

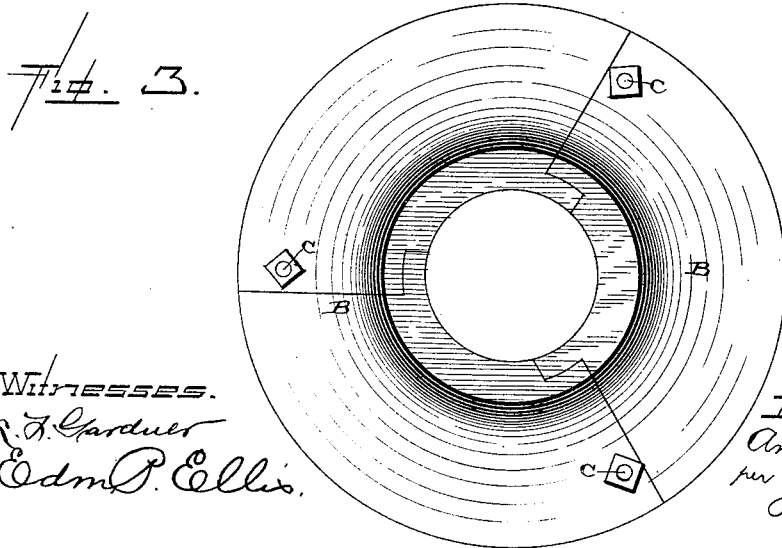
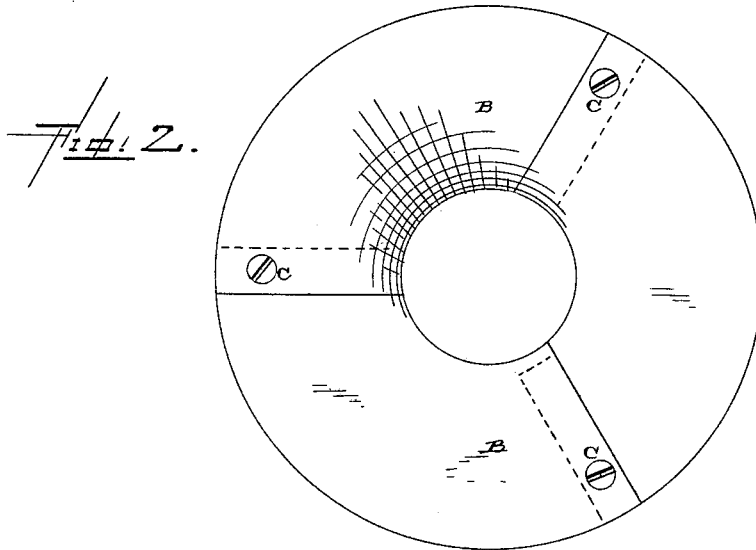
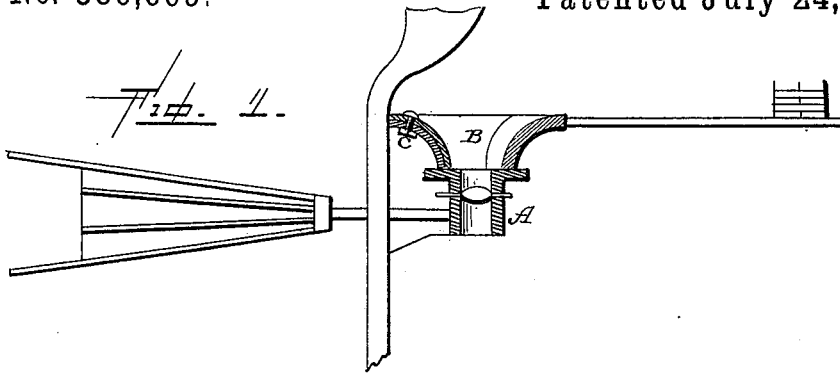
(No Model.)

A. VANSICKLE.

TUYERE.

No. 386,669.

Patented July 24, 1888.



Witnesses.  
*R. F. Gardner*  
*Edm. P. Ellis.*

Inventor:  
*And. Vansickle,*  
per *J. A. Lehmann,*  
att'y

# UNITED STATES PATENT OFFICE

ANDREW VANSICKLE, OF GESSIE, INDIANA.

## TUYERE.

SPECIFICATION forming part of Letters Patent No. 386,669, dated July 24, 1888.

Application filed January 16, 1888. Serial No. 260,917. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW VANSICKLE, of Gessie, in the county of Vermilion and State of Indiana, have invented certain new and useful Improvements in Tuyere-Iron Caps; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in tuyere-iron caps; and it consists in a cap which is to be placed upon the top of the tuyere-iron, and which is made in sections, as will be more fully described hereinafter.

The object of my invention is to provide an iron cap which is to be placed upon the top of the tuyere-iron, and which is to take the place of the clay, which is usually placed upon the top of the tuyere-iron, and in which the cinders stick, and in removing them the clay becomes torn out and the fire more or less interfered with.

Figure 1 is a vertical section of a tuyere-iron cap which embodies my invention. Fig. 2 is a plan view of the same. Fig. 3 is an inverted view.

A represents a tuyere iron of the ordinary construction, such as is usually used in black-smith-forges. Heretofore soft clay has been taken and placed upon the top of the tuyere-iron, and upon the top of this clay, when dry, the fire is built. The cinders stick to the clay, and in removing them the clay becomes torn out, and thus the fire is more or less spoiled. In order to do away with this trouble, I form a cap, B, preferably of the shape shown, and

which is made in three sections, the edges of which overlap each other and are fastened together by means of bolts C, which are passed through the overlapping edges. The bolt-holes may be made slightly larger than is absolutely necessary for the passage of the bolts, and thus allow the sections a slight play one upon the other, so as to prevent any warping or inclination to crack and break, as would be the case where the cap is cast in a single piece. As here shown, the cap has a flat rim or flange around its top edge and a conical opening through its center; but I do not limit myself to the precise form shown, as this may be slightly varied without departing from the spirit of my invention. Upon the top of this cap the fire is built, and the blast of air from the bellows passes through the central opening in the cap and through the fire in the usual manner.

The top edge of the cap may be just flush with the bottom of the forge, or raised slightly above it, as may be preferred.

Having thus described my invention, I claim—

The combination of the tuyere-iron A with the iron cap B, placed thereon and composed of a number of overlapping sections which are bolted together, the cap having an opening through its center and forming the base upon which the fire is built, substantially as shown.

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

ANDREW VANSICKLE.

Witnesses:

C. L. CARITHERS,

C. H. LEWIS.