Dec. 11, 1934. J. E. PALLAS 1,983,989

STOVE PIPE JOINT

Filed June 7, 1933

Fig. 1

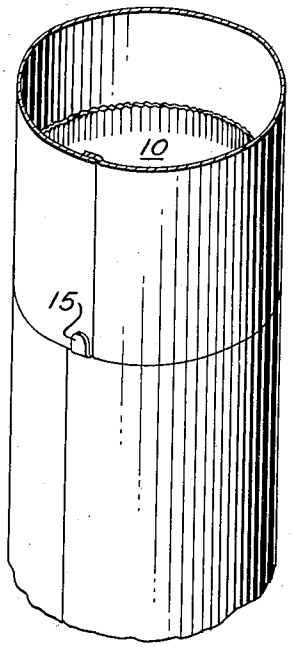


Fig. 2.

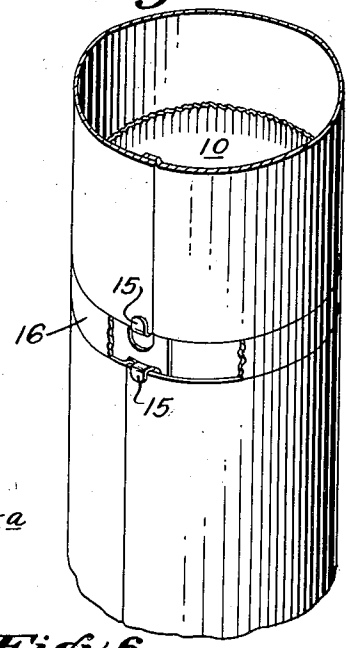


Fig. 3

Fig. 4.

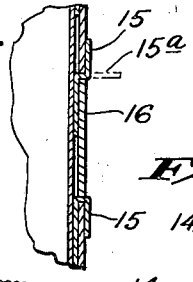


Fig. 5.

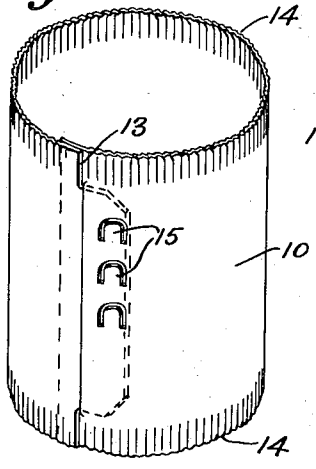
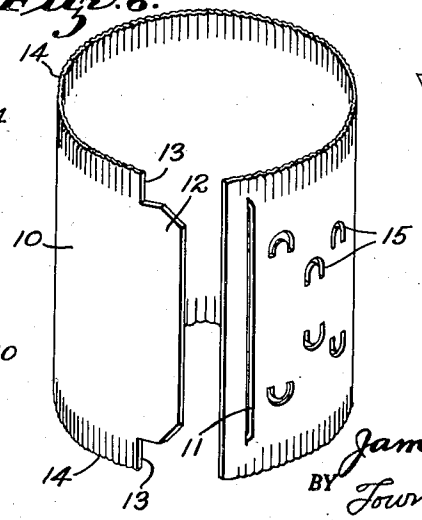


Fig. 6.



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STOVE PIPE JOINT

James E. Pallas, San Francisco, Calif.

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5 Claims. (Cl. 285—197)

This invention relates to stove pipe joints and pertains more specifically to a joint that may be used for connecting lengths and fittings of stove pipe without necessitating cutting or perforating the stove pipe in any manner.

Stove pipe is now manufactured of sheet iron with a baked enamel coating to improve its appearance, make it easier to clean and increase its resistance to the corrosive effect of smoke and hot gases passing through it. Coating the pipe with enamel reduces its pliability and makes it difficult to cut and it is therefore desirable to connect together lengths and fittings of the pipe by means that will not necessitate cutting or bending of the pipe.

It is the object of the present invention to provide a simple and inexpensive device for connecting together sections of stove pipe in such a manner that the joint made will be neat in appearance and tight enough to prevent the escape of any smoke and to make said device capable of supporting a very short section of pipe or filler to be interposed between two standard sections to increase the total length of the pipe.

One form which the invention may assume is exemplified in the following description and illustrated by way of example in the accompanying drawing, in which:

Fig. 1 is a perspective view of the ends of two sections of stove pipe connected in accordance with my invention.

Fig. 2 is a similar view with parts broken away and showing a filler section interposed between the main sections to increase their length.

Fig. 3 is a central vertical section of a complete set of stove pipe in which the sections are connected in accordance with my invention.

Fig. 4 is an enlarged fragmentary section of a portion of the joint shown in Fig. 2.

Fig. 5 is a perspective view of a connecting sleeve in closed position.

