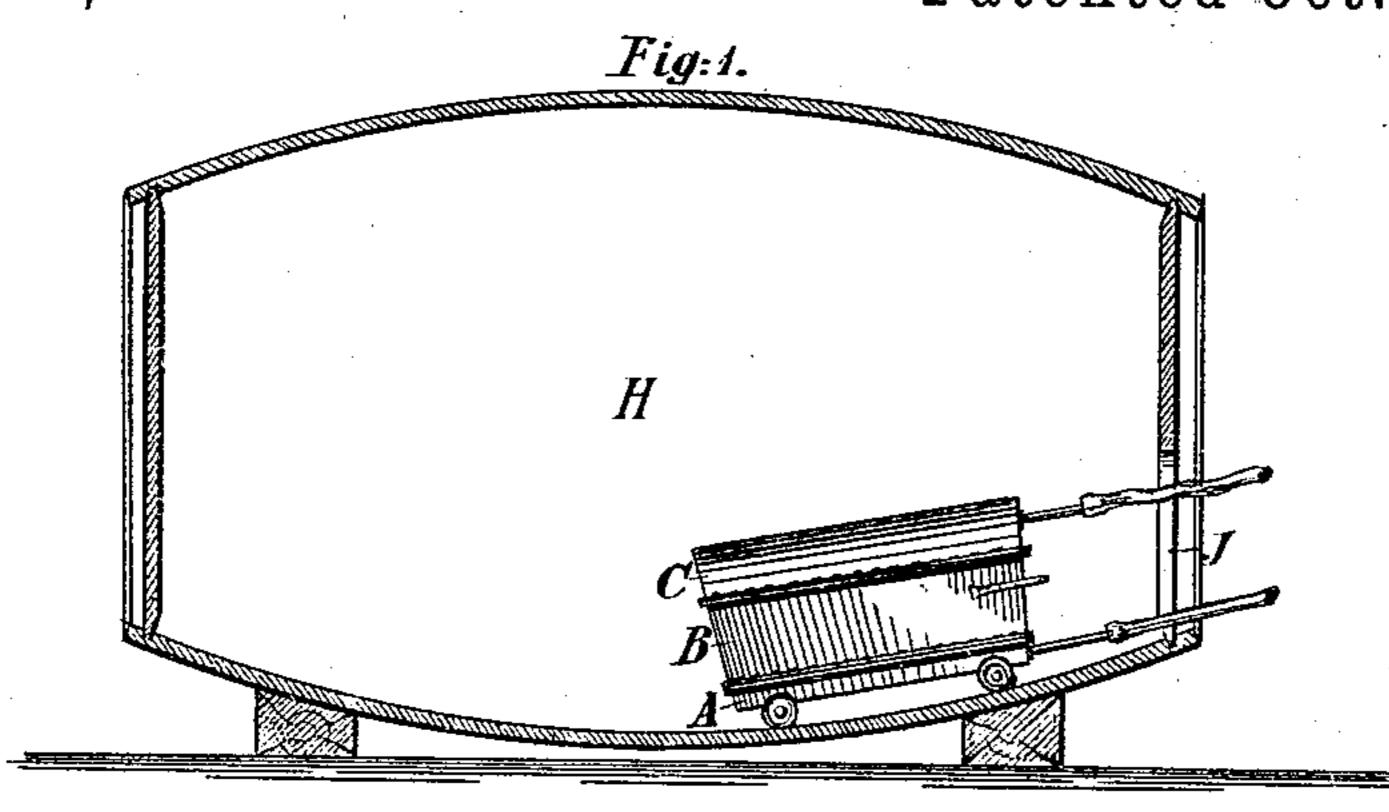
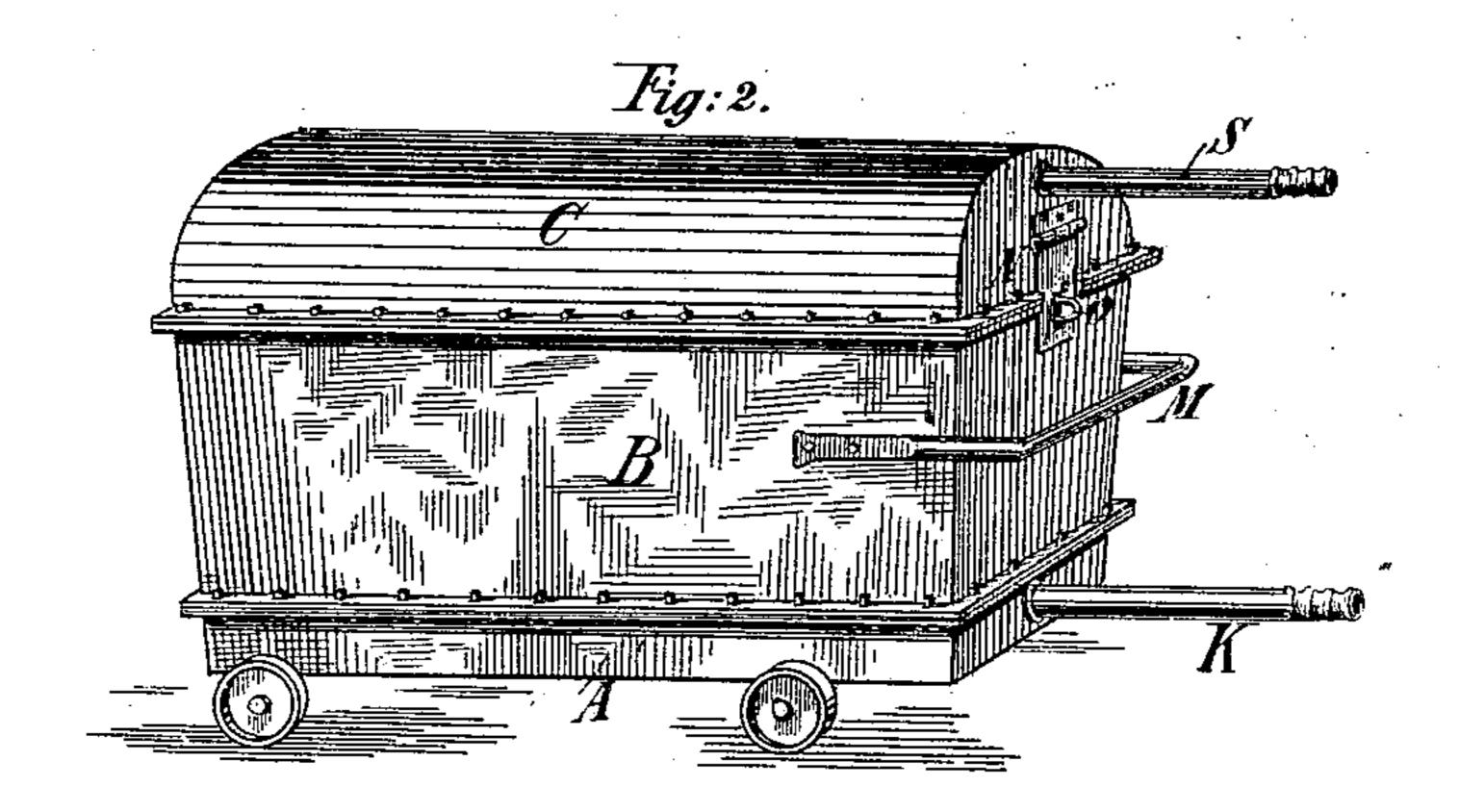
(No Model.)

