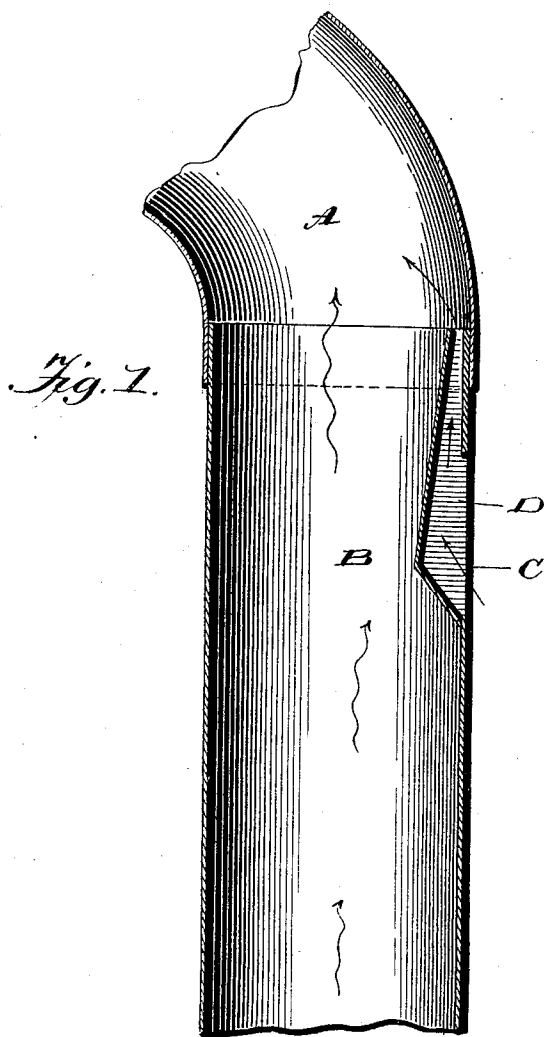
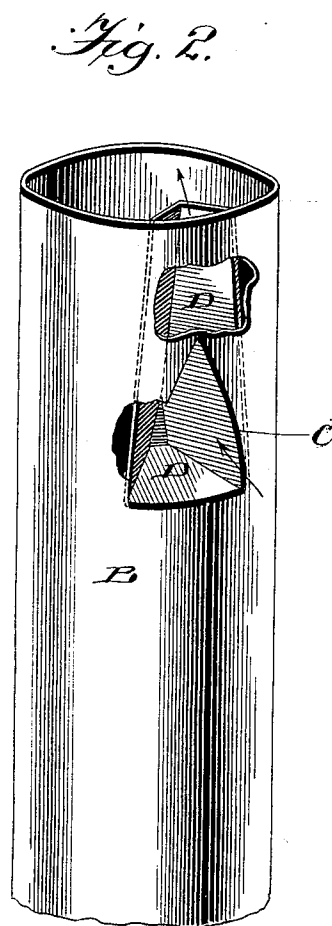


(No Model.)

J. MICKEL & G. D. FERREE.
STOVEPIPE ATTACHMENT.

No. 596,286.

Patented Dec. 28, 1897.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH MICKEL AND GEORGE D. FERREE, OF CARLISLE, INDIANA.

STOVEPIPE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 596,286, dated December 28, 1897.

Application filed December 20, 1895. Serial No. 572,798. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH MICKEL and GEORGE D. FERREE, citizens of the United States, residing at Carlisle, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Stovepipe Attachments; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in the means employed for preventing the accumulation of soot in the elbows of stovepipes; and it has for its object the provision of a simple attachment for stovepipes, whereby a supply of oxygen may at all times be maintained directly into the elbow of the pipe, thus insuring a perfect combustion of the soot and keeping the elbow free from obstruction and incidentally insuring a perfect draft.

To this end and to such others as the invention may pertain the same consists in the novel stovepipe attachment hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings—

Figure 1 is a vertical central section through a stovepipe-elbow provided with our attachment. Fig. 2 is an enlarged detail in perspective of a portion of a stovepipe provided with our attachment, parts being broken away.

We have found from practical experience that the accumulation of soot in the joints of stove and furnace pipes is in a great measure due to the fact that there is not a sufficient supply of oxygen within the pipe to effect a perfect combustion of the soot, and that when a supply of air is introduced directly into the elbow of the pipe the soot that would otherwise accumulate and obstruct the draft is consumed and the elbow thus kept free from ob-

struction, while the incoming current of air at the joint will also serve to materially aid in maintaining a draft.

Reference now being had to the details of the drawings by letter, A designates an ordinary stovepipe-elbow. The top joint B of the vertical portion of the pipe is at a point adjacent to its upper end and in close proximity to the elbow provided with a triangular opening C, which communicates with the base portion of a triangular chamber D. This chamber is constructed of sheet metal and has its enlarged lower end closed, with an inclined bottom, while its contracted upper end, which terminates at the upper end of the stovepipe-section, where it enters the joint-section of the elbow, is open, as shown. It will be seen that by this construction a uniform current of air will at all times be maintained directly into the joint of the pipe and a perfect combustion will be maintained.

While we have shown and described a particular form of air-inlet passage and prefer this particular form, it is at once evident that other forms of air-inlet passage may, if preferred, be substituted for the form which we have described without departing from the spirit of our invention, which contemplates, broadly, the introduction of an independent air-supply directly into the elbow of a stove or furnace pipe for the purpose of maintaining a combustion at such point.

It should be understood that our attachment is intended for use in connection with elbows of pipes which are located in proximity to the stove or furnace, as it is necessary that a sufficient degree of heat should exist at the elbow to insure combustion.

Having thus described our invention, what we claim to be new, and desire to secure by Letters Patent, is—

A device for preventing soot from accumulating in elbows of pipes located in proximity to stoves or furnaces, the same consisting of an upright length of pipe having secured to its inner surface adjacent to its upper end an angular partition-wall forming a chamber D which chamber is contracted near its upper end and opens into the pipe at the top thereof, the lower end of the said chamber being downwardly and outwardly inclined and an

opening or air-passage being provided in the
pipe and communicating with the lower por-
tion of the chamber, combined with an elbow
which is fitted over the upper end of the pipe
5 in such manner as to bring the outlet of the
chamber above the meeting edges of the pipe
and elbow, substantially as shown and de-
scribed.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

JOSEPH MICKEL.
GEORGE D. FERREE.

Witnesses:

JACOB ROOKSBERRY,
JAMES E. COONTS.