

T. L. BOYD.
Apparatus for Singeing Hogs.

No. 222,654.

Patented Dec. 16, 1879.

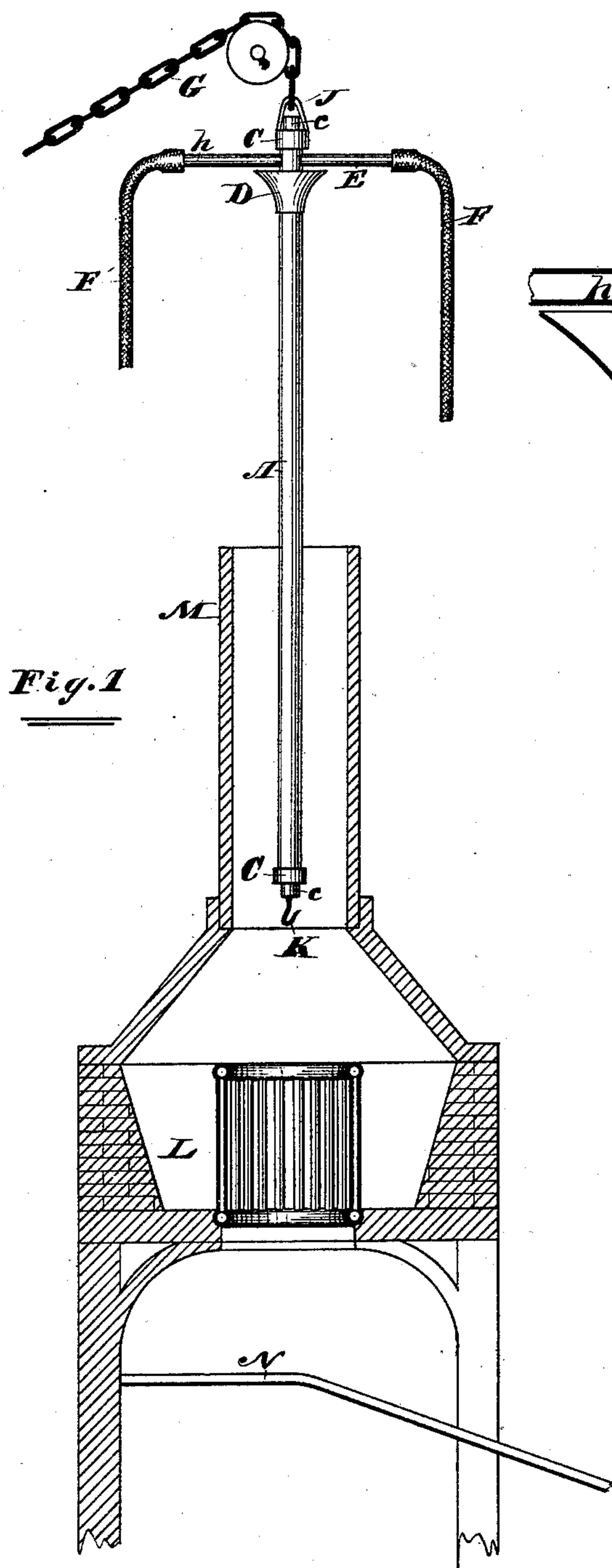


Fig. 1

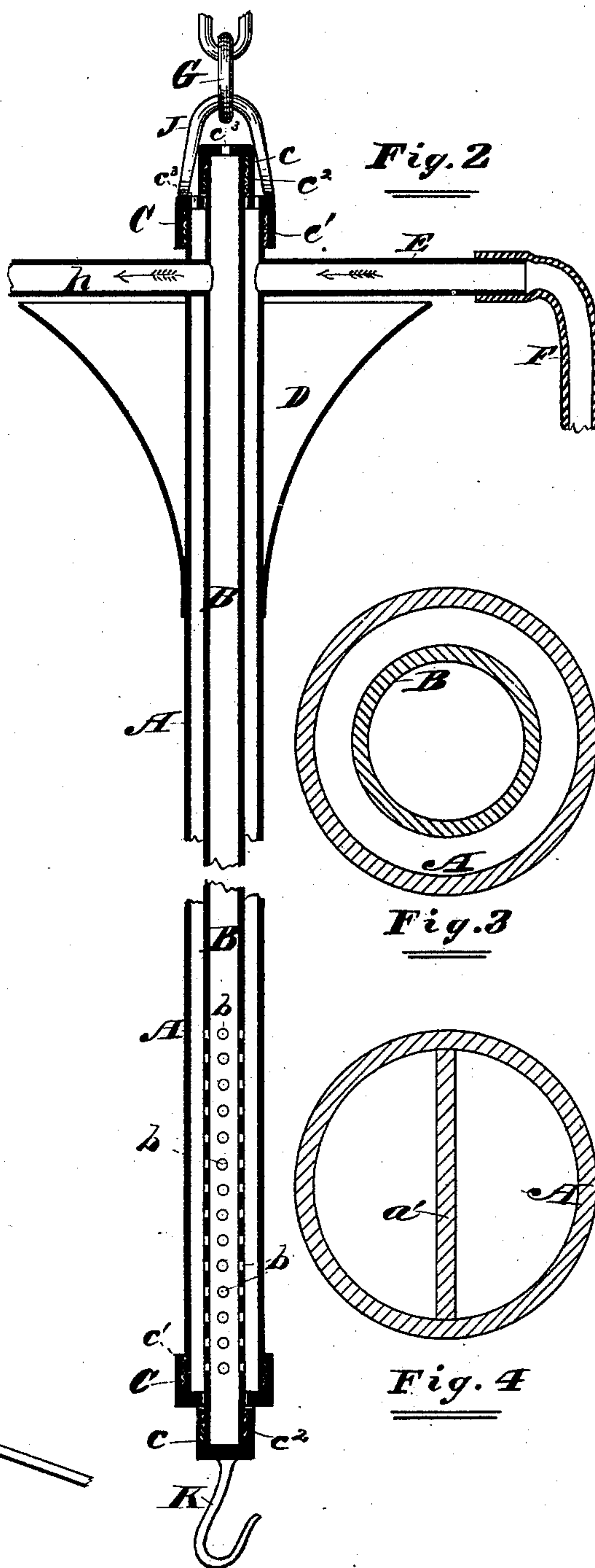


Fig. 2