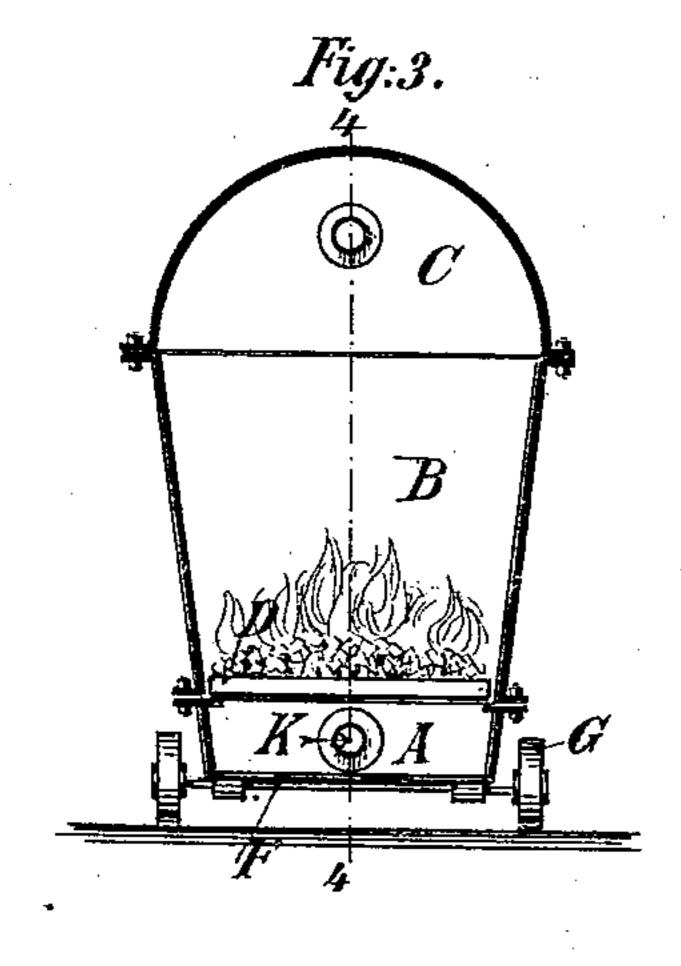
R. WEIGEL & B. WAECHTLER. BARREL HEATER.

