No. 896,374. PATENTED AUG. 18, 1908.

L. FRICK.

BARREL HEATER.

APPLICATION FILED FEB. 27, 1908.

Fig. 1.

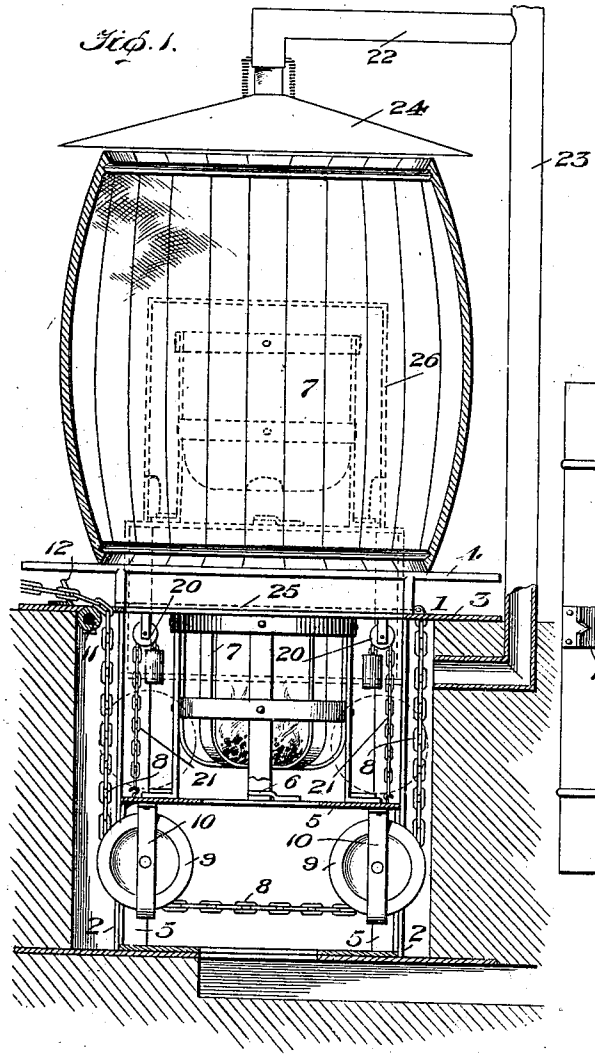


Fig. 4.

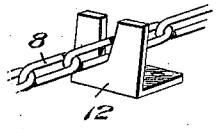


Fig. 2.

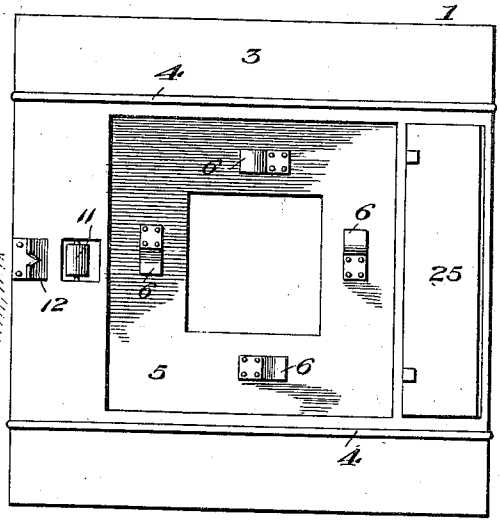


Fig. 5.

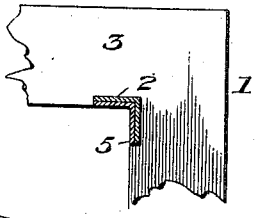
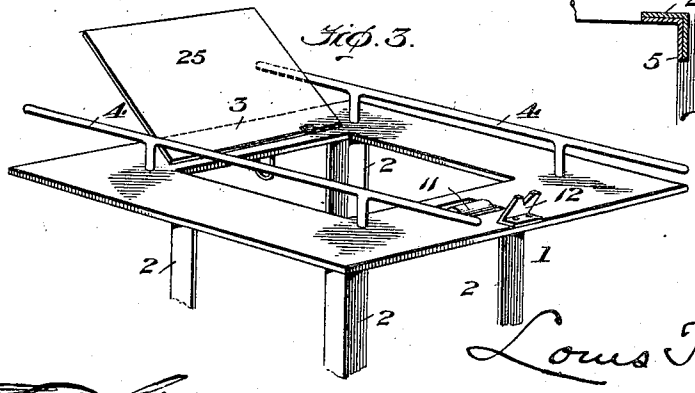


Fig. 3.



Witnesses

Inventor

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LOUIS FRICK, OF EVANSVILLE, INDIANA.

BARREL-HEATER.

No. 896,374. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed February 27, 1908. Serial No. 418,135.

To all whom it may concern:

Be it known that I, LOUIS FRICK, a citizen of the United States, residing at Evansville, county of Vanderburg, and State of Indiana, have invented certain new and useful Improvements in Barrel-Heaters, of which the following is a specification.

My invention relates to barrel heaters.

In barrel making it is a common practice to heat the interior of the barrel so that the inner faces of the staves will be hardened and the staves thus made to retain their bent shape, for in bending the staves the grain on the outer face thereof is stretched and that on the inner face compressed.