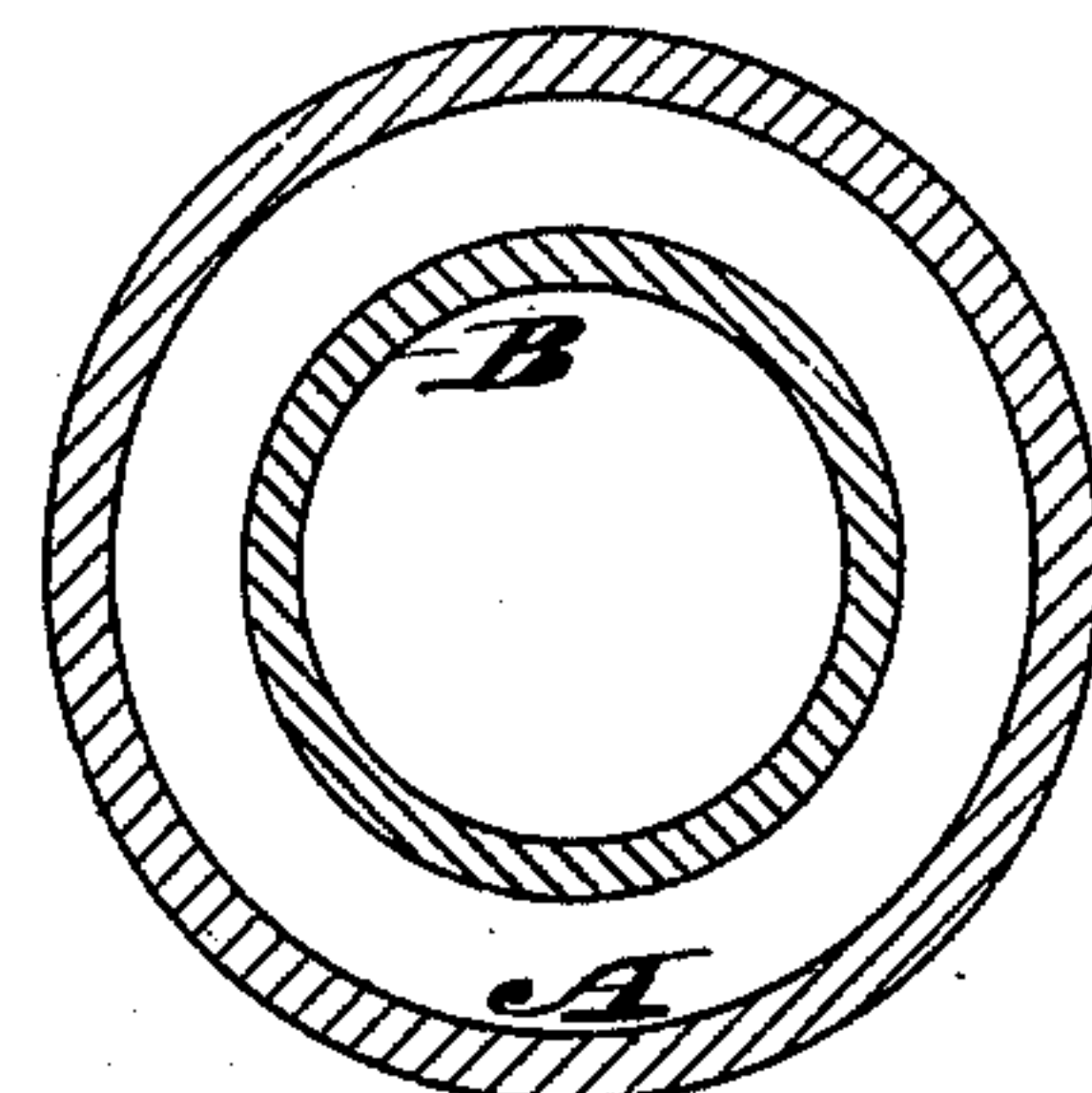


Fig. 3

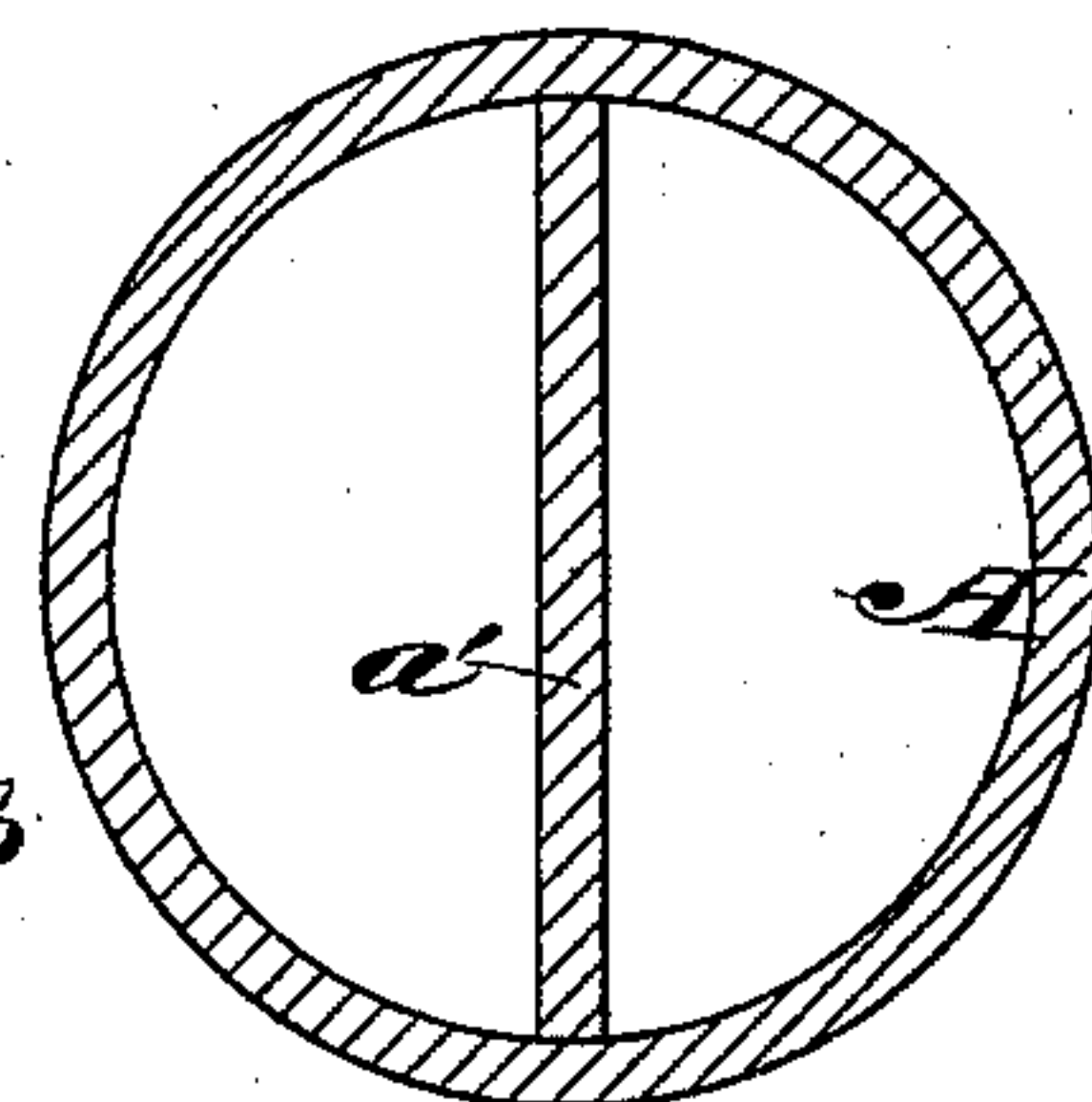


Fig. 4

Attest:

