

W. AND C. PRÜESSING.
TOOL HOLDER FOR BLOW TORCHES.
APPLICATION FILED SEPT. 18, 1916.

1,354,065.

Patented Sept. 28, 1920.
2 SHEETS—SHEET 1.

Fig. 1.

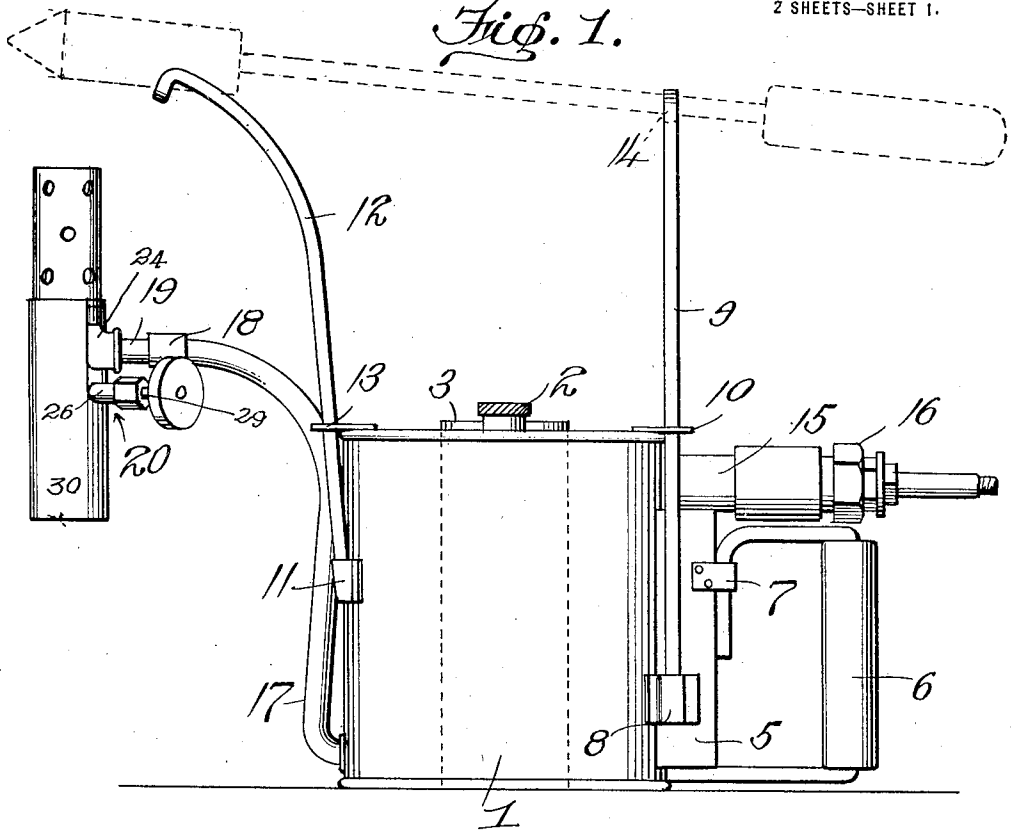
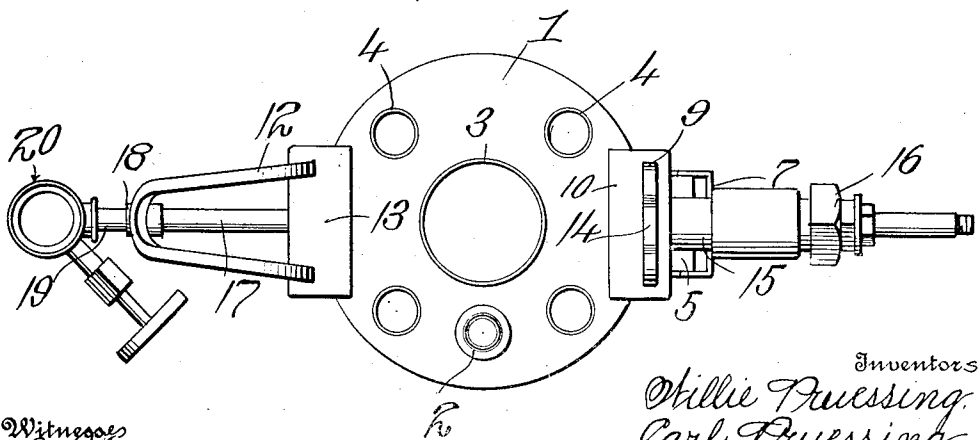


Fig. 3.



Witnesses
A. Bailey
S. M. M. M.

Inventors
Willie Pruessing,
Carl Pruessing,
By *[Signature]*
Attorney

W. AND C. PRUESSING.
TOOL HOLDER FOR BLOW TORCHES.
APPLICATION FILED SEPT. 18, 1916.

1,354,065.

