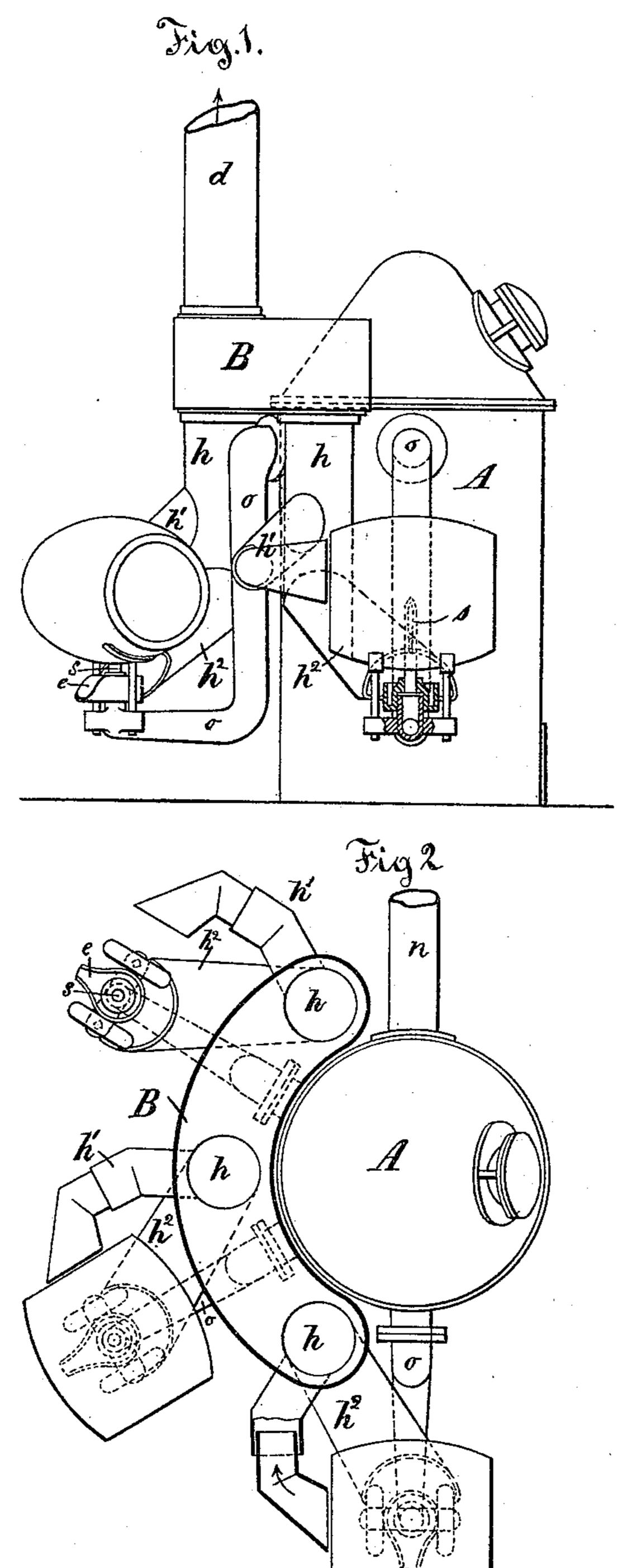
W. ARNEMANN.
PITCHING MACHINE.

No. 440,297.

Patented Nov. 11, 1890.

