Dec. 26, 1922. 1,440,273

E. C. CARMAN.
STOVEPIPE CONSTRUCTION.
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Fig. 1.

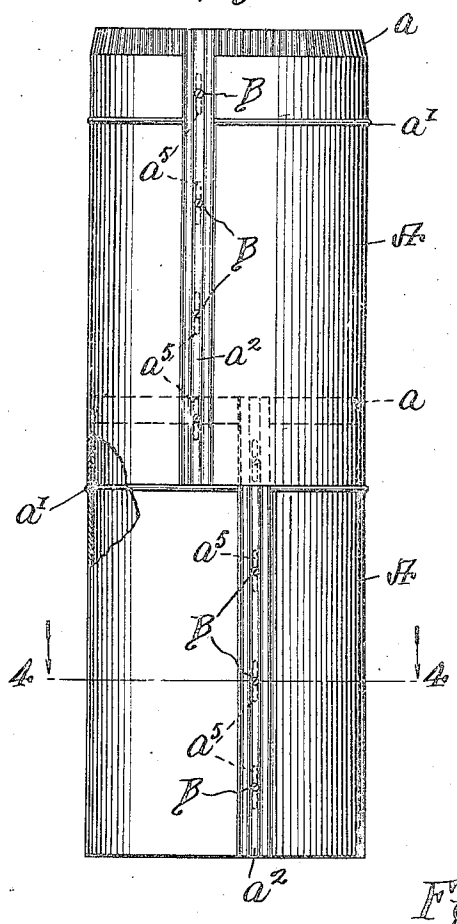


Fig. 2.

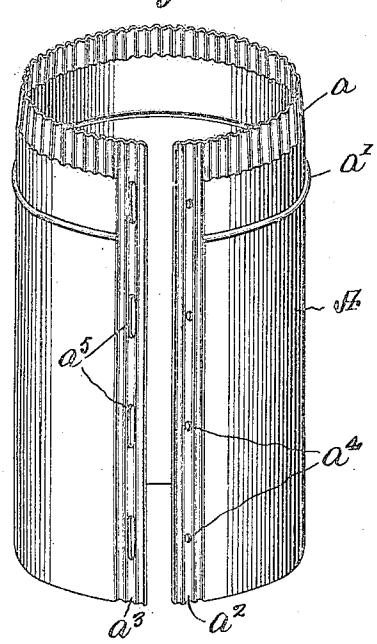


Fig. 3.

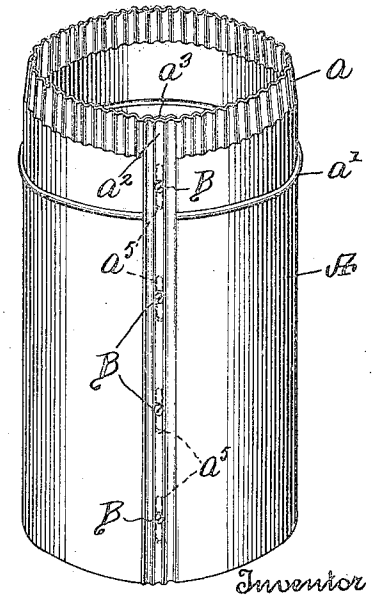
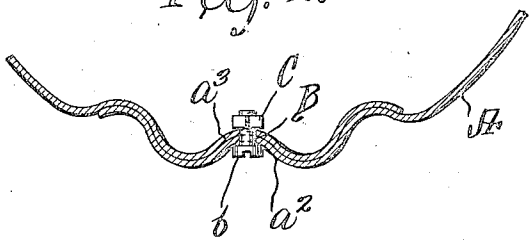


Fig. 4.



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UNITED STATES PATENT OFFICE.

EDWIN CLEVELAND CARMAN, OF NEW ORLEANS, LOUISIANA.

STOVEPIPE CONSTRUCTION.

Application filed July 21, 1922. Serial No. 576,500.

To all whom it may concern:

Be it known that I, EDWIN C. CARMAN, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Stovepipe Construction; 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.

