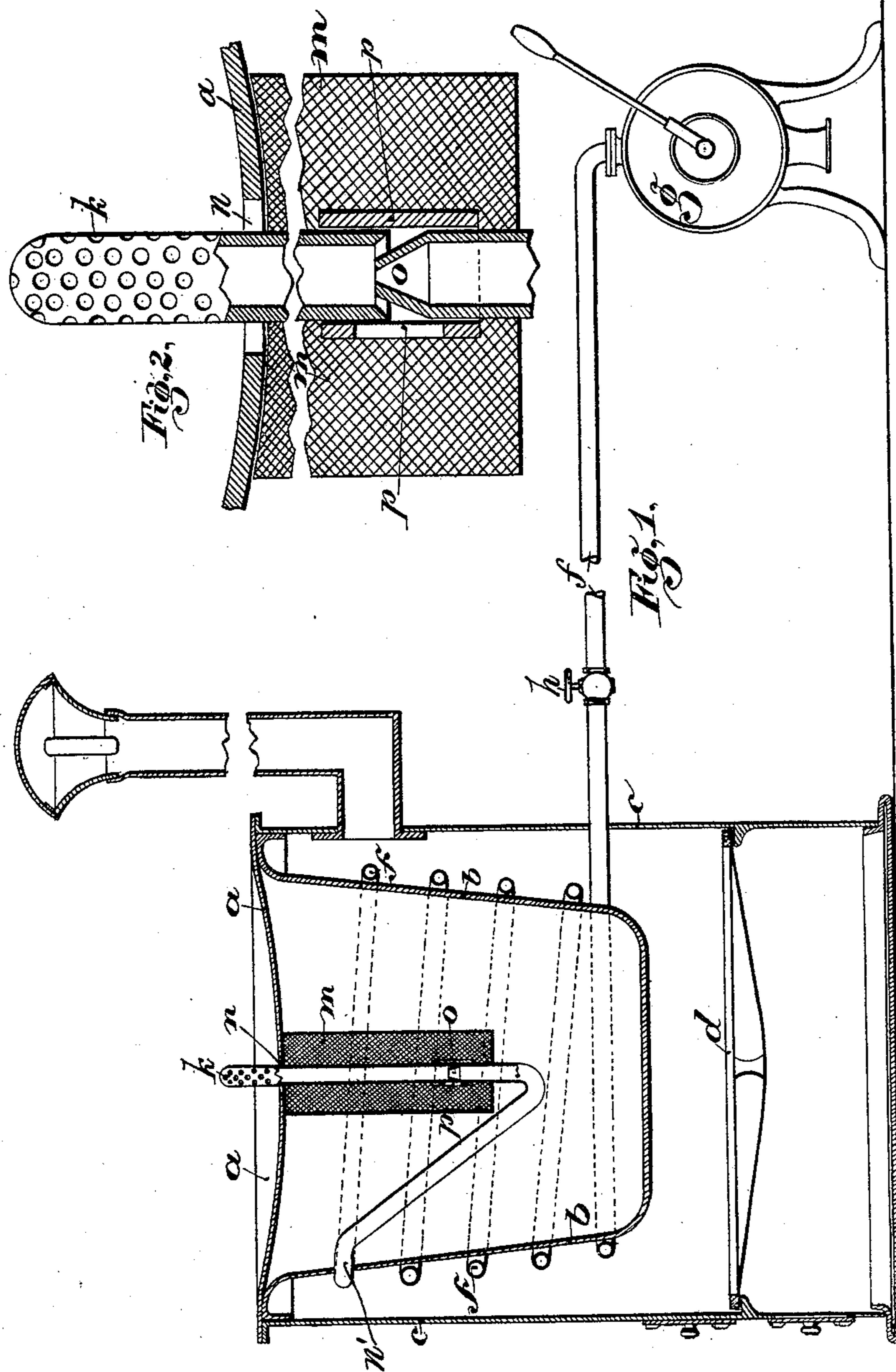


(No Model.)

C. HAGENMÜLLER.  
CASK PITCHING APPARATUS.

No. 585,028.

Patented June 22, 1897.



Witnesses.  
*Geo. W. Rea.*

Inventor.  
*Christian Hagenmüller.*  
By *James L. Norris.*  
*Atty.*

# UNITED STATES PATENT OFFICE.

CHRISTIAN HAGENMÜLLER, OF ERFURT, GERMANY.