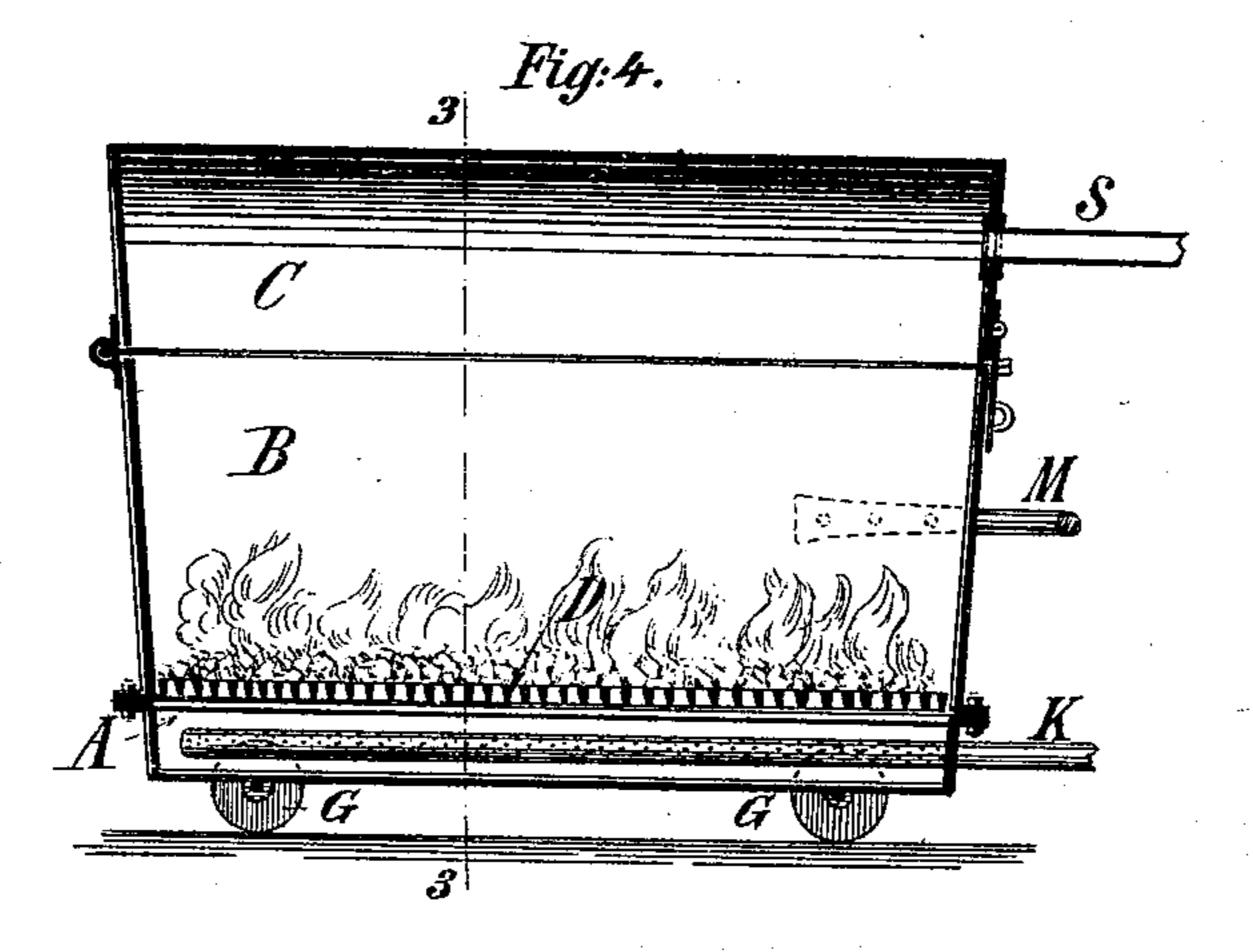
No. 484,073.