Patented Sept. 28, 1920.
2 SHEETS—SHEET 2.

Fig. 2.

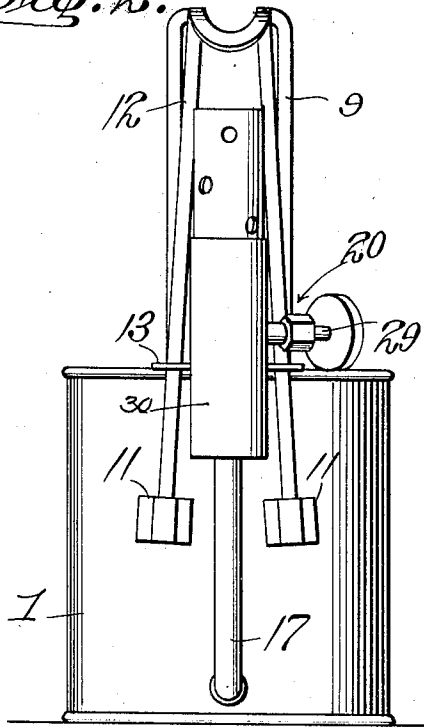


Fig. 5.

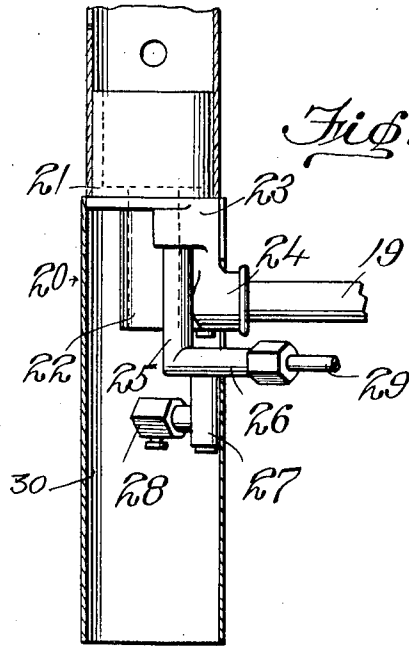


Fig. 6.

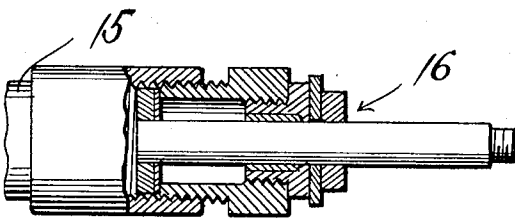
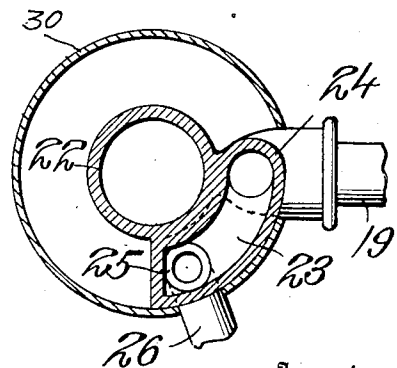


Fig. 4.

Witness
Q. Bailey
Samuel H. Johnson

Inventors
Willie Pruessing
Carl Pruessing
By *Charles Chandler*
Attorney

UNITED STATES PATENT OFFICE.

WILLIE PRUESSING AND CARL PRUESSING, OF SYRACUSE, NEBRASKA.

TOOL-HOLDER FOR BLOW-TORCHES.

1,354,065.

Specification of Letters Patent. Patented Sept. 28, 1920.

Application filed September 18, 1916. Serial No. 120,732.

To all whom it may concern:

Be it known that we, WILLIE PRUESSING and CARL PRUESSING, citizens of the United States, residing at Syracuse, in the county of Otoe, State of Nebraska, have invented certain new and useful Improvements in Tool-Holders for Blow-Torches; and we 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.

This invention relates to blow torches, and has particular reference to the class of blow torches in which gasolene is used as a fuel.

It is the object of the invention to provide an improved tool holder adapted for readily detachable connection with a heater substantially of the class set forth, whereby to support the tool in position for proper heating.

With the above object in view and such other objects as may hereinafter appear, our invention will now be fully set forth and described, reference being had to the accompanying drawings.

In the drawings,

Figure 1 is a side elevation of the torch,

Fig. 2 is a front elevation,

Fig. 3 is a plan view,

Fig. 4 is a detail sectional view of the air inlet valve,

Fig. 5 is an enlarged elevation of the burner, and

Fig. 6 is a sectional view through the burner.

Referring more particularly to the drawings, 1 indicates a tank into which gasolene is put, a suitable inlet port 2 being provided for the purpose. The tank 1 consists of a cylindrical shell through the top and bottom of which extends an axially located tubular column 3, said column 3 being open at its upper and lower ends so that a clear air passage is provided vertically through the tank. The tank is furthermore provided with a plurality of smaller columns 4 disposed near the periphery of the tank and extending substantially parallel to the column 3, the columns 3 and 4 providing a suitably braced and rigid structure.

