(No Model.)

F. W. ALTHEN.

FORGE.

No. 490,732. Patented Jan. 31, 1893.

Fig 1

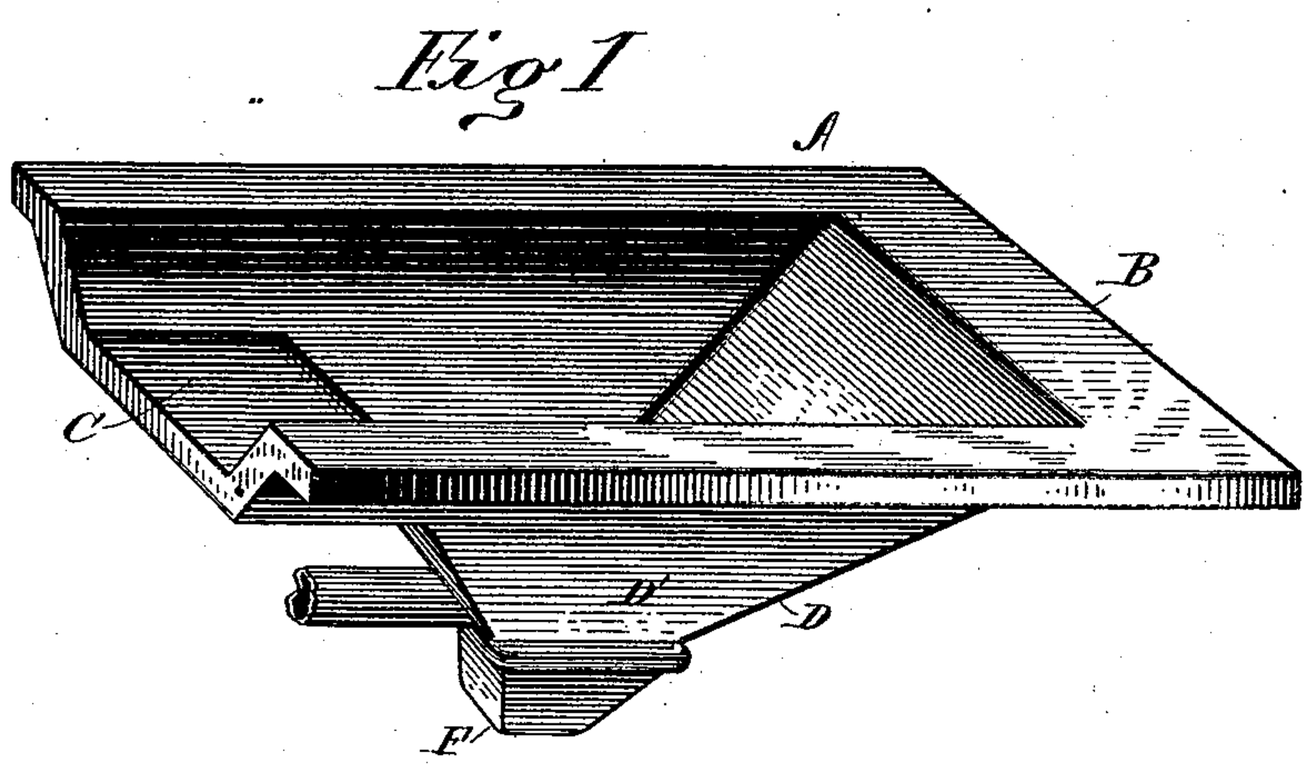


Fig 2

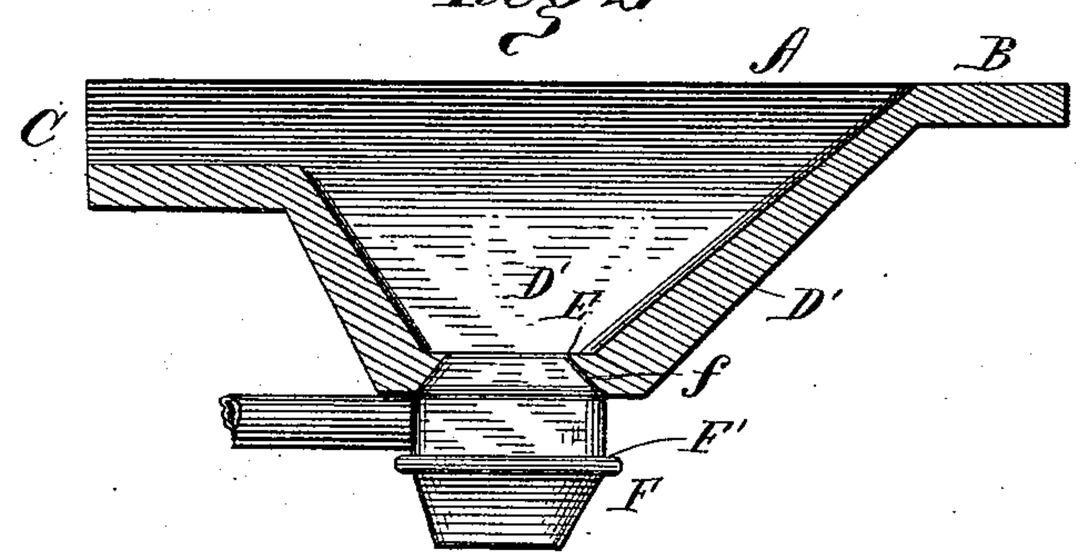
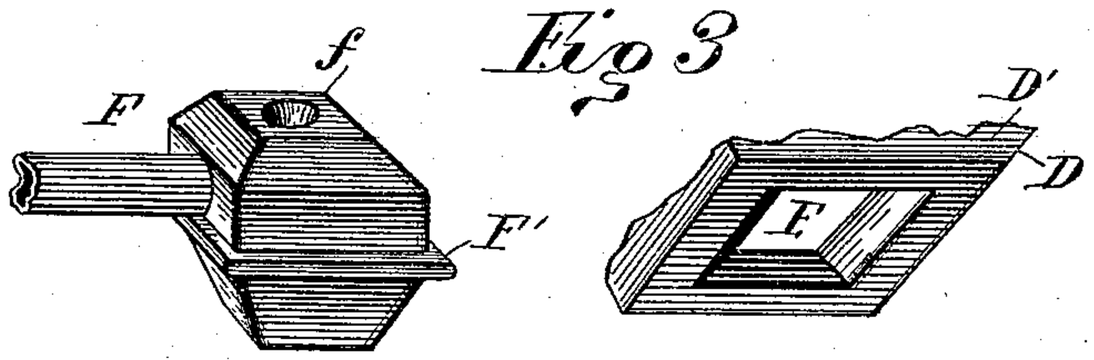


Fig 3



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UNITED STATES PATENT OFFICE.

FREDRICK WM. ALTHEN, OF ROME, OHIO.

FORGE.

SPECIFICATION forming part of Letters Patent No. 490,732, dated January 31, 1893.

Application filed May 2, 1892. Serial No. 431,573. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK WM. ALTHEN, of Rome, (post-office address Camp Chase,) in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Forges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in forges and consists in the construction and arrangements of parts hereinafter described and definitely pointed out in the claim.

The object of this invention is the provision of an improved forge pan or tray, designed more particularly to increase the capacity and render the forge more efficient and satisfactory than heretofore in the case of Smith forges. This object I obtain by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate like corresponding parts in the several views, and in which

Figure 1 is a perspective view of the improvement. Fig. 2 is a sectional elevation, and Fig. 3 is a detail perspective of the tuyere and seat.

In the drawings A represents the forge pan or tray, formed with a flat upper face B, with a depressed portion C at the front end of the tray thereof.

The bottom of the tray is formed substantially frusto conical, with the sloping rear D, and sides D′, which extend up to the edge B and terminate in flanges, which constitute the edges. The back wall of the bottom portion is inclined slightly upward and terminates at the base of the depressed portion C, at which point it is carried forward in a horizontal plane, forming a table C′, which as shown is located below the plane of the edges of the pan.

