

J. R. DESJARDINS.
 PIPE REAMER.
 APPLICATION FILED FEB. 7, 1912.

1,028,001.

Patented May 28, 1912.

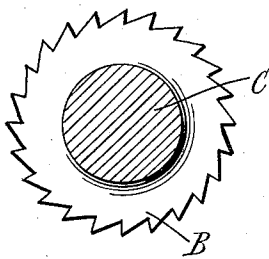
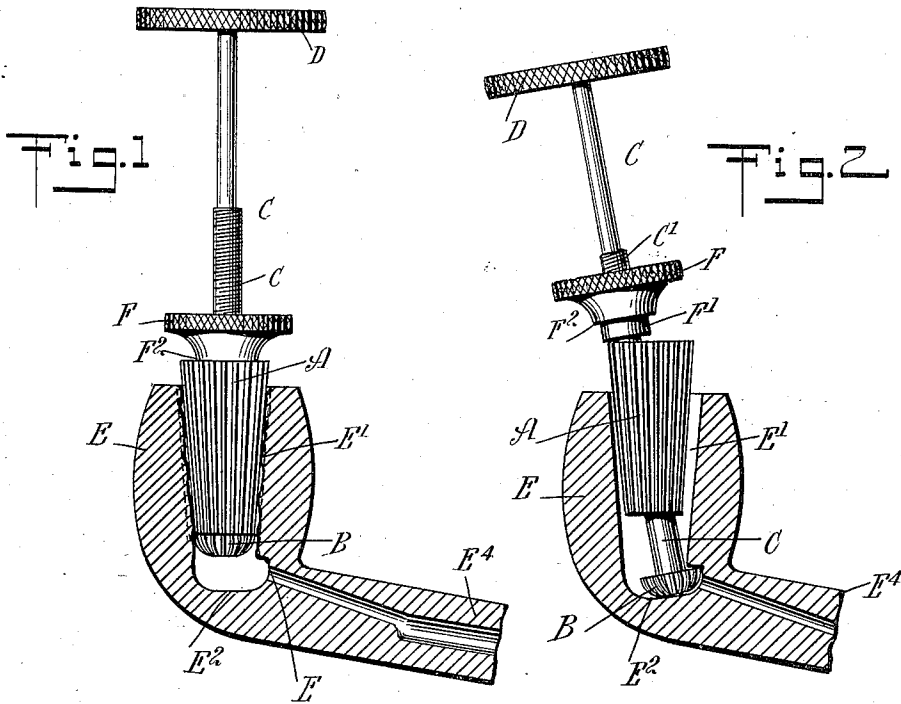


Fig. 4

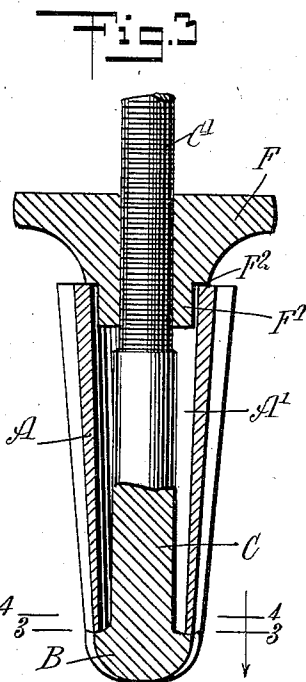


Fig. 3

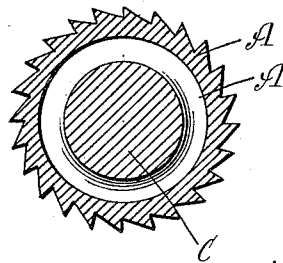


Fig. 5

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JOSEPH R. DESJARDINS, OF FALL RIVER, MASSACHUSETTS.

PIPE-REAMER.

1,028,001.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed February 7, 1912. Serial No. 675,995.

To all whom it may concern:

Be it known that I, JOSEPH R. DESJARDINS, a citizen of the United States, and a resident of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and Improved Pipe-Reamer, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved pipe reamer more especially designed for reaming tobacco pipes with a view to clean the same of the interior incrustation incident to the use of the pipe.

