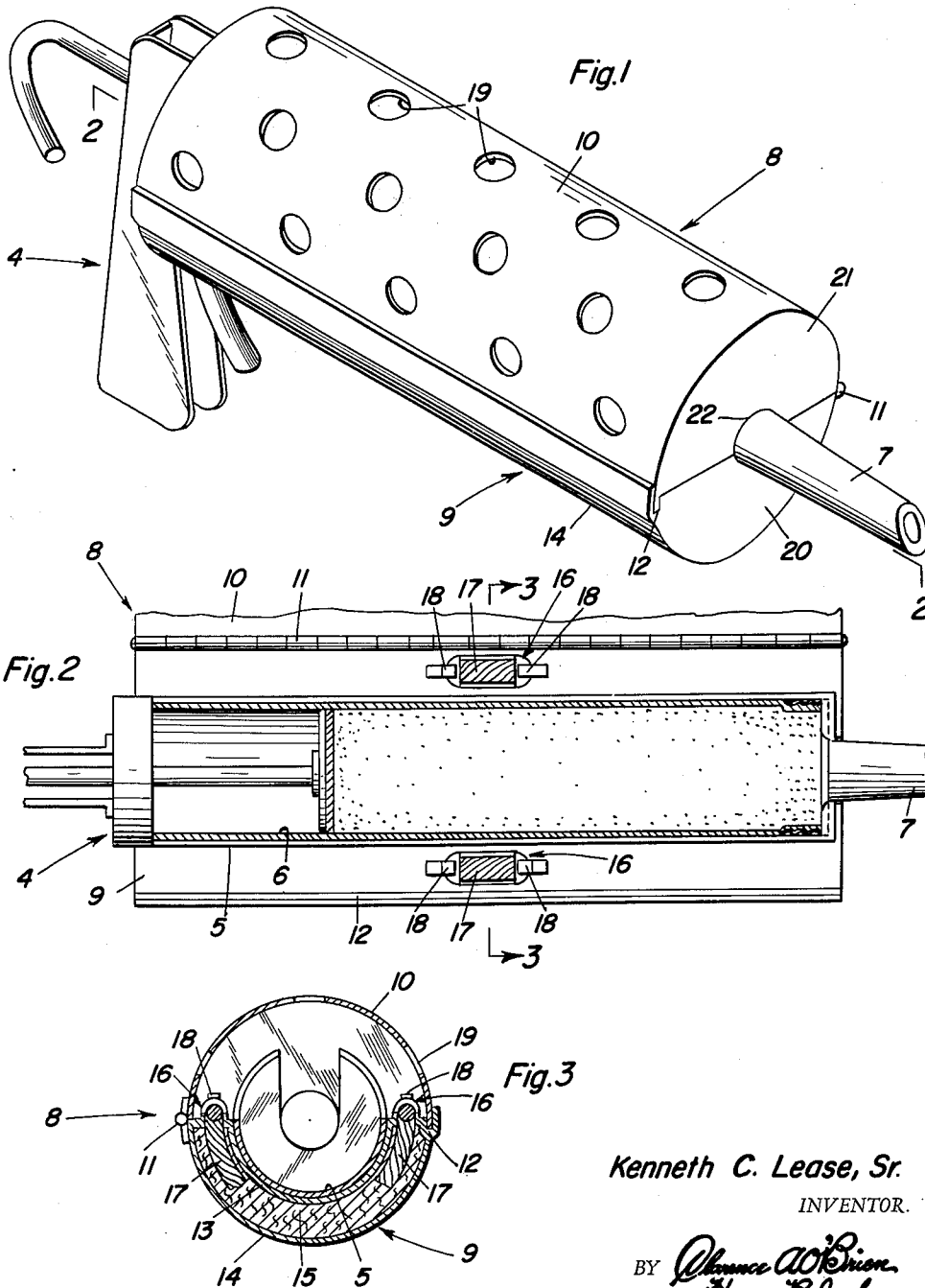


Feb. 13, 1962

K. C. LEASE, SR
EXTRUSION GUN HEATER
Filed April 1, 1959

3,020,907



Kenneth C. Lease, Sr.
INVENTOR.

BY *Albance A. O'Brien*
and *Harvey B. Jackson*
Attorneys

1

3,020,907

EXTRUSION GUN HEATER

Kenneth C. Lease, Sr., E. Rock Road, Allentown, Pa.
Filed Apr. 1, 1959, Ser. No. 803,478
4 Claims. (Cl. 126—229)

This invention relates to new and useful improvements in heaters for extrusion guns particularly although not necessarily, for caulking, glazing, etc., and has for its primary object to provide, in a manner as hereinafter set forth, novel means for heating the caulking or other material to be extruded, thus facilitating the use of such guns in cold weather.

Another important object of the present invention is to provide a heating means of the aforementioned character which may be applied to extrusion guns which are already in use or at the time of manufacture.

