

N. G. BARKERS.
SOLDERING IRON STOVE.
APPLICATION FILED JAN. 30, 1911.

1,027,096.

Patented May 21, 1912.

Fig. 1.

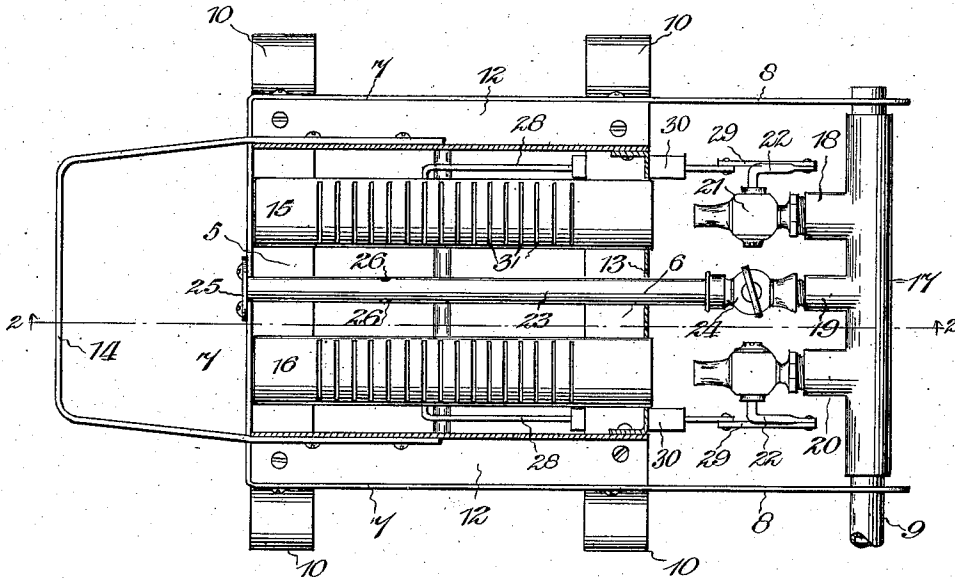
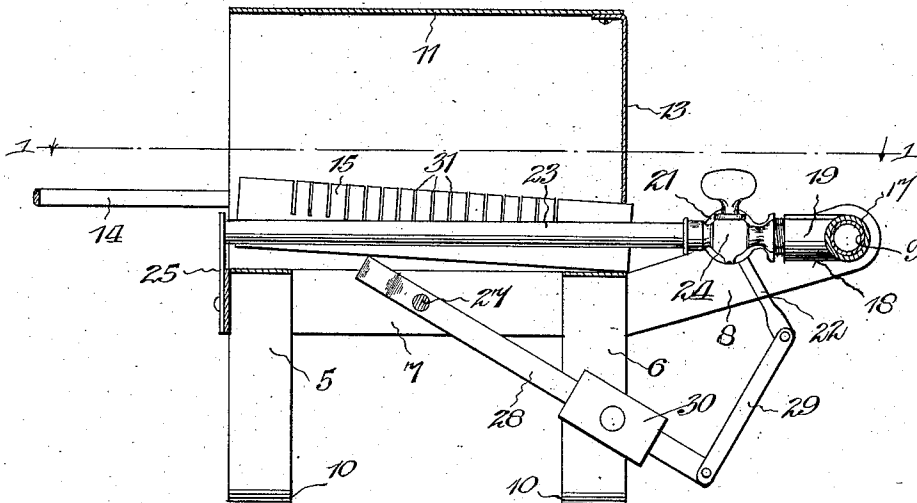


Fig. 2.



WITNESSES

A. R. Walton
M. R. Villen.

INVENTOR

Nicholas G. Barkers,

By *Wm. R. Stevens*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

NICHOLAS G. BARKERS, OF CHICAGO, ILLINOIS.

SOLDERING-IRON STOVE.

1,027,096.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed January 30, 1911. Serial No. 605,622.

To all whom it may concern:

Be it known that I, NICHOLAS G. BARKERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Soldering-Iron Stoves, of which the following is a specification.

My present invention relates particularly to gaseous fuel burning soldering iron heaters, and my object is to provide a simple and inexpensive construction which will be automatic in turning on and cutting off the main fuel supply, actuated by the placement upon, and removal of a soldering iron from, the position to be heated.