For the purpose mentioned use is made of a main reamer and an auxiliary reamer, the latter being fixed on a rod, and the main reamer being adapted to be clamped in place on the rod, the main reamer having a large bore for the passage of the rod and for allowing the rod to assume an angular position relative to the axis of the main reamer.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the reamer as applied to a tobacco pipe for reaming the side wall of the bowl of the pipe, the latter being shown in section; Fig. 2 is a like view of the same with the parts in position for reaming the bottom of the bowl and the opening leading from the bowl to the bore of the pipe stem; Fig. 3 is an enlarged sectional side elevation of the pipe reamer; Fig. 4 is a sectional plan view of the same on the line 4—4 of Fig. 3; and Fig. 5 is a similar view of the same on the line 5—5 of Fig. 3.

The pipe reamer consists essentially of a main reamer A and an auxiliary reamer B, of which the latter is secured on one end of a stem C provided with a handle D for manipulating the reamers, as hereinafter more fully explained. The main reamer A is in the form of the frustum of a cone and is provided on its exterior surface with the usual teeth, and the said main reamer A is provided with a bore A' through which extends loosely the rod C. The main reamer A is used for reaming the inner side of the bowl E of the tobacco pipe so as to cut the incrustation that accumulated in the bowl with a view to clean the bowl of said incrustation. The auxiliary reamer B is in the form of a rounded-off head provided

with teeth on the outer face for reaming the bottom E² of the bowl E and also for reaming and under-cutting the portion E³ leading from the bottom of the bowl into the bore of the pipe stem E⁴, as will be readily understood by reference to Fig. 4.

In order to use the main reamer A it is necessary to clamp the same centrally in position relatively to the rod C and for this purpose use is made of a nut F screwing on the threaded portion C' of the rod C, and the nut F is provided with a bearing F' extending into one end of the bore A', as shown in Fig. 3, and the said nut F is provided adjacent to the bearing F' with a shoulder F² adapted to abut against the base end of the main reamer. The small or apex end of the reamer A is adapted to rest on the upper face of the auxiliary reamer B, and hence when the nut F is screwed up the main reamer A is clamped centrally on the rod C between the top of the auxiliary reamer B and the shoulder F² of the nut F, as plainly shown in Fig. 3. With the parts in this position the reamer A can be readily placed into the bowl E, and when the operator now turns the handle D the reamer A cuts the incrustation on the inner surface of the bowl E to clean the same of such incrustation.

When it is desired to use the auxiliary reamer B the nut F is partly unscrewed to permit of moving the rod C into an angular position relative to the axis of the main reamer A, as plainly shown in Fig. 2, at the same time permitting the insertion of the tool to a greater depth in the bowl E so that the auxiliary cutter B can readily move into contact with the bottom E² of the bowl E and at the same time engage the portion at the entrance of the bore of the stem E⁴ into the bowl E, and consequently when the operator now turns the handle D the auxiliary cutter B cuts and cleans the bottom of the bowl and the said portion leading to the bore of the stem E⁴.

It is understood that by the arrangement described the auxiliary cutter B makes an undercut in the bottom of the bowl at the portion leading to the bore of the stem E⁴ to free the pipe of incrustation.

The pipe reamer shown and described is very simple in construction and composed of comparatively few parts not liable easily to get out of order, and the reamer can be readily adjusted for successively using the

main reamer A and the auxiliary reamer B to accomplish the desired result.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A pipe reamer provided with a main reamer for reaming the inner surface of the side wall of a pipe bowl, a separate auxiliary reamer for reaming the bottom of the bowl and the opening leading from the bowl to the stem of the pipe, said auxiliary reamer being located at one end of the main reamer and being movable laterally with respect thereto, and means whereby to support and lock the reamers together.

2. A pipe reamer, comprising a main reamer having a bore, a rod extending loosely through the bore, an auxiliary reamer fixed on the rod, and means on the rod for clamping the said main reamer on the rod.

3. A pipe reamer, comprising a main reamer having a bore, a rod extending loosely through the bore, an auxiliary

reamer fixed on the rod at one end thereof, and a nut screwing on the said rod and adapted to engage the said main reamer to clamp the latter between the nut and the said auxiliary reamer.

4. A pipe reamer, comprising a main reamer having a bore, a rod extending loosely through the bore, an auxiliary reamer fixed on the rod at one end thereof, and a nut screwing on the said rod and adapted to engage the said main reamer to clamp the latter between the nut and the said auxiliary reamer, the nut having a bearing for engagement with one end of the bore of the main reamer to hold the latter centrally on the rod.

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

JOSEPH R. DESJARDINS.

Witnesses:

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