At the base of the bottom portion is formed an aperture E, having inside side walls inclining from the outer face upward and inward thereby forming a seat for the tuyere F.

The tuyere F is formed with a beveled upper face *f*, which snugly fits the seat of the base portion of the pan and forms a tight joint to preclude the passage of cinders between. The tuyere has a flange F′ with which a suitable support engages, thereby obviating the necessity of a direct union between the tuyere and the pan.

The pan A may be supported in any suitable manner to hold the same rigid.

By the above described construction it will be seen that by constructing the pan with an inclined bottom portion an increased area is produced for containing the fuel, greatly increasing the capacity and permitting the spread of the flame or combustion to a greater area at the surface. By depressing the front portion of the pan at one point only the fuel is concentrated and held in place at all other points and the tools and implements forced in to the burning fuel on a horizontal plane, carrying the articles held thereby directly into the hottest portion of the bed while the tabie C serves to retain the same in the proper adjusted position. The entire pan is constructed in a single piece of metal preferably cast, thereby forming a rigid vessel or pan at slight expense.

I am aware that many minor changes in the construction and arrangement of the parts of the invention can be substituted for those herein shown and described, without in the least departing from the nature and principle of my invention.

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

A forge pan or tray, consisting of a flat upper face, having a depressed front, a bottom formed of inclined side walls, the foremost wall terminating at a point in the plane of the bottom of the depressed portion, and carried forward horizontally to form a table, and an aperture at the base of the inclined sides, formed with inclined side walls, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FREDRICK WM. ALTHEN.

Witnesses:

W. W. MACY,

A. A. RUINE.