Other objects of the invention are to provide a heating means for extrusion guns which will be comparatively simple in construction, strong, durable, compact, of light weight and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of an extrusion gun provided with heating means embodying the present invention;

FIGURE 2 is a top plan view thereof with the cover open and broken away, showing the cartridge in horizontal section; and

FIGURE 3 is a view in transverse section, taken substantially on the line 3—3 of FIGURE 2, showing the cover closed and the cartridge omitted.

Referring now to the drawing in detail, it will be seen that reference character 4 designates generally a conventional caulking gun of the portable, hand-operated type. The gun 4 includes the usual semi-circular barrel or trough 5 for the reception of a cartridge 6, said cartridge including a discharge nozzle 7 on one end.

The embodiment of the present invention which has been illustrated comprises a metallic casing or jacket 8 of cylindrical form which is adapted to substantially enclose the barrel or trough 5 of the gun 4 and the cartridge 6 in said barrel or trough. The jacket 8 includes a generally semi-circular lower section 9 which is secured longitudinally in any suitable manner beneath the barrel or trough 5. The jacket 8 further includes a semi-circular upper section or cover 10 which is pivotally secured on one side to the corresponding side of the lower section 9 by a piano hinge 11. The free longitudinal marginal portion of the upper section or cover 10 is engageable in a groove or channel 12 provided therefor in the upper portion of the lower section 9. Thus, the upper section or cover 10 is frictionally secured in closed position. If desired, the upper section or cover 10 may be positively secured in closed position through the medium of a suitable latch.

The lower section 9 of the jacket 8 comprises spaced, concentric inner and outer walls 13 and 14, respectively, providing a chamber for the reception of a suitable liquid fuel and an absorbent material, as indicated at 15.

Mounted on top of the lower section 9 of the jacket

2

8, on both side portions thereof, is a pair of burners 16. The burners 16 include wicks 17 which extend downwardly into the chamber 15 through openings provided therefor in the top of the lower section 9 of the jacket 8. Resilient angular metallic clips 18 removably secure the burners 16 in position. The upper section or cover 10 of the jacket 8 is provided with a plurality of ventilating openings 19 for the burners 16.

It is thought that the use or operation of the invention will be readily apparent from a consideration of the foregoing. Briefly, the upper section or cover 10 of the jacket 8 is swung to open position and the cartridge 6 is inserted in the barrel or trough 5 of the extrusion gun 4. The burners 16 are ignited and the upper section or cover 10 is closed. The forward end walls 20 and 21 of the jacket sections 9 and 10, respectively, have formed therein opposed recesses defining an opening which accommodates the nozzle 7 of the cartridge 6. This opening is indicated at 22. As shown to advantage in FIGURE 3 of the drawing, the upper section or cover 10 of the jacket 8 is spaced concentrically from the cartridge 6. Thus, heat generated by the ignited burners 16 may circulate freely in the upper portion of the jacket 8 for warming the cartridge 6 in an obvious manner.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A heater for extrusion guns of the type including a barrel, said heater comprising a generally cylindrical jacket for receiving and enclosing an extrusion gun barrel, said jacket including a fuel chamber and further including a cover hingedly mounted on said fuel chamber, and burners in the jacket mounted on the fuel chamber and operatively connected thereto for heating the interior of said jacket.

2. A heater for extrusion guns of the type including a barrel, said heater comprising a generally cylindrical jacket for receiving and enclosing an extrusion gun barrel to be heated, said jacket including a generally semi-circular fuel chamber and further including a generally semi-circular, perforated, complementary cover hingedly mounted on said fuel chamber, and a plurality of burners in the jacket mounted on the fuel chamber and operatively connected to said fuel chamber for heating the interior of said jacket.

3. A heater for extrusion guns of the type including a barrel, said heater comprising a generally cylindrical jacket for receiving and enclosing an extrusion gun barrel to be heated, said jacket including a generally semi-circular fuel chamber comprising spaced, concentric, generally semi-circular inner and outer walls, said jacket further including a generally semi-circular cover hingedly mounted on said fuel chamber, and burners in the jacket mounted on and operatively connected to the fuel chamber for heating the interior of the jacket.

4. An extrusion gun heater comprising a generally cylindrical jacket for receiving and substantially enclosing an extrusion gun to be heated, said jacket including spaced, concentric, generally semi-circular inner and outer wall portions defining a generally semi-circular fuel

chamber, said inner wall portion adapted to seatingly receive therein an extrusion gun barrel, said jacket further including a generally semi-circular, perforated cover hingedly mounted on the fuel chamber and cooperable therewith for enclosing the gun barrel, and burners in the jacket mounted on and operatively connected to the fuel chamber for heating the interior of said jacket, said burners comprising wicks secured on the fuel chamber and including at least one end portion extending thereinto.

5

10

References Cited in the file of this patent

UNITED STATES PATENTS

1,975,422	Hellenbroich	Oct. 2, 1934
2,060,317	Hoffman	Nov. 10, 1936
2,567,960	Myers et al.	Sept. 18, 1951
2,832,404	Thorpe	Apr. 29, 1958

FOREIGN PATENTS

782,365	Great Britain	Sept. 4, 1957
---------	---------------	---------------