No. 780,728. PATENTED JAN. 24, 1905.

T. PENDERGAST.

PITCH REAMER.

APPLICATION FILED OCT. 29, 1903.

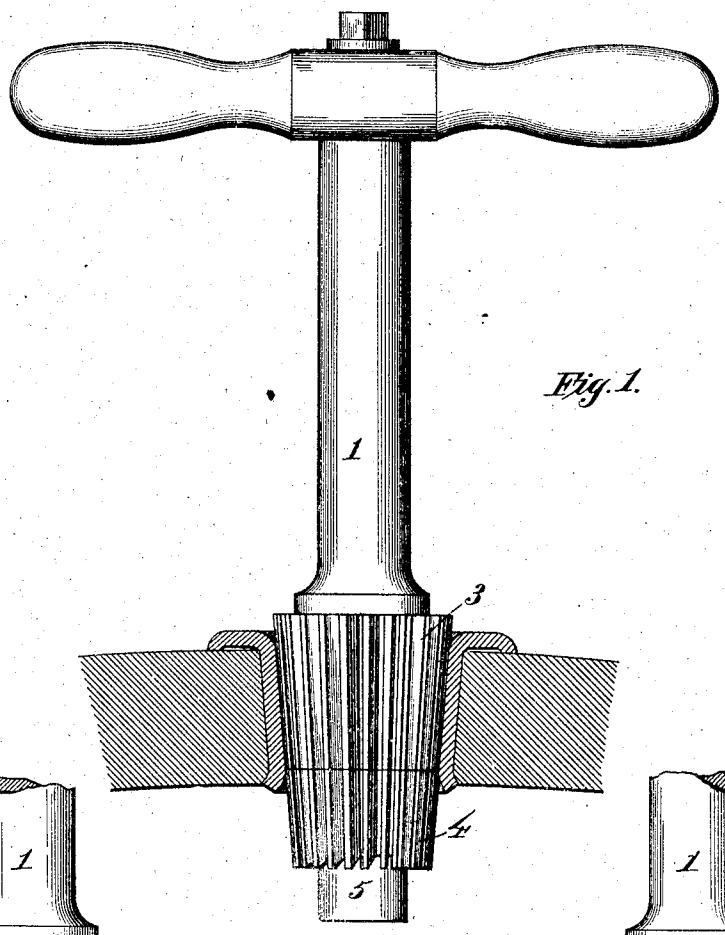


Fig. 1.

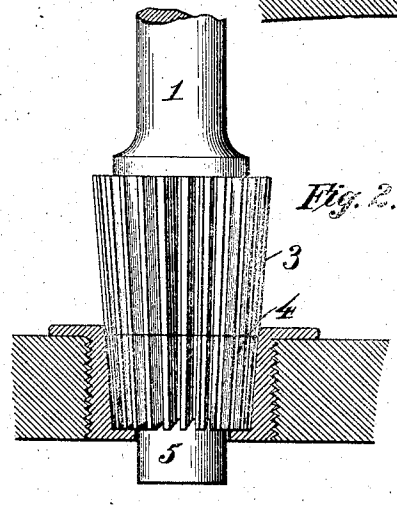


Fig. 2.

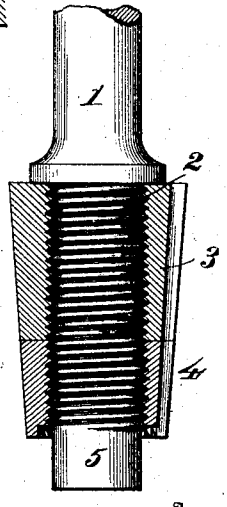


Fig. 3.

Witnesses
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No. 780,728. Patented January 24, 1905.

UNITED STATES PATENT OFFICE.

THOMAS PENDERGAST, OF LANCASTER, PENNSYLVANIA, ASSIGNOR OF FIFTY-ONE ONE-HUNDREDTHS TO JOHN HERTZLER, OF LANCASTER, PENNSYLVANIA.

PITCH-REAMER.

SPECIFICATION forming part of Letters Patent No. 780,728, dated January 24, 1905.

Application filed October 29, 1903. Serial No. 179,063.

To all whom it may concern:

Be it known that I, THOMAS PENDERGAST, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a certain new and useful Pitch-Reamer; 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.

