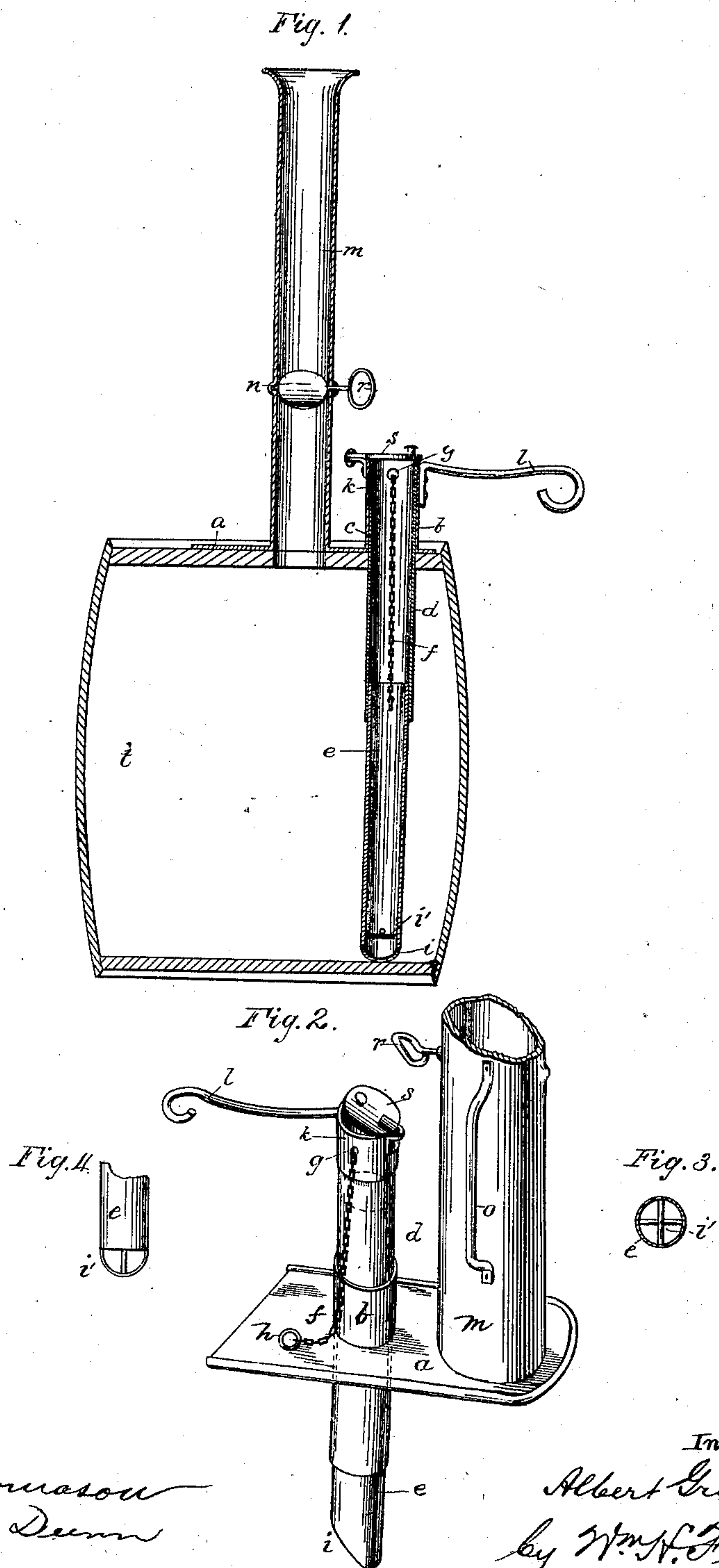


A. GROSMANN.
 Apparatus for Pitching Beer-Casks.
 No. 222,696. Patented Dec. 16, 1879.



Witnesses:
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George W. Deum

Inventor:
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 by *Wm. H. Finckel*
His Atty.

UNITED STATES PATENT OFFICE.

ALBERT GROSMANN, OF SCHORNDORF, WÜRTEMBERG, GERMAN EMPIRE,
ASSIGNOR TO ALBERT HAAS, OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR PITCHING BEER-CASKS.

Specification forming part of Letters Patent No. 222,696, dated December 16, 1879; application filed November 10, 1879; patented in Germany, January 10, 1878.

To all whom it may concern:

Be it known that I, ALBERT GROSMANN, of Schorndorf, Württemberg, German Empire, have invented a new and useful Improvement in Apparatus for Pitching Beer-Casks, of which the following is a specification.

This invention is in the nature of an improvement in the process and apparatus for pitching the interiors of beer or other kegs, casks, or barrels; and the invention consists in the employment, within the keg, cask, or barrel, of a pitch-consuming device, by which the pitch is prepared or melted and fitted for use, the apparatus employed consisting, in the instance here given, of an extensible tube mounted upon a suitable base and adapted to extend to or near the bottom of the keg, cask, or barrel, so as to permit the ingress within the keg of a fire to melt the pitch, a suitable chimney being provided for the escape of the smoke or vapor, and means employed for regulating the extension of the tube and for stopping the consumption of the pitch.