My invention relates to improvements in stove pipe construction and is especially intended to provide a convenient section of stove pipe which may be shipped in the knock-down condition and conveniently set up at the place where used without the requirement of any special tools, or any special skill on the part of the operator.

The invention is also intended to provide an arrangement by which the length of stove pipe may be nested both in shipment, or when placed on sale at the shops, thus not only securing cheaper freight rates, but also taking up less space in the shop or storehouse.

When shipped or exposed for sale in this nested condition the outer sections protect the inner from exposure to the air and corrosion and keep the same bright and clean.

My invention will be more fully understood after reference to the accompanying drawing, in which like parts are indicated by similar reference symbols throughout the several views, and in which:—

Figure 1 shows two sections of stove pipe in the assembled relation and ready for use.

Figure 2 shows one of the sections of the stove pipe in the condition for nesting, which would be the ordinary condition for transport or for exposure for sale.

Figure 3 shows the section illustrated in Fig. 2 in the closed or locked position, and with the fastening bolts in place; and

Figure 4 shows a section, on a larger scale, along the line 4—4 of Fig. 1, and looking down.

Each section of stove pipe A comprises a sheet of metal which is stamped at a single operation and is bent to approximately the form shown in Fig. 2. This sheet A is provided at the top with tapered corrugated portions a which enter into the bottom of the superposed section and form the usual joint. A suitable distance below this corrugated portion a I may have stamped out of the sheet a raised bead a' which prevents the superposed pipe section from sliding down too far.

The overlapping edges a^2 and a^3 of the sheet are corrugated, as shown most clearly in Fig. 4, and one of these edges a^2 is provided with a series of bolt holes a^4, and the other corrugated edge a^3 is provided with a series of longitudinal slots a^5. These bolt holes and slots are preferably at the base of the corrugation so as to mask the head b of the fastening bolts B when the parts are in the assembled relation, as shown in Figs. 1, 3 and 4. These bolts B are ordinary stove bolts provided with notched heads b and are screw threaded to engage the nuts C.

In forming the closed joint the two corrugated ends are caused to overlap until the bolt holes a^4 register with the slots a^5, and the bolts B are then inserted, preferably from the outside. These bolts pass through the slots and the nuts C are screwed on either by hand or by an ordinary wrench, the outer end of the bolt B being held in place by a screw driver or the like. It will be very convenient to quickly apply or remove the bolts and nuts C in the manner stated without the use of any tools at all, or at most of a small wrench and screw driver.

Obviously the nuts are preferably inserted from the interior of the pipe so as to make a neater appearance on the exterior, and moreover the heads b of the bolts fit in grooves and tend to be held by friction against the sides of the grooves while the nuts C being mounted against ridges are freely accessible for turning by hand or with a small wrench.

The same advantage prevails in taking down the section as in setting it up.

It will be seen that the herein described arrangement provides for a series of sections of stove pipe which may be conveniently knocked down or set up, and which, when assembled in the usual way, may provide a tight joint for the passage upwards of the products of combustion and prevent any leakage of gas or smoke at the joint.

It will be seen that screwing up on the stove bolts will make the joint tight.

It will be seen that the herein described construction does away with the necessity of flanges ordinarily provided in stove pipes, which flanges are apt to become mashed together, both in shipping and in putting up this style of stove pipe when it reaches the

dealer. It will also be seen that the sections of pipe may be readily put up or taken down when desired by the ordinary unskilled help without the necessity of employing expert mechanics for this purpose.

The advantages just referred to are not only applicable to the users of the pipe, but also to the retailers of the same, and also in part to the shippers of the same, so that the pipe may be economically shipped and sold, and readily and conveniently set up and taken down.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is:—

A stove pipe section comprising a single sheet of bent metal having corrugated overlapping ends, one of said ends being provided in the inward bend of a corrugation with a series of bolt holes, and the other of said ends being provided in a similar bend of a convolution with a series of elongated slots, the top of said section being corrugated and tapered inwards slightly, with screw bolts passing through said bolt holes and said elongated slots, the heads of said screw bolts being screened by the sides of the outer corrugation, and nuts screwed on said screw bolts on the interior of the section, substantially as described.

EDWIN CLEVELAND CARMAN.