## CASK-PITCHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 585,028, dated June 22, 1897.

Application filed December 23, 1896. Serial No. 616,809. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN HAGENMÜLLER, manufacturer, a subject of the King of Prussia, German Emperor, residing at Elizabeth Street, No. 2, Erfurt, in the Kingdom of Prussia, German Empire, have invented new and useful improvements in Cask-Pitching Apparatus, of which the following is a specification.

10 This invention relates to cask-pitching apparatus, and has for its object to provide new and improved means whereby heated air under pressure is made to draw the pitch from a pitch-boiler and drive it into the interior of  
15 the cask. This object is accomplished in the manner and by the means hereinafter described and claimed, reference being made to the accompanying drawings, in which—

20 Figure 1 is a sectional elevation of a cask-pitching apparatus embodying my invention; and Fig. 2 is a detail sectional view showing the pitch-nozzle, the hot-air nozzle, the screen surrounding the nozzles, and a portion of the cover of the pitch-boiler.

25 In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein the letter *b* indicates a pitch-boiler having a cover *a* and suspended  
30 over the grate *d* in a furnace structure *c*, provided with a suitable chimney.

35 The cover *a* is concave and is formed with a central aperture *n*, such that any pitch in excess that may flow out of the cask can flow back into the boiler.

40 Around the boiler *b* there is arranged a worm or coiled pipe *f*, which leads to a pumping apparatus *g*. The other end of the pipe *f* passes with its bend or elbow *n'* through the shell or wall of the pitch-boiler and terminates with the nozzle *o* below the surface of the pitch.

45 The pitch-nozzle *k* is arranged over the nozzle *o*. The junction of the nozzles *o* and *k* is surrounded by a perforated sleeve *p*. The nozzle *k* is wider than the nozzle *o*. The result is that the heated compressed air issuing from the nozzle *o* sucks up the pitch and projects it out through the pitch-nozzle *k*.

50 The sleeve *p* fits tightly over the periphery of the nozzle *o*, overlapping the end thereof sufficiently to allow of the pitch-nozzle *k* to be securely fitted in the projecting end of the sleeve *p*, and thus support the pitch-nozzle.

55 The pipe *f* being practically rigid, the end

thereof having the nozzle will, through the medium of sleeve *p*, afford a support for the pitch-nozzle.

A sieve or strainer *m* surrounds the pitch-nozzle *k* and the hot-air nozzle *o* and prevents  
60 any dirt that may be floating in the pitch from reaching the nozzles. The nozzle *k* is provided with squirting-outlets.

The apparatus is operated as follows: When the pitch in the boiler *b* is melted, the cask to  
65 be pitched is placed upon the cover *a* and air is forced into the pipe *f* by means of the pump *g*, said pipe being provided, if desired, with a stop-cock *h* at a suitable point. On opening this cock the air flows through the pipe-coil *f*,  
70 is heated therein, and as it is prevented from expanding it acquires a pressure, so that it flows under pressure into the nozzle *k* and there draws along with it the melted pitch which surrounds the nozzle, said pitch being  
75 projected out through the nozzle *k* into the interior of the cask. The pitch is brought into contact with the heated air, which prevents the pitch from setting or hardening on issuing from the apertures of the nozzle and  
80 avoids choking the apertures.

Having now particularly described the nature of my invention, what I claim is—

1. The combination, in a cask-pitching apparatus, of a furnace structure, a pitch-boiler  
85 therein, a cover on the pitch-boiler, a pitch-nozzle projecting from the cover, a pipe extending into the furnace structure and into the pitch-boiler and having a hot-air-delivery nozzle coöperating with the pitch-nozzle, a  
90 screen surrounding the nozzles in the pitch-boiler, and means for forcing air through the said pipe, substantially as described.

2. The combination, in a cask-pitching apparatus, of a heater, a pitch-boiler having a  
95 cover, a pitch-nozzle extending above the cover, a pipe coiled around the pitch-boiler extending thereinto, and having a hot-air-delivery nozzle coöperating with the pitch-nozzle, a screen surrounding the nozzles in the  
100 pitch-boiler, and a force-pump for forcing air through the coiled pipe, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHRISTIAN HAGENMÜLLER.

Witnesses:

FANNIE MOORE,

MARGARET A. MAURE.