

(No Model.)

M. L. DEERING.

APPARATUS FOR COOLING THE GLUE LINING OF BARRELS.

No. 260,745.

Patented July 11, 1882.

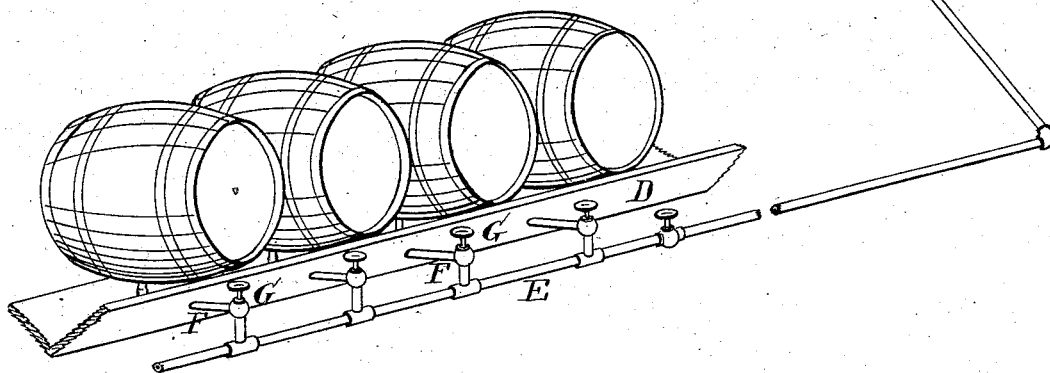
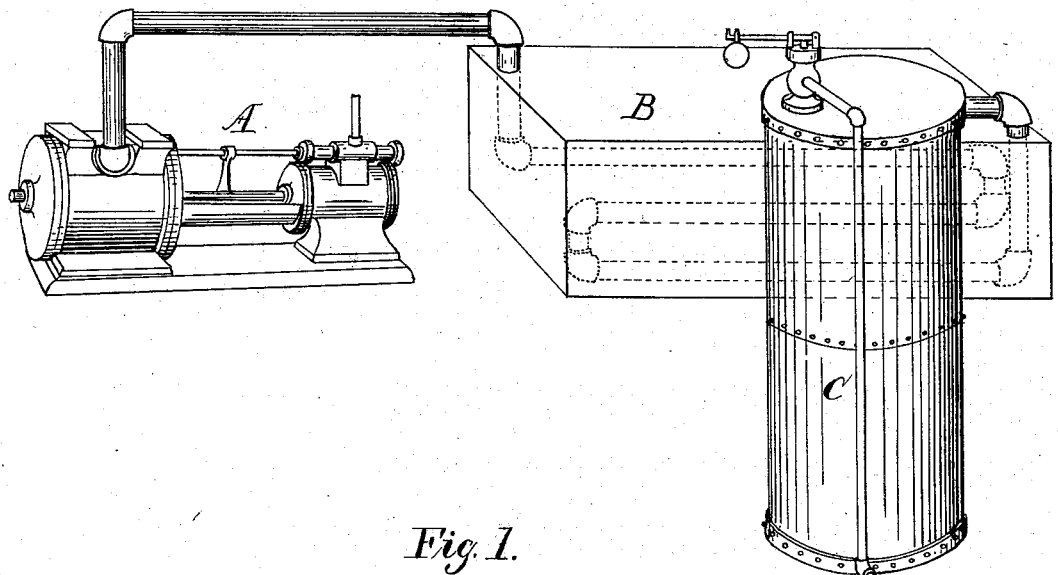
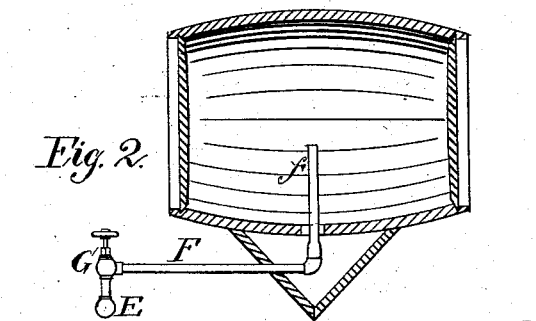


Fig. 2.



Witness,

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UNITED STATES PATENT OFFICE.

MARK L. DEERING, OF CLEVELAND, OHIO.

APPARATUS FOR COOLING THE GLUE LINING OF BARRELS:

SPECIFICATION forming part of Letters Patent No. 260,745, dated July 11, 1882.

Application filed January 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, MARK L. DEERING, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful
5 Apparatus for Cooling the Glue Lining in Barrels, of which the following is a specification.

The nature and objects of the invention will fully appear from the subjoined description
10 when considered in connection with the accompanying drawings, in which—

Figure 1 is a general perspective view of the apparatus or means employed for carrying out
15 my process. Fig. 2 is a vertical section of a barrel, showing method of applying the cold air for cooling the interior.

A represents a force-pump for forcing air, which may be of any of the known constructions.

20 B represents a cooling apparatus consisting of a box, tank, or vessel for holding water, in which is arranged a coil of pipe submerged in the water, the said coil of pipe being connected with the air-pump aforesaid.

25 C is an air-receiver consisting of a strong air-tight cylinder located near to and connected with the coil of pipe in the cooling-tank. It is supplied on the top with a safety-valve and a pipe leading therefrom.

30 Situated at any suitable point from the said receiver C is arranged a trough, D, by the side of which, near the floor, for convenience, is arranged a pipe, E, connected with the pipe leading from the said receiver C. Pipe E is
35 also supplied with a number of branch pipes, F, which lead into the trough at suitable intervals, to attach to a row of barrels lying across the top of the said trough. The ends
40 of the branch pipes F are terminated with a piece of stiff rubber hose, f, which is designed to be inserted into the bung-hole of the barrel, as seen in Fig. 2. The said branch pipes F are supplied with cocks G near their intersec-

tion with the main pipe E, and the main pipe is also supplied with a cock, both for an ob- 45
vious purpose.

The operation of this apparatus is as follows: Prepared glue, of the proper consistency and temperature, is put into the barrels for coating their interior surface. The barrels are then
50 rolled and turned to cause the glue to adhere to all parts of the interior. They are then placed on the trough, with the hose inserted through the bung-hole and the bung-hole side down, and allowed to drain off the surplus
55 glue. Then at the proper time the cocks G are opened and cold air admitted for the purpose of expelling the steam and hot air therefrom, and cooling the interior of the barrel and cooling
60 the remaining glue to prevent its further running. The air is then shut off by closing the cocks, and the barrels removed from the trough and set aside for the glue to harden.

By this method glue of a thin consistency may be used at all seasons of the year for the
65 coating of the interior of barrels, thus greatly facilitating the operation and insuring a uniformity of application of the glue to the entire interior surface, as the glue is sufficiently set
70 before removing the barrels from the trough.

Having described my invention, I claim—

In an apparatus for cooling the lining of barrels, the combination of the air-pump A and the air-cooling apparatus B, air-receiver
75 C, having the conducting-pipe E, provided with the branch pipes F F, with cocks G, and the trough D, for the purpose of first draining off from the barrels the surplus glue, then injecting cold air, thereby expelling the steam and hot air and setting or fixing the glue lin- 80
ing in the barrels, substantially as described.

MARK L. DEERING.

Witnesses:

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