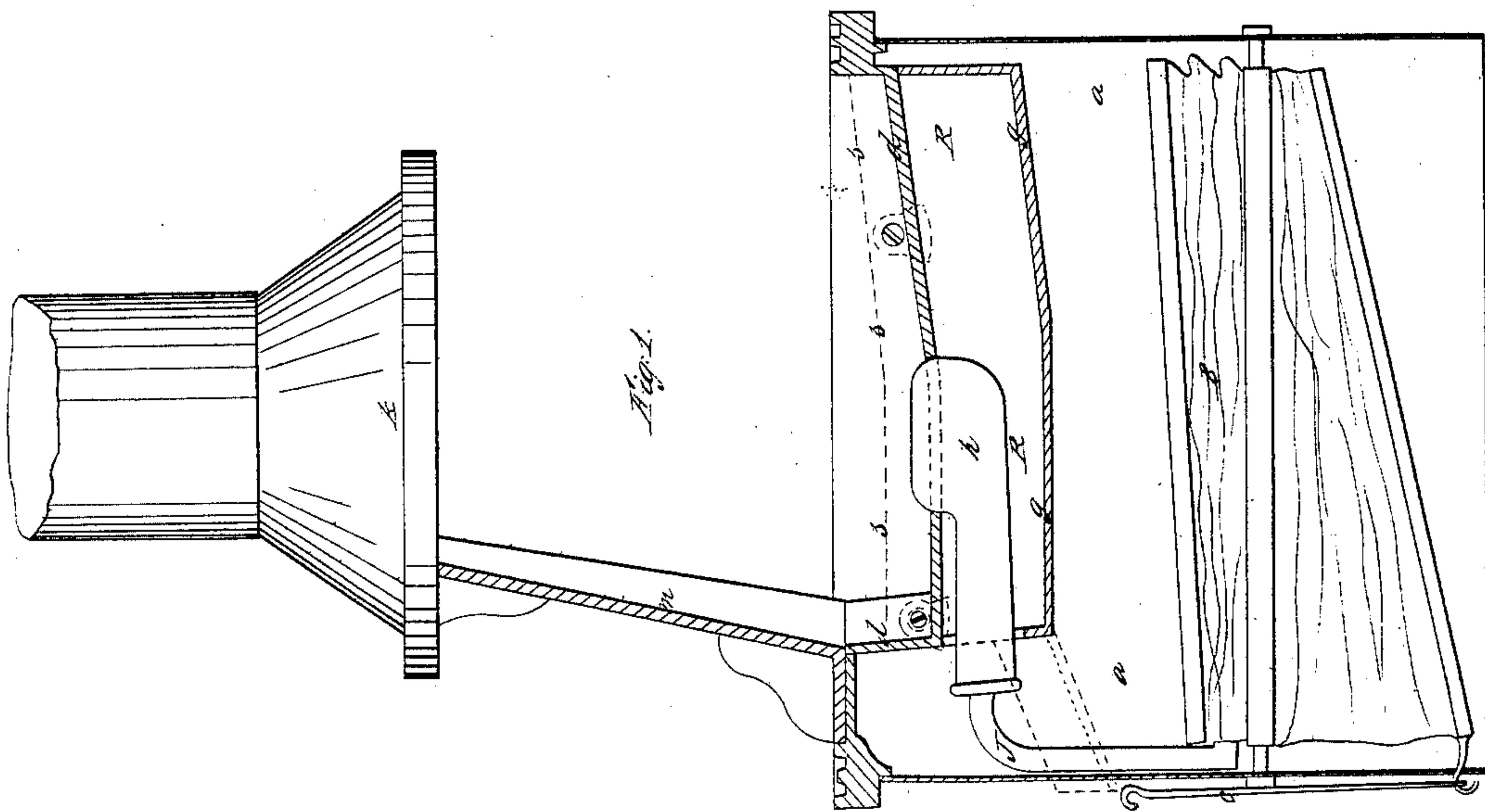
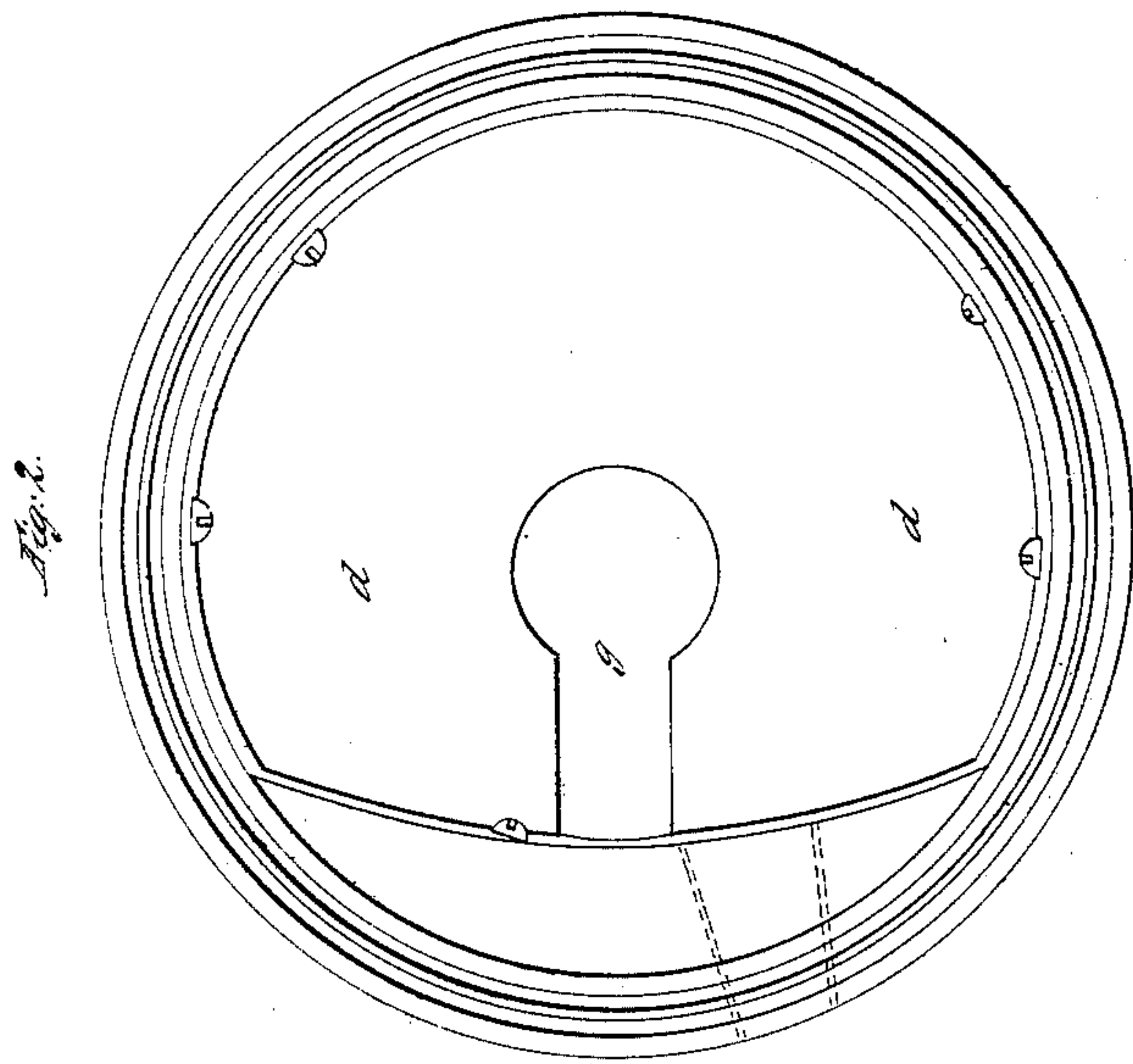