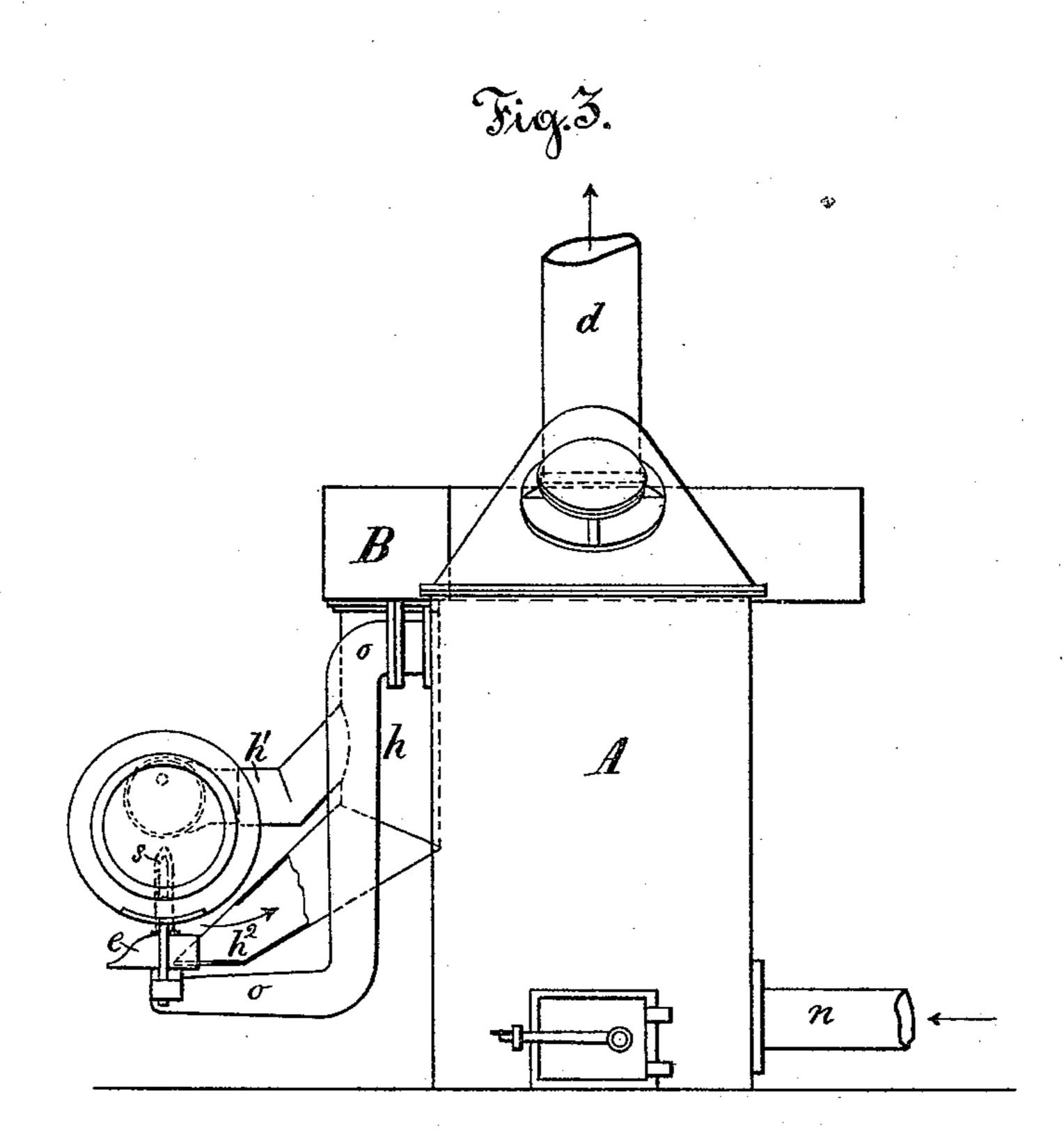


THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

Wilnesses: L.N. Legendre George Barry. Hilhelm Arnemann. by Attorneys. W. ARNEMANN.
PITCHING MACHINE.

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United States Patent Office.

WILHELM ARNEMANN, OF HAMBURG, GERMANY.

PITCHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 440,297, dated November 11, 1890.

Application filed August 23, 1890. Serial No. 362,839. (No model.)

To all whom it may concern:

Be it known that I, WILHELM ARNEMANN, of the city of Hamburg, in the Empire of Germany, have invented a new and useful Improvement in Pitching-Machines, of which the following is a specification.

The object of this invention is to provide for carrying off from a pitching-machine the vapor or smoke produced during the process

to of pitching.

The improvement consists in the combination, as hereinafter described and claimed, of a smoke-extractor with a pitching-machine, whereby both the pitching-machine and the extractor constitute one transportable apparatus.

Figure 1 in the accompanying drawings represents a front elevation, partly in section, of a pitching-machine with my improvement.

Fig. 2 is a plan view of the same partly in section. Fig. 3 is a side elevation of the same, partly in section.

Similar letters of reference designate cor-

responding parts in all the figures.

The furnace A of the machine is of known construction, having within it a fire-place for a fire of coke, into which fresh air is to be introduced from a blower through a tube n, to be heated therein and led therefrom through tubes o to the nozzles s, upon which

the barrels to be pitched are placed.

The smoke and vapor extractor consists, principally, of a box or hood B, partly surrounding the upper part of the furnace and having provided in its bottom tubes h, each of which has for each tube o and nozzle s two branches h' and h², that are arranged in such manner shown that after the barrel to be pitched has been placed on or over the cor
versponding nozzle o the tube h² terminates

underneath the bung-hole of the barrel and the corresponding tube h' terminates near the tap-hole. A tube d leads from the box or hood B to an exhauster, which may be of any known or suitable kind not necessary to be 45 shown.

While operating the machine hot air from the furnace enters the barrels through the tubes o and nozzles s and melts the old pitch attached to the inner surface of the barrels. 50 This pitch runs out of the bung-hole near the sides of the nozzle into a reservoir e. At the same time the exhauster removes the smoke from the barrel through the tubes h'and h^2 into the box or hood B, and thence 55 through the tube d into the atmosphere, or to a place where it cannot molest the workmen or other people. The suction-tubes h' and h^2 can be closed each by a slide or flap to close one or more of the same toward the box or 60 hood B if the corresponding tubes o and nozzles s have to be shut out from work. The ends of the tubes h' are made telescopic to provide for a close fit to the barrel-surface.

What I claim as my invention, and desire 65

to secure by Letters Patent, is—

The combination, with the furnace A, the hot-air pipe o, and nozzle s of a pitching-machine, of a box or hood B, arranged near the said furnace and provided with an ex- 70 haust-pipe d and with tubes h' h^2 for forming communication, respectively, with the taphole and bung-holes of a barrel placed over the said nozzle, substantially as and for the purpose herein set forth.

WILHELM ARNEMANN.

Witnesses:

F. ENGEL,

H. WITT.