In the manufacture of beer-kegs and other liquor casks or barrels in order to render them perfectly fluid-tight and impervious to the action of the liquors they are usually interiorly coated with pitch, which is applied in hot or molten condition by spraying it into the receptacles. By this pitching operation more or less of the pitch collects in the bung holes or bushings and afterward has to be removed, generally by heating or burning it out, with consequent heating of the bushings, liability of burning the wood and loosening the bushings by such burning or by expansion and contraction of the metal, and other evils well understood by persons engaged in this industry.

My invention has for its object the removal of this pitch from the bung holes or bushings without application of heat or burning, and it provides an exceedingly simple, convenient, and efficient reaming tool or device for this purpose.

A reamer embodying the invention is illustrated in the accompanying drawings, which are to be taken as a part of this specification, and wherein—

Figure 1 is a view of the complete device, showing an application thereof to reaming or cutting out the pitch from one of the larger-sized bung-bushings, such as used in the sides of kegs or barrels. Fig. 2 is a fragmentary view of the reaming portion of the tool, showing an application thereof to reaming out the pitch from one of the smaller-sized bushings, such as used in heads of kegs or barrels; and Fig. 3 is a fragmentary view of the reaming portion of the tool, partly in central longitudinal or vertical section and partly in elevation.

The reamer illustrated consists of a shank or stock 1, provided with a suitable handle and having a reduced threaded part 2, on which is screwed a hollow interiorly-threaded conical or tapered reaming device made in separate sections, two such sections being represented and indicated by the numerals 3 and 4. The said reaming device or rather the sections 3 and 4 have appropriate longitudinal scraping ribs or cutters extending the length of the two sections, and these ribs or cutters terminate at the end of the lower section 4 in bottom cutters. The said ribs or cutters are formed with sharp advance cutting edges with radial or abrupt front surfaces and inclined or angular surfaces behind such edges, leaving deep wide furrows between the ribs, in which the pitch accumulates as it is cut or scraped out of the bushings. The advance edges of the ribs are continued at the bottom to provide bottom cutters of the same formation, each having abrupt front surfaces and inclined back surfaces.

The shank, as shown, has a round extension 5 beneath the lower reamer-section 4, which may serve as a guide for the tool in reaming out tapping-bushes. Both reamer-sections 3 and 4 may be screwed independently on the threaded shank, and of course if either one becomes worn out or injured it may be removed and replaced by a new one without the necessity of procuring an entirely new device. The upper section 4 screws tightly against the shoulder of the shank above its reduced threaded portion, while the lower section screws tightly against the other, and thus serves as a lock-nut as well as a reamer or cutter.

The reaming portion of the tool is made to conform in length, diameter, and taper to the standard sizes of bung-bushings. The upper section 3 is adapted for reaming out the pitch from the larger-sized filling-bushes, such as provided in the sides of kegs or barrels, as represented in Fig. 1. These bushings are usually formed without internal flanges; but if it is desired to ream out such a bush having a flange and the lower section cannot pass through it said lower section may simply be

unscrewed and removed. The lower section 4 is adapted for cutting out the pitch from the smaller-sized tapping-bushes, such as provided in the ends of kegs or barrels, as represented in Fig. 2. In this instance the ribbed portion of the reamer cleans out the sides of the bush, while the bottom cutters clean off the seat or inner flange. The lower round extension 5 of the shank may serve as a guide to fit within said seat or flange.

The invention having thus been described with reference to the device illustrated, without limitation, however, to that specific form, except as hereinafter recited, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A tool for removing pitch from bung holes or bushings comprising a shank having a shoulder and a threaded part, a conical reamer screwed on said threaded part against said shoulder, formed with a continuous straight taper corresponding with the taper of bushings, and made in separate sections, the lower section having also peripheral bottom cutters.

2. A tool for removing pitch from bung holes or bushings, comprising a shank having a shoulder and a threaded part, and a conical reamer screwed on said threaded part against said shoulder, formed with a continuous straight taper corresponding to the taper of bushings, and having longitudinal cutting-ribs with abrupt front surfaces and sharp advance edges and angular or inclined back surfaces, leaving also deep grooves between the ribs, and the said ribs being continued at the lower end as bottom cutters having the same formation.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS PENDERGAST.

Witnesses:

J. FRANK REMLEY,

REDMOND CONYNGHAM.