

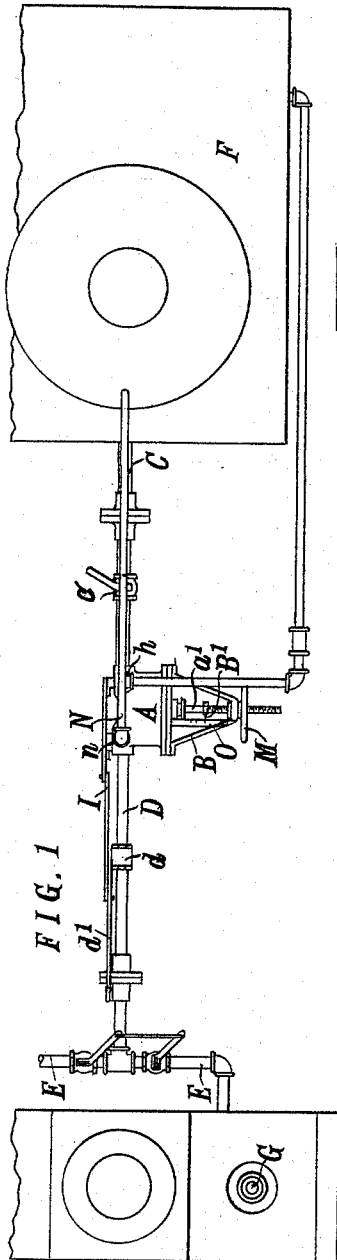
(No Model.)

2 Sheets—Sheet 1.

G. SCHMITT.  
BARREL PITCHING APPARATUS.

No. 526,504.

Patented Sept. 25, 1894.



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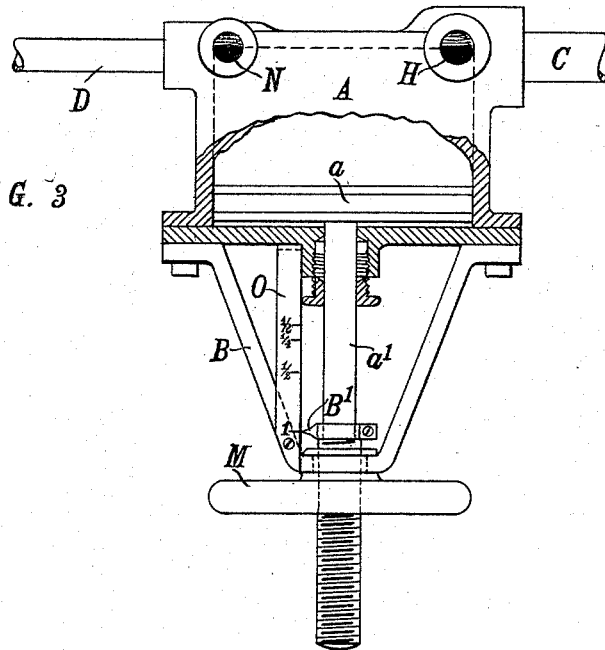
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FIG. 3



WITNESSES:

*Frank Miller*  
*M. S. Ingham*

INVENTOR,

*George Schmitt*  
BY *Wing & Thurston*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

GEORGE SCHMITT, OF CLEVELAND, OHIO, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO PHILLIP SHERRER AND MARY A. SHORT, OF SAME PLACE.

## BARREL-PITCHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 526,504, dated September 25, 1894.

Application filed December 24, 1892. Renewed May 10, 1894. Serial No. 510,805. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE SCHMITT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Barrel-Pitching Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement on the barrel pitching apparatus shown and described in my application for a patent, Serial No. 447,017, filed September 27, 1892.

It relates particularly to the part of apparatus with which the amount of pitch to be sprayed into the barrel is regulated proportionately to its size; and the invention consists in the construction and combination of parts hereinafter described and definitely pointed out in the claims.

In the drawings, Figure 1 is a plan view of the apparatus. Fig. 2 is a side elevation thereof; and Fig. 3 is a detached view partly in section of the cylinder A.