Barrel heaters have been heretofore employed, some of which embody heating appliances which are adapted to be lowered into the barrel, while others embrace stationary heaters and movable platforms to raise the barrel so it will surround the heater.

The present invention has for its object the provision of an improved barrel heater wherein the heater or fire pot will be raised instead of lowered into the barrel, thereby permitting the entire device to be positioned below the surface of the ground or floor, facilitating the operation of heating the interior of the barrel, as also to provide, generally, an adjustable barrel heater of novel construction, permitting rapid and easy operation and treatment of the barrels, ready removal of the fire-box or grate, and ample access of air.

The invention is set forth fully hereinafter and its novel features are recited in the appended claims.

In the accompanying drawings: Figure 1 is a vertical section, dotted lines showing the heater in position; Fig. 2, a plan view, the heater and its attachments being removed; Fig. 3, a detail perspective of the top of the device; Fig. 4, a detail showing how the chain is held; and Fig. 5, a detail section showing the guides for the platform.

The entire structure is, by preference, preferably sunk below the surface of the ground, thereby obviating the necessity of raising the barrel in order that it may be heated, beside doing away with all hanging appliances, thus minimizing the space employed and thus facilitating the heating operation.

The frame 1 has standards 2 of angle iron which constitute guides for the movable platform. The lower part of the frame may be of one solid piece or of open construction, the upper piece 3 being of open form and lying substantially flush with the surface of the ground or floor. Raised barrel supports 4 are disposed slightly above the top frame-piece 3, thus permitting circulation of the air thereunder.

The platform 5 is suitably guided to slide vertically in the standards 2 and has retaining devices 6 of any desired form for detachably holding the legs of the open grate or fire-box 7. This construction permits the fire-box to be bodily removed whenever desired.

Secured to the frame-piece 3 is a chain or cable 8 which runs under sheaves or pulleys 9 carried by hangers 10 which are fastened to the platform 5, said chain thence passing upwardly and over a pulley or sheave 11 suitably journaled in the frame-piece 3, near which is a hook or catch 12 with which the chain or cable is engaged for holding the platform and the fire-box in any desired or raised position. Chains 21 attached to the platform 5, running over sheaves 20 on the piece 3 and having weights, counterbalance the platform, heater, and movable parts. Smoke pipes 22 and 23 and a hood 24 take off the smoke when the heater is either raised or lowered. A door, (shown by dotted lines Fig. 1,) 25 as hinged to the piece 3, may be used, if desired, to cover the hole when the platform is completely lowered. A guard 26 having suitable draft openings, shown by dotted lines, Fig. 1, may be placed over the heater when raised to prevent scorching the interior of the barrel.

Having first raised the platform 5 by pulling on the chain 8 and engaging the chain with the hook 12, a suitable fire is built in the fire-box 7 and the platform then lowered. The barrel to be heated is next placed on the barrel supports 4 and the workman then pulls on chain 8 and raises the platform and fire-box to any desired extent inside of the barrel. From time to time the fire-box may be lowered or raised according to requirements. When the barrel has been heated, the chain is paid out and the fire-box lowered so that the barrel may be conveniently removed from its supports 4 without requiring lifting, thus making the operation very easy for the workman.

The supports 4 being raised, the air can readily pass into the barrel and create the proper draft for the fire, insuring the carrying away of the smoke through hood 24 and pipe 22. When the heater is in the pit, the pipe 23 takes off the smoke, but the hinged

door 25 may then be closed to prevent any escape of smoke, if desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. An adjustable barrel heater comprising the combination of a barrel support, a heater disposed below said support adapted to be raised and lowered from below the barrel support to position it in the barrel, and means for raising and lowering said heater.

2. In an adjustable heater, the combination with a barrel support, of a vertically movable platform disposed below said support, a heater carried by the platform and adapted to be positioned within the barrel by being raised into the latter, a pulley on the platform, and a flexible member having one part anchored and a free part running over the pulley, whereby the platform and heater may be raised or lowered.

3. In an adjustable heater, the combination with a barrel support, of a vertically movable platform disposed below said support, a heater carried by the platform and adapted to be positioned within the barrel by being raised into the latter, a pulley on the platform, a flexible member having one part anchored and a free part running over the pulley, whereby the platform and heater may be raised or lowered, and a device for securing said flexible member to hold the platform and heater in any desired raised position.

4. In an adjustable barrel heater, the combination with a barrel support, of a movable platform disposed below said support adapted to be raised or lowered below the barrel, and a heater detachably carried by the platform.

5. A detachable barrel heater, comprising the combination of upright guides, a barrel support surmounting said guides, a platform slidable on the guides below said support, means for raising and lowering the platform below the barrel, and a heater carried by the platform.

6. In an adjustable heater, the combination with a heater adapted to be lowered into or raised from a pit, of means for supporting the object to be heated above the pit, and a closure to cover the mouth of the pit when the heater is lowered into the pit.

7. In an adjustable heater, the combination with a heater adapted to be lowered into or raised from a pit, of means for supporting the object to be heated above the pit, and a hinged closure to cover the mouth of the pit when the heater is lowered into the pit.

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

LOUIS FRICK.

Witnesses:
P. C. HOPKINS,
F. C. GORE.