Fig. 6 is a perspective view of a similar section in open position and illustrating a modified arrangement of the tabs employed for insuring proper positioning of the sleeve in the pipe sections.

Referring more particularly to the drawing, my invention is shown as comprising a sleeve generally indicated at 10. The sleeve 10 is provided with a separable seam formed by a slot 11 cut parallel to one of its edges and a tongue 12 cut from the opposite edge and insertable through the slot 11. Shoulders 13 are left when the tongue 12 is formed and these shoulders abut the sleeve at opposite ends of the slot 11 to maintain a minimum diameter of the sleeve which should be of a size to permit the sleeve to be inserted into the end of a section of stove pipe with a close or frictional fit. The ends of the sleeve are crimped in a convention manner as indicated at 14 to facilitate their insertion into the pipe sections.

The side of the sleeve is provided with a row of U-shaped perforations forming tabs 15 bendable to extend outwardly at right angles of the plane of the sleeve wall.

The tabs 15 are capable of performing two functions. When one of the tabs is bent outwardly from the sleeve, it serves to limit the distance that the sleeve may be inserted into a section of pipe. This junction of the tab is important as in assembling two sections of the pipe one end of the sleeve is inserted into one section and then the other section is slipped over the projecting end of the sleeve. Were it not for a tab 15 projecting outwardly, as shown in broken lines at 15*a* in Fig. 4, the sleeve might be forced into the first section of pipe so far that it would not properly support the second section.

The other function of the tabs 15 is that of securing the pipe sections against removal from the sleeve. After the pipe sections and sleeve have been assembled, the tab which projects between the ends of the sections is bent to lie flat against the outer wall of the pipe in the manner shown in Figs. 1, 2 and 4, and in this position frictionally engages the pipe section to secure it to the sleeve.

As stated above, the enameled pipe sections are not easily cut. For this reason they are manufactured in varying lengths so that a run of pipe of any desired length may be made up from them. The pipe sections are made as short as one, two and three inches and when it is necessary to use one of the very short lengths to obtain the desired length of run, the short section is first slipped over a sleeve 10 to a position centrally thereof, such a short length being shown at 16 in Fig. 2.

The tabs 15 are spaced from each other at intervals corresponding to the lengths of the short sections of pipe and are bent outwardly to retain the short section in central position on the sleeve. The regular sections are then slipped over opposite ends of the sleeve and secured in position by bending over of the tabs 15.

Fig. 5 shows the tabs 15 arranged in a straight line. A modification of this arrangement is shown in Fig. 6 in which the tabs are arranged in pairs, each pair being spaced to receive a short

piece of pipe of different length and the tabs of each pair being equally spaced from the middle of the sleeve so that when a short section of pipe is in position on the sleeve, the projecting ends of the sleeve are of equal length and give equal support to the two sections supported by them.

The shoulders 13 on the sleeve 10 may be cut back slightly if the sleeve fits too tightly within the pipe and in fact a large sleeve may be reduced in size to fit a smaller diameter of pipe by cutting back the shoulders 13 a suitable distance. Similarly a tapered sleeve may be made if desired by cutting away one only of the shoulders 13.

In Fig. 3 of the drawings my invention is shown as applied to a string of stove pipe connecting a stove 17 with a flue 18 and including an elbow fitting 19, regular pipe sections 20 and a short section 21.

From the foregoing it will be apparent that I have provided novel and simple means for securing together ends of stove pipe sections, which means is also adaptable to supporting short sections for the purpose of increasing the over all length of a run of pipe and capable of use for connecting pipe sections to elbows and other fittings.

While I have shown a preferred form of my invention, it should be understood that changes may be resorted to in the construction and arrangement of its parts within the spirit and scope of the appended claims.

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

1. A connecter for stove pipe joints comprising a cylindrical sleeve adapted to receive a short section of stove pipe encircling it intermediate its ends, tabs cut from the sleeve to bend outwardly therefrom and retain said section in a central position on the sleeve, the ends of the sleeve being insertable into the ends of longer sections of pipe to be joined end to end with said short section.

2. In combination, two pipe sections, a joining sleeve therebetween and telescopically engaging an end of each section, the adjacent ends of said sections being spaced apart, and a third pipe section carried by said sleeve, the ends of which substantially abut the ends of the first two pipe sections.

3. The combination of claim 2 in which the sleeve is provided with means to limit telescopic movement of the first mentioned two pipe sections.

4. The combination of claim 2 in which the sleeve is provided with outwardly bent tabs to limit the telescopic movement of the first mentioned two sections.

5. The combination of claim 2 in which the sleeve is provided with outwardly bent tabs to limit the telescopic movement of the first mentioned two sections, the third pipe section being located between the sleeve tabs.

JAMES E. PALLAS.