In the accompanying drawings, illustrating my apparatus, Figure 1 is a vertical section, showing the apparatus applied to a cask. Fig. 2 is a perspective view of the apparatus, part of the chimney being broken off. Fig. 3 is a bottom view, and Fig. 4 is a side view, of the end of the inner tube.

A suitable base-plate, *a*, may be used, upon which is a collar or flange, *b*, encircling an opening, *c*, in said plate. A tube, *d*, adapted to fit within the flanged opening in the plate, is provided with an inner tube, *e*, arranged to slide up and down within it. The inner tube may be adjusted by means of a chain, *f*, passing up from said tube through an opening, *g*, in the tube *d*, and having an operating ring or handle, *h*, which may be secured to any suitable fastening upon the apparatus, if desired. The lower end of the inner tube is chamfered or cut slanting, as at *i*, Fig. 2, or otherwise constructed to permit the ready admission of fire to ignite and melt the pitch within the barrel, and when so constructed the tube may rest upon the bottom of the barrel. The bottom of this tube may have a grating or cage to contain the fire, as shown at *j*, Figs. 3 and 4. The tube *d* may be pro-

vided with a re-enforcing-collar, *k*, and a stem, *l*, attached thereto for convenience in handling the tubes. The tube *d* has a swinging top or cover, *s*.

The object of the provision of the extensible tube is to adapt the apparatus to barrels, &c., of different lengths or capacity.

Pitching apparatus heretofore have had sets of firing-nozzles to adapt them to barrels of various sizes, a nozzle being removed and the one of proper size substituted for it, or else the barrel was placed upon a movable platform and by it adjusted to the nozzle.

Upon the plate *a* is preferably rigidly fixed a tube, *m*, opening through the plate, and having a damper or regulator, *n*, to control the draft, and provided with handles *o*, for transporting or manipulating the apparatus. The regulator has an operating-handle, *r*, extending beyond the tube. This tube serves as means for the escape of the smoke from the burning pitch, and is herein designated as the "chimney" or "smoke-stack."

To insure the proper draft the smoke-stack must be of greater diameter than the fire-tube *d e*.

The apparatus is constructed of metal, the tubes being conveniently made of sheet metal; but the material used forms no part of the invention.

The operation is as follows: The keg, cask, or barrel to be pitched is set on end and a suitable quantity of pitch placed in the bottom of the barrel. The plate *a* is placed over an opening or openings in the head of the barrel, the extensible tube *d e* extending into the barrel through the opening *c* of the plate *a*, and the inner tube is permitted to descend to or nearly to the bottom of such keg, cask, or barrel, as shown, the keg being represented in section at *t*. Fire is then dropped down the tube *d e*, and falling upon the pitch ignites it, sufficient draft to aid combustion being obtained by having the cover *s* swung aside and the regulator *n* in the smoke-stack open, the said smoke-stack communicating with the interior of the keg. The melting of the pitch is watched from the bung-hole, and when the pitch has become sufficiently liquid the fire is instantly stopped by the closing of

the cover *s*. The apparatus is then removed and the barrel rolled, as usual, in order to diffuse the melted pitch therein. The smoke or vapor generated by the ignition of the pitch escapes through the smoke-stack. The combustion may be regulated by the damper *n* in the smoke-stack.

By my apparatus I dispense with the pitch-melting furnaces usually used in pitching barrels. I also avoid danger from explosions by the generation of steam. I can also pitch old as well as new barrels, and whether they be damp, sour, or dry, and that, too, effectually.

The apparatus is portable, durable, and cheap. It is used by moving it from keg to keg as the pitch is melted, instead of moving the barrels up to it, as was necessary in the apparatus heretofore employed.

The grating *v* is designed to catch the wood or other kindling used to fire the pitch, and so prevent it from mingling with the pitch.

What I claim is—

1. That improvement in the art of pitching beer and similar kegs, casks, or barrels which consists in melting the pitch within the keg, cask, or barrel by means of a portable pitch-melting apparatus constructed to be moved from keg to keg, &c., as used, and applied upon and wholly supported by such keg, &c., substantially as specified.

2. A barrel-pitching apparatus adapted to support combustion within the barrel, having an extensible pitch firing or melting tube, substantially as and for the purpose specified.

3. In a barrel-pitching apparatus, an extensible pitch-melting tube to be applied within the barrel, a free inner end to such tube, and a cover for its outer end, substantially as and for the purpose described.

4. In a barrel-pitching apparatus, the combination of a pitch-melting tube, a cover therefor, and a smoke-stack or chimney having a damper or regulator, substantially as and for the purpose specified.

5. An apparatus for pitching barrels, kegs, or casks, composed of an extensible tube, by means of which the pitch is melted at pleasure, means for controlling the extensibility of such tube, a smoke-stack, a regulator therein, and a base-plate to receive them, substantially as described.

6. In an apparatus for igniting and maintaining the combustion of resinous matter within a keg or equivalent vessel for pitching the same, a pitch-firing tube and a smoke-stack, arranged upon and supported by the keg to be pitched, to create a draft or current of air through such keg, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT GROSMANN.

Witnesses:

R. M. JACKSON,
M. ROPER.