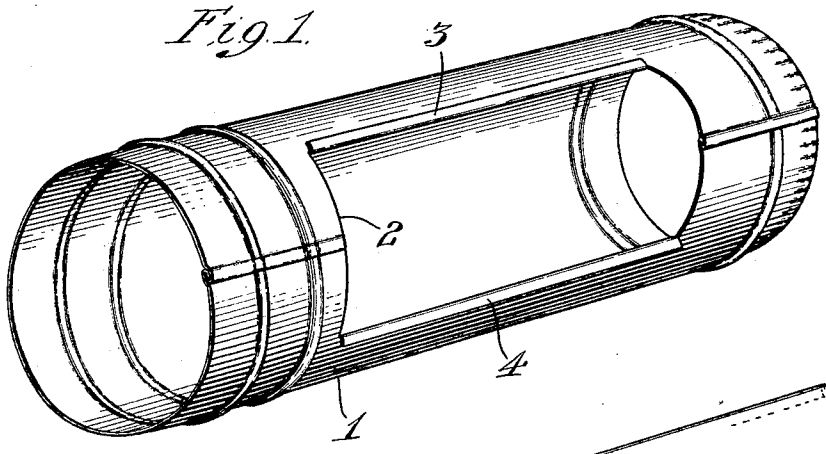
E. BYRUM.

PIPE.

APPLICATION FILED JAN. 24, 1914.

1,119,573. **Patented Dec. 1, 1914.**

Fig. 1.



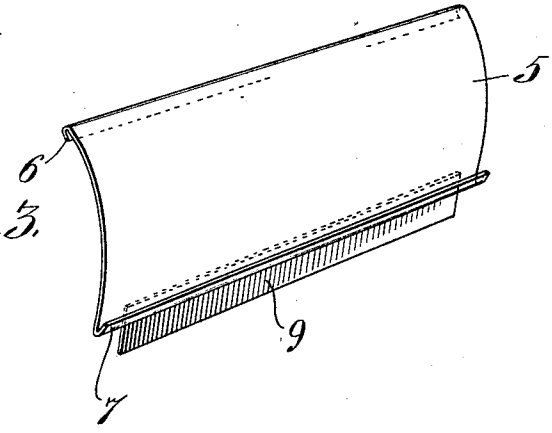


Fig. 3.

Fig. 2.

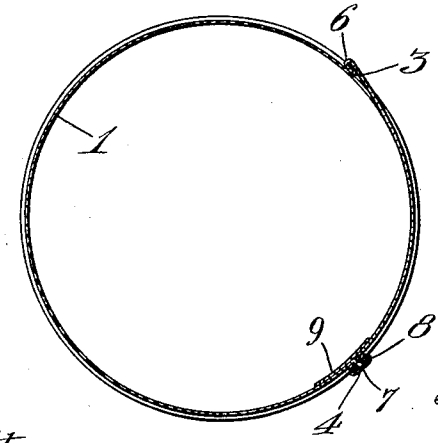
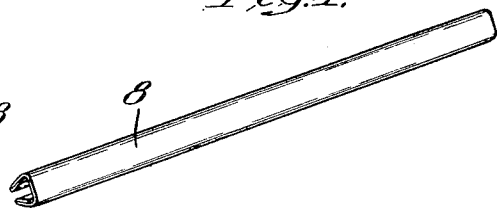


Fig. 4.



Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

ELI BYRUM, OF CANTON, ILLINOIS.

PIPE.

1,119,573. Specification of Letters Patent. Patented Dec. 1, 1914.

Application filed January 24, 1914. Serial No. 814,156.

To all whom it may concern:

Be it known that I, ELI BYRUM, a citizen of the United States, and a resident of the city of Canton, county of Fulton, and State of Illinois, have invented certain new and useful Improvements in Pipes, of which the following is a specification.

This invention relates to furnace pipes and has for its object the production of a hot air pipe used in conjunction with hot air furnaces which will be so constructed as to permit of ready access being gained to the interior thereof in order to permit of cleaning when desired.

A further object is the production of a pipe as mentioned which will be of durable and economical construction, and which will be efficient in use.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which,

Figure 1 is a perspective view of a pipe embodying my invention, Fig. 2 is a transverse section of the pipe, Fig. 3 is a perspective view of the closure plate which coöperates with the pipe shown in Fig. 1, and Fig. 4 is a perspective view of the locking strip which coöperates with said closure for locking one edge thereof in position.