A further object is to provide a construction which will enable ready adjustment to suit soldering irons of various weights, and a still further object is to provide a heater which will operate equally as well with a solder-holding pot.

In the accompanying drawings, Figure 1 is a horizontal section through my improved heater taken substantially on the line 1-1 of Fig. 2, and Fig. 2 is a vertical longitudinal section therethrough taken substantially on the line 2-2 of Fig. 1.

Referring now to these figures, the main frame of the heater comprises a pair of spaced U-shaped frames 5 and 6, standing transversely of the heater, and a horizontally disposed U-shaped frame 7 secured around the upper portions of frames 5 and 6 and having upwardly extending rear portions 8, the outer ends of which are apertured to receive and support the service pipe 9. The lower portions of the frames 5 and 6 are curled as shown, to provide supporting feet 10.

A hood 11 is provided with side flanges 12, which may be suitably secured to the upper portions of the frames 5 and 6, preferably in a manner which will enable said hood to be quickly removed; the forward end of this hood being open, and the rear end being closed by an end plate 13. The sides of this hood 11 support the ends of a forward U-shaped iron supporting frame 14, and the end plate 13 is provided with apertures through which the rear ends of the two longitudinally extending burner pipes 15 and 16 project slightly; these burner pipes being arranged in parallel relation upon opposite sides of the longitudinal center of the heater, and disposed above the frames 5 and 6, in such manner that

their forward end may swing in a vertical plane.

The service pipe 9, between the portions 8 of frame 7, is provided with a fitting 17, having angular extensions 18, 19 and 20. To the extensions 18 and 20, which are alined with the burner pipes 15 and 16, are secured the gas nozzles 21, each one of which includes a valve provided with an angular arm 22. To the intermediate extension 19 is connected the rear end of a pilot pipe 23, having a regulating valve 24, and extending forwardly between the burner pipes 15 and 16, and having its forward end secured in a plate 25 secured to and upstanding from the forward portion of frame 7, this pipe 23 having intermediate side apertures 26.

Secured to and extending between the sides of frame 7, below the upper portions of frames 5 and 6, is a transverse bar or rod 27 upon which are journaled levers 28, adjacent their upper forward ends, the rear ends of which levers extend rearwardly of the frame 6 and are connected, by pivotal links 29, to the ends of the valve arms 22. From this it will be understood that the upper ends of the levers 28, of which there is one beneath each of the burner pipes 15 and 16, by their movement, control the supply of gas to the burner pipes. The weight 30, adjustably mounted upon the lower portion of each of the levers 28, rocks the lever to the position shown in Fig. 2, when a soldering iron is removed from its corresponding burner pipe, thus permitting the burner pipe to swing upwardly. This movement results in a downward movement of the corresponding valve arm 22, closing the valve, and cutting off the gas supply and the burner flame through the burner pipe slots 31. As soon as the iron is replaced upon the corresponding burner pipe for reheating, its weight forces the burner pipe downwardly, again rocking the lever 28, but this time in a reverse direction, which results in an upward movement of its rear end and an upward movement of the valve arm 22, whereby to open the valve and permit a supply of gas to issue from the nozzles 21, into the burner pipe, this gas igniting from the pilot flame which constantly burns at the openings 26 of the pilot pipe 23.

It will be noted that the pilot pipe 23 is below the upper level of the burner pipes 15 and 16, when the latter are in their lower-

most positions, whereby when the hood 11 and its parts are removed, the device may be used to heat solder-holding pots.

I claim:

- 5 In a tool heater, the combination of a supporting frame, vertically rocking burner pipes carried by said frame, a service pipe carried by the supporting frame and extending across one end of the burner pipes
10 in spaced relation therewith, fuel supply connections extending from said service pipe toward and in alinement with and free from the burner pipes, valves in said supply connections, said valves having actuating

arms, and connections between each of the 15 burner pipes and its respective valve, said connections comprising levers pivoted in the frame beneath the burner pipes and having one free end bearing loosely against said pipes, and links pivotally connecting the 20 other end of said levers and the valve arms.

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

NICHOLAS G. BARKERS.

Witnesses:

MYRON G. CLEAR,
ANNA M. MENGEL.

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