W. L. Baker
Daniel Stoner

INVENTOR:

Thomas Linham Boyd
D. Stoner
Attorney

UNITED STATES PATENT OFFICE.

THOMAS L. BOYD, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN APPARATUS FOR SINGEING HOGS.

Specification forming part of Letters Patent No. **222,654**, dated December 16, 1879; application filed April 22, 1879.

To all whom it may concern:

Be it known that I, THOMAS LUNHAM BOYD, of the city of Chicago, in the county of Cook, of the State of Illinois, have invented a new and useful Improvement in an Apparatus for Singeing Hogs, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof.

My invention pertains to an improvement in the hoisting chain or cable used, in combination with an annular furnace having a central vertical passage, for singeing hogs, the chain or cable having a rotary bearing perpendicularly above the central passage of the furnace, and being used to operate the hogs for the purpose of singeing them; and my invention consists of a tubular device, of iron or other suitable material, which is attached to the chain or cable pendent from the bearing above the furnace.

The device is constructed and arranged in such manner that a constant stream of water may be caused to flow through it during the whole time that it is in operation, which is to prevent its destruction by the intense heat to which it is subjected in operating through the furnace, my object being to provide a device for operating hogs through a singeing-furnace that shall be indestructible by the heat from the furnace in combination with which it is used.

I will now describe more fully my invention, for the purpose of enabling others to make and use the same.

My device is composed of an outer tube, A, and an inner tube, B, joined together at each end by a double cap, C c, or other suitable device at each end, respectively provided with screw-threads c' and c'' , into which the tubes A and B are respectively set.

The cap-joint at the lower end of the device is effluvium-tight, and that at the upper end is provided with vent-perforations c^3 .

The outer tube, A, is provided near its upper end with a funnel-shaped heat-shield, D, and immediately above the heat-shield D, with an induct-pipe, E, the free end of which communicates with a rubber or other flexible

hose, F, and the inner tube, B, is, near its lower end, perforated with a series of perforations, b , forming communication with the tube A, and at the upper end it is provided with an educt-pipe, h , on the same level with the induct-pipe E, the free end of which may also communicate with a rubber or other flexible hose, F', for the purpose of utilizing the water passing through the device.

To the upper end of the device is attached a staple, J, or other suitable device, for the purpose of attaching it to the chain or cable G, and to the lower end is attached a hook, K, for the purpose of securing thereto the hogs, altogether as shown in the drawings, in which—

Figure 1 is a vertical-section view of an annular singeing-furnace, L, showing my device complete in combination therewith. Fig. 2 is a vertical-section view of my device broken in two parts; and Fig. 3 is a cross-section view of the tubes A and B, showing their positions as in relation to each other.

The length of my device must be equal to or greater than the height from the top of the furnace-chimney M to the hog-chute N below the furnace L, and the free ends of the induct and educt pipes must project beyond the periphery of the chimney M.

I do not wish to limit my invention to the use of the tubes A and B, as shown, because it is apparent that the same result will be obtained by the use of the tube A with a partition, a' , through the center, as shown in Fig. 4 of the drawings; also, that the tube B may be dispensed with and the tube A be applied around the chain or cable G in the manner of a sleeve, the educt-pipe h also communicating with the tube A.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a singeing-furnace, L, a chain, G, provided with a device composed of an outer tube, A, provided with an induct-pipe, E, communicating with a flexible hose, F, and an inner tube, B, perforated near the lower end, and provided with

an educt-pipe, *h*, at the upper end, the pipes A and B being joined together at each end by the caps *c*, or their equivalents, and the device is, at the upper end, provided with a staple, J, and at the lower end with a hook, K, substantially as described, for the purpose set forth.

2. In combination with said device, the heat-shield D, for the purpose set forth.

In witness whereof I hereunto set my hand this 15th day of February, 1879.

THOMAS LUNHAM BOYD.

In presence of—

LYMAN M. PAINE,
DANIEL STONER.