Patented Oct. 11, 1892.









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United States Patent Office.

ROBERT WEIGEL AND BRUNO WAECHTLER, OF NEW YORK, N. Y.

BARREL-HEATER.

SPECIFICATION forming part of Letters Patent No. 484,073, dated October 11, 1892.

Application filed February 6, 1892. Serial No. 420,558. (No model.)

To all whom it may concern:

Be it known that we, Robert Weigel, a citizen of Belgium, and BRUNO WAECHTLER, a citizen of Germany, both being residents of 5 the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Barrel-Heaters, of which the following is a specification.

The large casks and barrels used in brew-10 eries are varnished on the inside for the purpose of rendering them waterproof, and it is absolutely necessary that before such barrels are varnished the interior should be dry. The heating of these barrels has heretofore been 15 connected with more or less difficulties; and the object of our invention is to provide a new and improved heater by which the barrels and casks can be made perfectly dry and then successfully varnished.

The invention consists in a barrel-heater composed of a body preferably mounted on wheels and provided a short distance above its bottom with a grate and a perforated airinlet tube below said grate and projecting 25 from one end of the body and an outlet-tube for the products of combustion also projecting from said body.

The invention also consists in the construction and combination of parts and details, 30 which will be fully described hereinafter, and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a cask into which our improved cask and barrel heater 35 has been inserted. Fig. 2 is a perspective view of our improved cask and barrel heater. Fig. 3 is a vertical transverse sectional view of the same on line 33 of Fig. 4, and Fig. 4 is a vertical longitudinal sectional view of the same 40 on line 4 4 of Fig. 3.

Similar letters of reference indicate corre-

sponding parts.

Our improved barrel-heater is composed of the bottom section A, intermediate section B, 45 cover-section C, and the grate D, resting on the bottom section A. The bottom section is provided with axles F, carrying wheels G, by means of which the heater can run in the cask or barrel H through the usual manhole 50 J, provided in the same. The tube K projects

midway of the height of said section, and extends almost the entire length of the section, said tube being perforated in that part within the section A. The outer end of the tube pro- 55 jects a greater or less distance from the section A and is adapted to be connected with a flexible tube or hose. As shown, the grate D, on which the fire is built, rests on the top of the bottom section A a short distance above 65 said tube K. The intermediate section B is preferably provided with a handle M to facilitate moving the entire heater. The cover-section C is provided at one end with a springhasp N, adapted to engage a staple O in the 65 intermediate section, and at the opposite end the cover-section is hinged to the intermediate section. The intermediate section B has flanges at the top and bottom edges. The cover-section has its bottom edges flanged, 70 and the bottom section A is flanged along its upper edges, and bolts are passed through the bottom flanges of the intermediate section and the top flanges of the bottom section for holding said intermediate and bottom sections to-75 gether. A tube S projects from one end of the cover-section C and is also adapted to be connected with a flexible tube or hose.

The apparatus is used in the following manner: A fire is built upon the grate D, and 80 when the same is in full blast the heater is run into the cask or barrel. The air necessary for combustion passes through a flexible tube or hose to the tube K and through the perforations of the same up through the grate. 85 The products of combustion, gases, and smoke pass up through the tube S and through the flexible tube or hose connected with said tube S.

By means of our improved heater a cask or 90 barrel can be thoroughly dried and heated in a few hours. There is no danger of firing the cask, the apparatus can be readily handled,

and great heat can be produced.

Having thus described our invention, we 95 claim as new and desire to secure by Letters Patent—

In a barrel-heater, the combination, with a suitable bottom section provided with wheels, a grate supported in said bottom section, an xoo intermediate section bolted on the bottom through one end of the bottom section A, about I section, a cover-section hinged on the intermediate section and forming a tight joint, a perforated air-inlet tube in the bottom section below the grate and projecting from one end of said bottom section, and an outlet-tube for the products of combustion projecting from the end of the top section, substantially as set forth.

In testimony that we claim the foregoing as

our invention we have signed our names in presence of two subscribing witnesses.

ROBERT WEIGEL. BRUNO WAECHTLER.

Witnesses:
CHARLES SCHROEDER,

CHARLES D. BLES.