

Jan. 21, 1941.

E. HORNE

2,229,084

CLEANER

Filed Sept. 12, 1938

Fig - 1

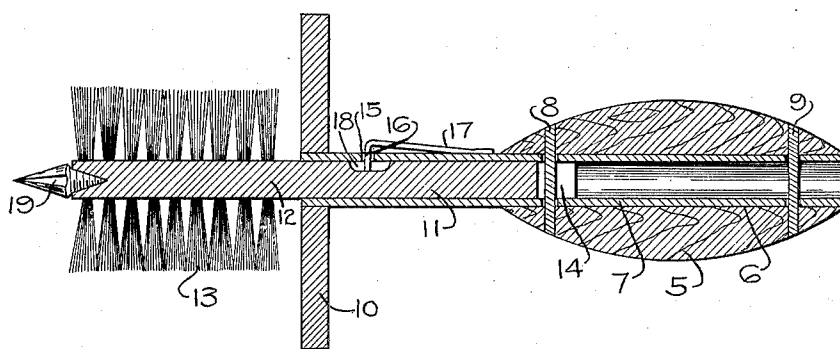
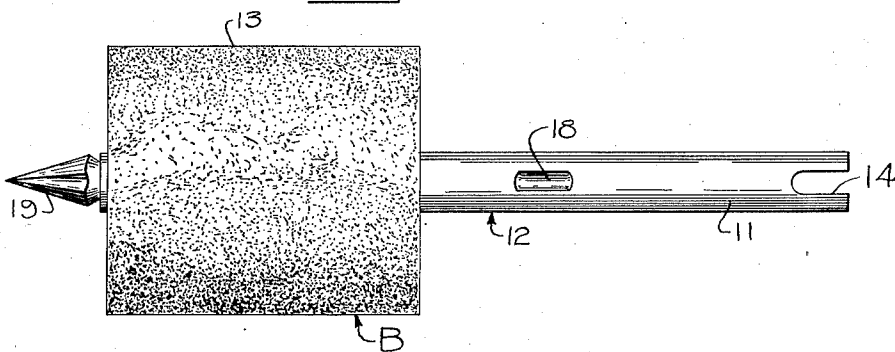


Fig-2



Edward Horne
INVENTOR

BY *Victor J. Evans & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,229,084

CLEANER

Edward Horne, West Palm Beach, Fla.

Application September 12, 1938, Serial No. 229,590

2 Claims. (Cl. 15—145)

My invention relates to cleaning devices and more particularly to cleaning devices utilized for cleaning pipe fittings and the like.

One of the principal objects of my invention is to provide a cleaning device adapted for cleaning pipe fittings and the like equipped with a handle means for detachably securing thereto a cleaning element, the latter being replaceable with others of various sizes as described.

Another object of my invention is to provide a device of the above described character which is simple in construction, durable in use, efficient in operation and economical in manufacture.

Other objects and advantages will be apparent from the following description, appended claims and annexed drawing.

Referring to the drawing wherein like reference characters designate like parts throughout the several views:

Figure 1 is a longitudinal sectional view of my device.

Figure 2 is an elevation of the cleaning element detached from the handle.

In practicing my invention I provide a handle 5, preferably constructed of wood, and formed with a longitudinally extending bore 6 in which is secured a metal tube 7 by means of a pair of spaced front and rear rivets 8 and 9 respectively, located adjacent the ends of the handle and extending transversely through said tube and handle.

The tube 7 extends beyond the forward end of the handle and has secured at its outer end a metal plate 10 for limiting the insertion of a brush B, hereinafter described, into a pipe fitting or the like. Removably mounted in the tube 7 is the outer end 11 of a shank 12 of the wire brush or cleaning element B and said end 11 of said shank is provided with a transverse slot 14 embracing the rivet 8 at the forward end of said handle whereby to limit the rearward axial movement of said shank and to effect rotation of the brush with the handle.

Adjacent the plate 10, the tube is formed with a slot 15 through which extends an angularly disposed end 16 of a spring latch member 17, the opposite end of the latter being fixed to the outer periphery of the tube. The angularly disposed end 16 seats within a recess 18 formed in the

periphery of the shank 12, as clearly illustrated in the drawing, whereby to latch said brush into operating engagement with the handle. The other end of the shank 12 adjacent the brush B is provided with a reamer 19 adapted for reaming relatively small bores of fittings.

In use, the parts being in the position illustrated in Figure 1, the brush 13 is inserted within the end of a pipe fitting, for instance of the copper sweat type, and rotated therein by means of the handle to effect a cleaning of said fitting. The plate 10 coacts with the end of the fitting to limit the inward movement of the brush. The brush 13 may be of a convenient size and is detachable from the handle for replacement of others of different sizes and shapes whereby various sizes of pipe fittings may be cleaned.

While I have shown and described my invention as being hand operated, it is to be understood that the same may be operated by a motor or the like attached thereto. It is also to be understood that various changes and modifications may be resorted to in the construction and arrangement of my invention without departing from the spirit thereof or scope of the appended claims.

What I claim is:

1. A device of the character described comprising a handle provided with a bore, a tube in said bore and having an end section projecting beyond said handle, a brush provided with a shank having a bifurcated end defining a slot and extending into said tube through said end section, a latch member carried by said tube and engaging said shank for detachably securing said brush to said handle, and a pin extending transversely through said handle and tube and securing said handle and tube in fixed relation, said pin extending through said slot and effecting unitary rotation of said handle and shank and permitting detachment of said shank from said tube upon operation of said latch member.

2. The structure of claim 1 as set forth and defined therein including, a plate fixed to said tube adjacent said brush for limiting the axial movement of the latter when inserted within a pipe fitting for effecting cleaning of the latter.

EDWARD HORNE.