In the drawings A represents a cylinder, and *a*, a piston fitted therein. The piston rod *a'* projects out through a suitable stuffing box in one end of the cylinder and the end of said piston rod, outside of the cylinder, is threaded so as to fit the threaded hand wheel M.

B represents a fixed yoke, the outer end of which surrounds the hub of the hand wheel, and lies in an annular groove therein, whereby endwise movement of said hand wheel is prevented. By the revolution of the hand wheel, the piston is moved up or down in the cylinder thereby decreasing or increasing the size of the chamber therein with which the several pipes to be hereinafter described communicate. Secured to the piston rod is a finger B' and fixed to the yoke, or any other suitable support is a scale O, having graduations, which indicate the positions which the finger will occupy when the chamber in the cylinder is of the proper size to contain a suitable amount of pitch or other material to be applied to a barrel, half barrel, quarter barrel, &c.

A pipe C connects the cylinder and the pitch kettle which is in the furnace F. A pipe D is connected at one end with said cylinder, and at the other end with the branch pipes E E which communicate with the vertical perforated pipes G through which the pitch is discharged into the barrel. Only one perforated pipe is shown in the drawings because the portion of the apparatus in which the other pipe is located is broken away.

H represents a pipe which connects the cylinder with a steam boiler or other source of steam.

N represents a vent pipe connected with the cylinder A. This vent pipe extends back into the furnace for the reason that when the cylinder A is being filled with pitch from the kettle,—at which time the vent pipe is open,—more or less of the pitch and smoke from the pitch is forced out of this pipe N.

Each of the pipes C, D, H and N is provided with a valve indicated respectively by the letters *c*, *d*, *h* and *n*; and these valves are located as close as convenient to the cylinder A. The cylinder and so much of the pipes C and D as lie between their respective valves and the cylinder constitute a regulating chamber, within which the quantity of pitch to be used in pitching any barrel may be measured and regulated.

The stems of the valves *d*, *h* and *n* are connected by the bar I, which is attached to a lever *d'*. The connection is such that when by the manipulation of the lever *d'* one valve is moved, the other valves are simultaneously moved in the following manner, viz: The valve *n* is opened when the valves *d* and *h* are closed,—or the valves *d* and *h* are opened when the valve *n* is closed,—in which latter case the steam from pipe H forces the pitch in the said chamber forward through pipes D and the intermediate pipes to and through the perforations in one of the pipes G,—into one of the barrels.

The valve *c* in the pipe C is opened and closed by hand, but in the proper operation of the device it is opened when the valve *n* in the vent pipe is opened and the valves *d* and *h* are closed, whereby the pitch may flow into and fill the regulating chamber; and the

valve *c* is closed when the valve *n* is closed and the other valves are open, whereby the pitch cannot be forced by the steam from pipe, H either backward through pipe C or  
5 through pipe N.

To regulate the quantity of pitch which at each opening of the valves *d* and *h* shall be forced into a barrel, the piston *a* is by the  
10 operation of the hand wheel moved in or out of the cylinder, thereby decreasing or increasing the size of the regulating chamber as circumstances may require. The position of the finger B' with respect to the scale will show when the regulating chamber is of the  
15 proper size to contain the amount of pitch required for the barrel to be pitched.

Having described my invention, I claim—

1. The combination of a regulating chamber, and a piston adjustable therein, with a  
20 steam pipe, a pitch inlet pipe, a pitch outlet

pipe, and a vent pipe all connected with said chamber, and a valve for each of said pipes, substantially as and for the purpose specified.

2. The combination of a regulating chamber, a piston, a piston rod extending out of  
25 said chamber and having a threaded end, a fixed yoke, and a threaded hand wheel having an annular groove in its hub with which said yoke engages, with the steam pipe, a pitch inlet pipe, a pitch outlet pipe and a vent pipe, 30 all connected with said chamber, and a valve for each of said pipes, substantially as and for the purpose specified.

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

GEORGE SCHMITT.

Witnesses:

E. L. THURSTON,  
GEO. W. SHORT.