The preferred form of construction as illustrated in the drawing comprises a cylindrical pipe 1 formed of sheet metal and constructed at its ends so as to permit of engaging or interlocking with adjacent pipes in the usual manner. Formed in one side of the pipe 1 is a rectangular opening 2, the longitudinal edges of said opening being parallel and provided with outwardly turned engaging flanges 3 and 4. Coöperating with the opening 2 is a closure 5 of a form and dimensions adapting the same to fit over said opening 2 so as to effectually close the same, it being essential that a tight connection be secured between the closure and said pipe so as to not interfere or in any way retard or impede the draft through the pipe when in use. The closure 5 is provided at one of its longitudinal edges with an inwardly turned flange 6 adapted to interlock with the flange 3 of opening 2, as clearly shown in Fig. 2. Provided at the opposite edge of said closure is an outwardly turned flange 7 adapted to be locked in close proximity with the flange 4 of the pipe by means of a locking strip 8. Said locking strip is of channel form as shown, the flanges or sides thereof which converge toward their outer ends being adapted to interlock with the divergent outer portions of flanges 4 and 7 as clearly shown in Fig. 2. Said flanges 4 and 7 are straight and the same project outwardly from the pipe so as to permit of locking strip 8 being readily slid longitudinally into engagement or disengagement.

Arranged at the edge of closure 5 at which the engaging flange 7 is provided is an elongated lip 9 secured in position by soldering, and extending from said edge, said lip being adapted, when the closure is in operative position to engage against the inner side of the pipe adjacent flange 4, the locking strip 8 when in operative position being adapted to hold the strip 9 in snug engagement with the inner end of the pipe as shown in Fig. 2.

In arranging the closure in the pipe opening the lip 9 is first inserted in position, engaging against the inner side of the pipe at the flange 4. Said closure is then moved laterally or transversely to effect engagement of engaging flange 6 thereof with the pipe flange 3, the securing of said closure in position being completed by sliding strip 9 into engagement with flanges 4 and 7. In the detachment of said plate the reverse course of procedure is followed.

With a construction as set forth it will be seen that a pipe is provided the interior of which is readily accessible. By reason of this ready accessibility to the interior of the pipe the ready cleaning thereof, that is the removal of dust, soot and other foreign matter which ordinarily accumulates in furnace pipes when in use is facilitated, it being possible with this construction to readily maintain the interior of the furnace pipes absolutely clean and thereby conduce to sanitation and cleanliness in the hot air which is introduced to the rooms of a house in the heating of the latter. The pipe is extremely simple and economical in construction and hence may be manufactured at a low cost and will be found efficient in operation.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is

capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A pipe provided with an opening in one side; engaging flanges provided at opposite edges of said opening; a closure for said opening; engaging flanges provided at opposite sides of said closure, one of said closure flanges being adapted to engage with one of said opening flanges; and means for releasably connecting the other of said closure flanges with the other of said opening flanges, substantially as described.

2. A pipe provided with an opening in one side; engaging flanges provided at opposite sides of said opening; a closure for said opening; engaging flanges provided at opposite edges of said closure, one of said closure flanges being adapted to engage with one of said opening flanges; and a channel member adapted to connect the other of said closure flanges with the other of said opening flanges, substantially as described.

3. A pipe provided with an opening in one side; outwardly extending flanges provided at opposite edges of said opening; a closure for said opening; engaging flanges provided at opposite edges of said closure, one of said flanges of said closure being turned outwardly and the other of said flanges being turned inwardly, said inwardly turned flange of said closure interlocking with one of said flanges of said opening; and means for releasably connecting the outwardly turned flange of said closure with the other of said opening flanges, substantially as described.

4. A pipe provided with an opening in one side; engaging flanges provided at opposite sides of said opening; a closure for said opening; engaging flanges provided at opposite edges of said closure, one of said closure flanges being adapted to engage with one of said opening flanges; a channel member adapted to connect the other of said closure flanges with the other of said opening flanges; and an extension provided at the edge of said closure having said last mentioned engaging flange adapted to engage against the under side of the corresponding edge of the pipe at said opening, substantially as described.

5. A pipe provided with an opening in one side; engaging flanges provided at opposite sides of said opening; a closure for said opening; engaging flanges provided at opposite edges of said closure, one of said closure flanges being adapted to engage with one of said opening flanges; means for releasably connecting the other of said closure flanges with the other of said opening flanges; and an extension provided at the edge of said closure having said last mentioned engaging flange adapted to engage against the under side of the corresponding edge of the pipe at said opening, substantially as described.

6. A pipe provided with an opening in one side; outwardly extending flanges provided at opposite edges of said opening; a closure for said opening; engaging flanges provided at opposite edges of said closure, one of said flanges being turned outwardly and the other being turned inwardly, said inwardly turned flange releasably interlocking with one of said engaging flanges of said opening; a channel locking strip releasably interlocking with the other of said closure flanges and the other of said opening flanges; and a lip extending from the edge of said closure provided with said last mentioned engaging flange adapted to engage against the under side of the corresponding edge of the pipe at said opening, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELI BYRUM.

Witnesses:
JOSHUA R. H. POTTS,
HELEN F. LILLIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."