This invention relates to a tar burner. An object of this invention is to provide a burner for use in melting tar which can be used either as a portable burner or as a stationary burner. Another object of this invention is to provide an improved burner head having an adjustable air valve for admitting air into the head. A further object of this invention is to provide an improved burner head having a shoe on the forward end thereof whereby the head may be slid along the surface to be heated with the shoe contacting such surface.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claim.

In the drawings:

Figure 1 is a detailed end elevation of a burner constructed according to an embodiment of this invention.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a fragmentary sectional view taken on the line 4—4 of Figure 2.

Figure 5 is a detailed side elevation partly broken away showing the burner in a vertical stationary position.

Figure 6 is a fragmentary sectional view taken on the line 5—5 of Figure 6.

Figure 7 is a detailed side elevation showing the burner in a portable operating position.

Referring to the drawings, the numeral 10 designates generally a burner head which is designed for use with propane or butane gas, and the head 10 comprises a cylindrical body 11 formed with a rear end bar 12 which is integral with the body 11. The bar 12 forms a pair of rear air intake openings 13 through which air is adapted to pass, and the bar 12 has formed integral therewith a rearwardly projecting boss 14. The boss 14 is formed with an axial opening 15 and with a second right angularly disposed opening 16.

As shown in Figure 2, when the burner is in a horizontal position, opening 15 is closed by means of a threaded plug 17. The boss 14 is formed with a central passage 18 communicating with a jet opening 19, which is formed in the end bar or wall 12. The body 11 is formed with a plurality of circumferentially spaced apart elongated air intake openings 20 which extend forwardly from the end wall 12, and a cylindrical air regulating valve 21 is slidable within the body 11.

The valve 21 is friction tight within the body 11 so that it will remain in its manually adjusted position. A bolt or handle 22 is fixed to the valve 21 and projects through one of the air intake openings 20. Tubular handle 23 is secured in one of the openings of the boss 14 and, as shown in Figures 1 and 2, handle 23 is secured within the threaded opening 16. The handle 23 is adapted to be connected to a source of fuel supply, and the handle 23 has secured thereto a regulating valve structure 24. The valve structure 24 comprises a valve housing 25 having a passage 26 through which the fuel is adapted to pass. A main needle valve 27 is carried by a bushing 28 threaded into the housing 25, and needle valve 27 is adapted to control the amount of fuel passing through the passage 26 into tubular handle 23. The housing 25 also includes a pilot fuel passage 29, and a pilot needle valve 30 is carried by a boss 31.

The body 11 has extending from the peripheral surface thereof a plurality of longitudinally extending and circumferentially spaced apart ribs 32. These ribs 32 not only brace the body 11, but also provide a securing means whereby the body 11 may be secured in either a horizontal or vertical operative position. U-shaped base member, generally designated as 33, is secured by means of screws 34 to the body 11 with the bight 34 thereof lowermost and the parallel sides 35 vertical. The upper edges of the sides 35 are adapted to bear against a pair of diametrically opposed ribs 32, as shown in Figure 2, so that the body 11 will be parallel with the bight 34. The two sides 35 of the base 33 are also formed with slots 36 extending downwardly from the upper edges thereof within which a pair of ribs 32 are adapted to engage when the head 10 is in a vertical position, such as the position shown in Figure 5.

The body 11 is also provided, adjacent the forward end thereof, with a shoe 37 which, as shown in Figure 7, is adapted to contact with the surface which is being heated so as to support the forward end of the head 10 a slight distance above the surface and permit the head 10 to be moved over the surface.

Referring to Figure 7, when the burner is being used as a portable burner, a straight tubular handle 38 is threaded into the opening 15 and plug 17 is transferred from opening 15 to opening 16. The straight handle 38 has secured to the
rear end thereof a valve structure 24a which is similar in every detail to the valve structure 24. A U-shaped ball or handle 35 is secured to and extended laterally from the tubular handle 38 so that the handle 38 may be grasped at a point forwardly from the rear end thereof.

In the use and operation of this burner structure, the handle is connected to a source of fuel supply which is either propane or butane gas. If the burner is to be used as a stationary burner in a horizontal position, the base 32 is secured to the head 19 by means of the bolts or screws 34 with the upper edges of the sides 35 of the base engaging the sides of a pair of the ribs 32. The air valve 21 is adjusted lengthwise of the head 19 to provide for the desired combustion and both the main and pilot valves are disposed in an open position when the burner is operating. When the burner is not in use, temporarily the main valve 27 is closed and the pilot valve 30 is left open.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claim.

What is claimed is:
A gas burner comprising a cylindrical body open at its forward end, a bar fixed across the rear end of said body and forming a pair of rear air intake openings, said body having a plurality of elongated air openings extending forwardly from the rear thereof, a cylindrical air intake regulating valve slidable in said body, means for adjusting said valve relative to said elongated openings, a plurality of lengthwise extending ribs carried by the outer side of said body, a U-shaped base, and means securing said base to said body with the upper edges of the sides of said base bearing against a pair of said ribs.

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