To one side of the tank 1 is secured a rectangular boxing 5 which provides a support for a handle 6, the lower end of the latter being secured to the lower end of the boxing, and the upper end of the latter be-

ing looped through a strap 7 secured transversely across the boxing 5. The boxing 5 furthermore provides a support for a pair of sockets 8 secured to the sides of the boxing into which sockets the lower ends of a two-legged iron support 9 are stepped. Projecting from the top of the tank 1 and having a pair of openings in vertical alignment with the openings in the sockets 8 is a plate 10, the legs of the support 9 extending through the openings in the plate 10 and being thereby supported at its intermediate portion. Secured to the opposite side of the tank 1 is a second pair of sockets or steps 11 into which the lower ends of the legs of the forward support 12 are received, and plate 13 secured to the top of the tank 1 having openings receiving the intermediate portion of the legs of the support 12. The top of the support 9 is bent downwardly to form a seat 14 for the handle or shank of a soldering iron, while the upper end of the support 12 is bent forward and also downwardly bent as best seen in Figs. 1 and 2 in order to provide a seat for the head of the soldering iron.

Above the handle 6 and the boxing 5, the tank 1 is provided with an air pipe 15, to which is coupled an air check valve 16 which is preferably of a well-known type, so that a practical and universal connection for any ordinary hand pump, such as is used in connection with automobiles and bicycles is provided. The check valve 16 extends outwardly over the handle 6 in position to conveniently receive the end of the rubber connecting hose or tube of the air pump so that the latter may be kept in continuous connection with the torch through the use of the latter, but may be readily disconnected when the latter is stored away or not in use.

At the front of the tank, and issuing from the lower portion thereof, is the gasolene pipe 17, which is bent upwardly into close relation to the front of the tank, and lies between the legs of the front iron support 12. At the top of the tank the gasolene pipe 17 is bent forward and has its end carrying a coupling nipple 18 which in turn supports the stem 19 of the upright tubular burner which stands forward of the front support as seen in Fig. 1.

The burner 20 is of the retort type and consists of an annular casting 21 which constitutes the upright burner body, a tubular

projection 22 below the bottom of the body providing a means for the injection of the gaseous mixture into the body. One side of the casting is provided with an offset chamber 23 which, at one end, has an elbow 24 into which the stem 19 is threaded. The opposite end of the chamber 23 is provided with a threaded port to which is secured a downwardly extending pipe 25 whose lower end terminates in the needle valve casing 26. Below the casing 26 is a further projection 27 from one side of which extends the nozzle 28, the latter lying below the lower end of the projection 22 in order to inject the gaseous mixture into the burner. The needle valve casing carries the usual needle valve stem 29 whereby the flow of the gasolene may be adjusted. It will be noted that the casting 23, the elbow 24 and the pipe 25 provide for the preliminary heating of the gasolene before it passes through the needle valve, and thence to the burner. In order to provide for the perfect action of the burner in cool weather or under other unsatisfactory circumstances, the lower portion of the burner together with the needle valve casing is inclosed in a casing 30 which extends from the base of the burner body to a point well below the needle valve and the nozzle 28, the casing consisting of a tubular structure open at its lower end in order to permit the proper feeding of air to the burner and having openings in its sides through which the stem 19 and the needle valve stem 29 project.

From the foregoing description, it is obvious that we have constructed an improved form of gasolene blow torch which is particularly adapted for heating soldering irons, and that the details of its construc-

tion render it a peculiarly handy and efficient device. The particular arrangement of the burner and its relationship to the iron supports insures a hot iron at all times that the apparatus is in use, the full blast of the burner being directed upwardly against the head of the iron. It is furthermore possible to maintain a proper air supply in the tank without disturbing the torch itself, and thereby disarranging the iron.

What we claim is:—

A device of the character described comprising a torch including a tank, an air pipe leading into the same at one side, a gas pipe leading out of the tank at the opposite side and carried upward and bent forward, and an upright tubular burner to which the gas pipe delivers; plates secured upon the tank at front and rear and each having two openings, sockets secured to the wall of the tank below said plates and in line with their respective openings, a rear support having downwardly diverging legs passing through the openings in the rear plate, astride the air pipe and into the sockets, its upper end having a seat for the shank of a tool, and a front support having downwardly diverging legs passing through the openings in the front plate, astride the gas pipe, and into the front sockets, its body above said plate being bent forward and its top provided with a seat disposed in rear of said burner and adapted to support the head of a tool.

In testimony whereof we affix our signatures, in the presence of two witnesses.

WILLIE PRUESSING.
CARL PRUESSING.

Witnesses:

D. P. WEST,
H. C. GUNTHER.