W. G. Hyndman,

Portable Forge,

Patented Nov. 17, 1857.

N^o 18,643.



UNITED STATES PATENT OFFICE.

W. G. HYNDMAN, OF CINCINNATI, OHIO.

PORTABLE FORGE.

Specification of Letters Patent No. 18,643, dated November 17, 1857.

To all whom it may concern:

Be it known that I, W. G. HYNDMAN, of the city of Cincinnati, county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Portable Forges; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and made to form part of this specification and to the letters of reference marked thereon.

Similar letters refer to like parts of the improvement.

Portable forges heretofore constructed have been provided with a fire proof lining on the hearth plate of the forge—which is subject to coming loose and falling out particularly when the forge is being moved around from place to place which is often required as a general thing, and to obviate this difficulty is the object of my improvement, and consists in arranging a plate to the bottom of the hearth plate with which arrangement of plate a recess is formed and to be filled with fire-brick or any other good non-conducting material to serve as a hearth and prevent it from falling out when the forge is being moved from place to place.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and operation by referring direct to the accompanying drawings, of which—

Figure 1 is a sectional elevation of a portable forge with the improvement described attached. Fig. 2, represents a top view of the hearth, with the top portion of the forge removed.

a, a, represents the body of the forge made in a cylindrical shape and furnished with a cylindrical bellows, *B*, as usual, which bellows is operated in the ordinary manner at the side of the forge, with a lever

which takes hold of the rod (*c*) attached to the lower part of the bellows.

J is the air pipe extending from the bellows to the twyer iron *h*, and *d, d,* is the hearth of the forge, and *g, g,* is a plate of a circular form with a rim projecting up around its edge and furnished with lugs for attaching it to the bottom of the hearth plate *d, d*, by which plate *g, g*, and attaching to the hearth plate *d*, the recess *R R* is formed, which recess is filled with fire brick, clay or any good non-conducting substance to serve as a hearth and prevent the bellows from being heated.

A forge after the ordinary plan would be provided with brick on the top of the hearth plate, *d, d*, as denoted by the dotted line 3, 3, 3, Fig. 1, but when the forge is moved from place to place they are inclined to get loose and fall out, which is perfectly obviated by my improved plan.

The forge in other particulars excepting my improvement is constructed after the ordinary plan of such forges. *k* is a cap attaching the chimney pipe to and supported by the flange *m*.

What I claim as my improvement and desire to secure by Letters Patent is—

The plate *g, g*, when arranged with the bottom of the hearth plate *d, d*, by which arrangement of plates the recess *R, R*, is formed, and to be filled with fire brick, or any other good non-conducting material to serve as a hearth to the forge in place of laying the brick on the top of the hearth plate *d, d*, for reasons mentioned and purposes specified in the foregoing specifications, and represented in the accompanying drawings.

W. G. HYNDMAN.

Witnesses:

W. BENSON,
CHARLES H. FOX.