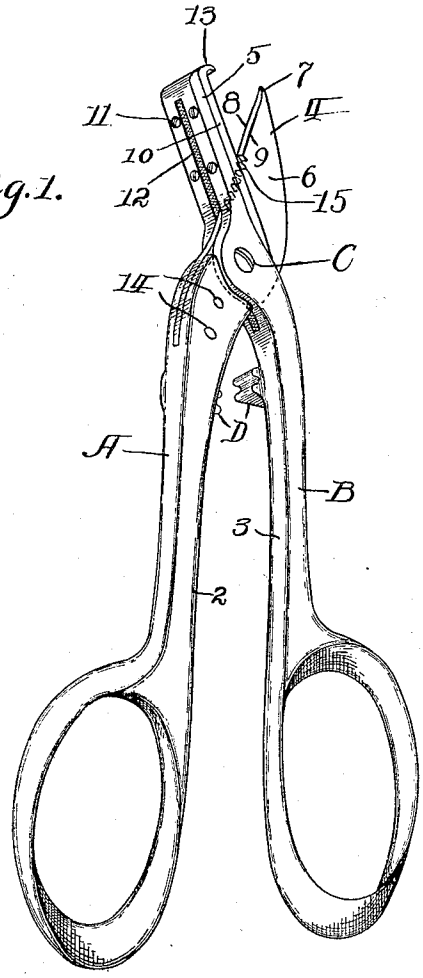


Fig. 3.

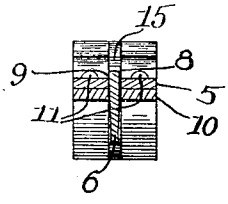
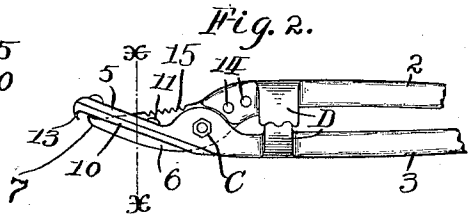


Fig. 2.



Witnesses:

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STOVEPIPE-CUTTER.

1,086,286. Specification of Letters Patent. Patented Feb. 3, 1914.

Application filed March 22, 1911. Serial No. 616,070.

To all whom it may concern:

Be it known that I, TORGER C. FYHRIE, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Stovepipe-Cutters, of which the following is a specification.

My invention relates to improvements in stove pipe cutters and has for its object a device of its kind which may be used for cutting off thin sheet metal pipes. My invention is particularly useful for this purpose because it can be started to do this work without the use of any additional tools. Heretofore, it has been necessary to first puncture the pipe so that one of the cutting jaws of the cutter can be inserted. By the use of my invention it is not necessary to puncture the pipe because the cutter is adapted to start by engaging the seam of the pipe after which the jaws are adapted to cut by the simple operation of opening and closing.

Among further objects of my invention are simplicity of construction and greater effectiveness in use.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of my improved pipe cutter; Fig. 2 is a side view of a detail of the cutter, showing the jaws closed, and Fig. 3 is a section of Fig. 2 taken on the line X—X.

In the drawings A and B represent two inserting lever handles which are fulcrumed on the pin C at their intersection. These handles have power ends 2 and 3 and work ends 4 and 5. The work end of lever A is formed with a narrow cutting blade 6, having a slightly turned up point 7 at its end and parallel cutting edges 8 and 9 which are spaced apart a short distance. The sides of the blade 6 below the cutting edges taper downwardly to allow clearance when the blade is in the act of cutting. The work end 5 of lever B is provided with a hardened steel face plate 10 which is detachably secured to the work end by screws 11, or other suitable means. The work end 5 and face plate have a longitudinal slot 12 in which the blade 6 of the lever A is adapted to pass when the levers are closed together. The outside edges of this slot coöperate with edges 8 and 9 on jaw 6 to perform the function of cutting. The blades of the levers do not entirely close together as illustrated in Fig. 2, the unclosed portions of the jaws thus serving to assist in guiding the tool when in use. The outer extremity of face plate 5 is formed with an inturned hook 13 which is used for starting the tool in the thin sheet metal pipe. By turning the hook in a more secure hold by the tool on the material being cut is produced than if the outer end of the face plate were merely curved out. In use this hook is engaged with the seam of the pipe and the cutting blade 6 closed into the wall, thus making an incision in the pipe. The tool is then withdrawn from engagement with the pipe and the jaw 6 reversed in the incision. The levers are then opened and closed in the usual manner until a seam has been cut entirely around the pipe. It will be noted that the cutting blade acting in conjunction with the slotted member 5 cuts a narrow strip out of the pipe making a clean cut. The inner end of the cutting portion of the jaw 6 is serrated at 15 thus preventing slipping of the jaws on the material being cut when the jaws are in the act of closing. Cutting blade 6 is joined to the work end of lever A by rivets 14 and is preferably made out of hardened steel. The upper ends of the levers A and B are provided with intermeshing crimping jaws D which are cast integral with said levers and are adapted to close together when the levers are closed. These jaws may be used for crimping the ends of stove pipe sections.

In accordance with patent statutes I have described the principles of operation of my invention together with the construction which I now consider to represent the best embodiment thereof, but I desire to have it understood that the construction shown is only illustrative and that the invention can be carried out by other means and applied to uses other than those above set forth within the scope of the following claims.

Having described my invention, what I claim as new and desire to protect by Letters Patent, is:—

1. In a device of the class set forth, comprising, in combination, a pair of lever arms fulcrumed together and adapted to open and close, one of said arms having a narrow cutting blade formed with an upturned point on its work end, a hardened face plate detachably secured on the work end of the other arm having a slot into which said blade is adapted to close, said blade and the edges of said slot forming cutting members

and an inturned hook formed on the end of the face plate, and projecting ahead of said upturned point, said hook being adapted to engage the seam of a pipe while said blade is being closed to draw said point into the wall of said pipe making an incision without denting the walls of said pipe on either side of said incision.

2. In a device of the class set forth, comprising, in combination, a pair of lever arms fulcrumed together between their ends, the work end of one of said arms having a narrow serrated cutting blade formed with an upturned point at its extremity, a face plate secured to the work end of said other arm and slotted to receive said cutting blade when said work ends are closed, said face plate being formed with an inturned hook upon its outer end adapted to engage the seam on a sheet metal pipe to draw said upturned point into said pipe while said blade is being closed, thereby preventing the denting of the walls of said pipe and making a smooth annular cut.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

TORGER C. FYHRIE.

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