April 23, 1940. L. E. JAMES 2,198,535

PIPE CLAMP CHIMNEY COMBINATION

Original Filed Oct. 15, 1936

Fig. 1.

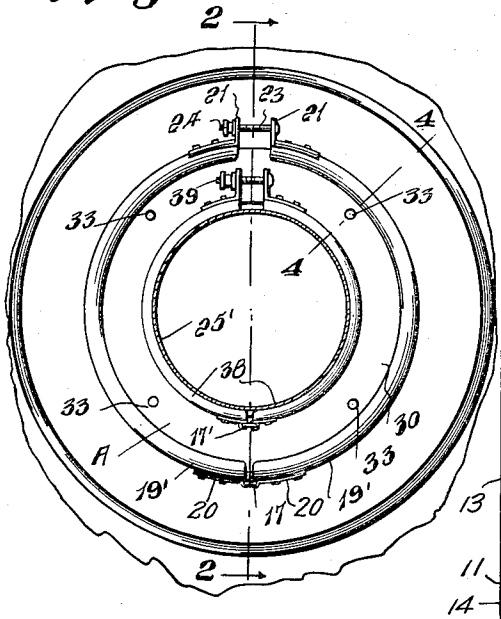


Fig. 2.

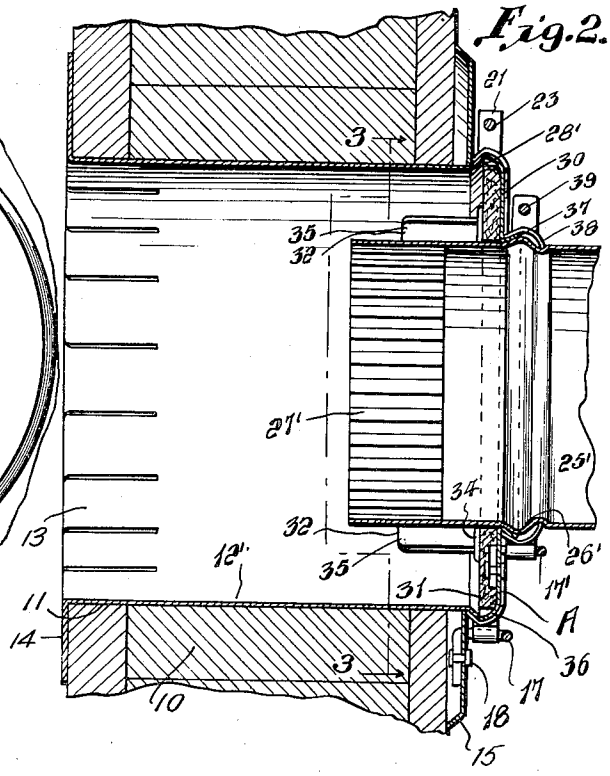


Fig. 3.

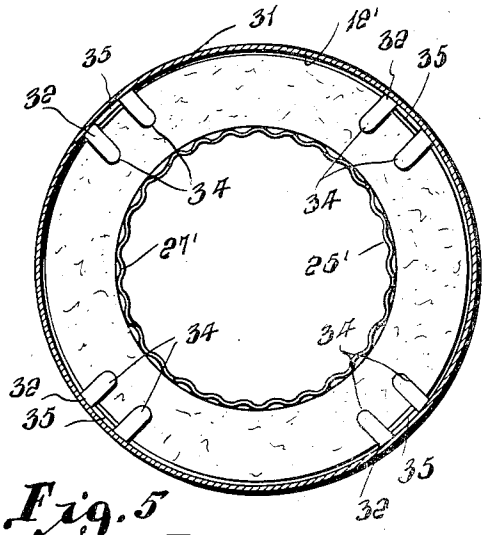


Fig. 4.

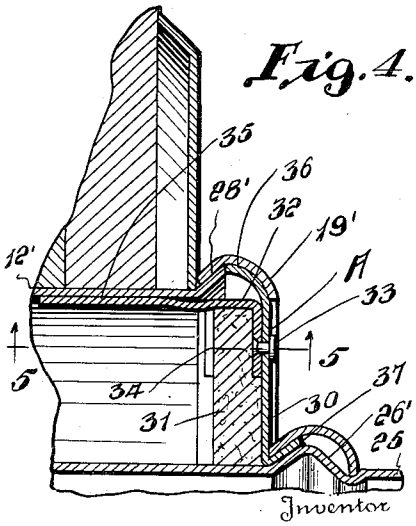
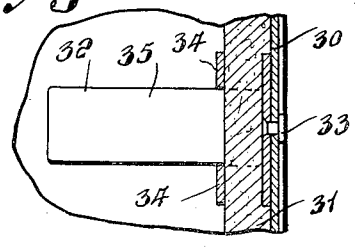


Fig. 5



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PIPE CLAMP CHIMNEY COMBINATION

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Application October 15, 1936, Serial No. 105,804
Renewed September 14, 1939

3 Claims. (Cl. 126—314)

It is aimed to provide a novel structure and combination whereby various pipes may be fitted to chimney openings of different diameters, wherein nothing protrudes into the chimney to unduly gather soot or interfere with the draft; wherein installation makes the premises more fireproof and gas proof; wherein the use of nails or wire or unsightly contrivances to hold the pipe in place are avoided, and wherein various standard sizes of pipes may be connected and clamped in a novel manner in the chimney openings of different sizes.

The more specific objects and advantages will in part be pointed out hereinafter and otherwise become apparent from a consideration of the description following taken in connection with accompanying drawing illustrating an operative embodiment.

In said drawing:

Figure 1 is a view in front elevation showing my improvements in use in connection with a chimney;

Figure 2 is a vertical sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a section taken on the line 3—3 of Figure 2;

Figure 4 is an enlarged section taken on the line 4—4 of Figure 1; and

Figure 5 is a detail section taken on the line 5—5 of Figure 4.

Referring specifically to the drawing wherein like reference characters designate like or similar parts, a chimney is conventionally shown at 10. having an opening 11 therethrough whereby products of combustion may reach the interior of the chimney and discharge therein. Disposed in the opening 11 is a thimble 12' whose inner end has a multiplicity of base lock members 13, which are bent laterally as at 14 to anchor the thimble in place. At the inner surface of the wall of the chimney, it is engaged by an annular ring 15.

A bracket 17, of angular form in side elevation and of U-shape in plan, is bolted or otherwise fastened as at 18 to the ring, and clamp sections 19' are pivotally connected to the bracket 17, for instance having hinged leaves 20, fastened to the sections 19' and pivoted to portions of the bracket.

Said clamp sections 19' are of interior channel shape as shown and such sections have lugs 21 thereon engaged by an adjustable and removable clamping bolt 23 having a nut 24 screw threaded thereon.

The stovepipe is shown at 25' and it has an annular outward bulge or swedge at 26' at a short distance from its outer end, which end is preferably crimped as at 27'.

It will be seen that the clamp sections are connected to the thimble and that the ring 15 is also connected to the thimble. Said clamp sections are adapted to be brought together so as to enclose and engage the flange 28' which is welded to the thimble. The bolt 23 may be tightened to the extent desired and a very tight, non-rattling and secure and efficient joint is produced.

The invention is usually employed where the stovepipe 25' is of less diameter than the thimble 12. An adapter generally designated A is employed and it comprises an annular plate 30 and within the chimney being lined with asbestos as at 31. The device uses a plurality, preferably four clips 32 which are riveted at 33 to the plate 30. The clips 32 have lugs 34, bent into retaining engagement with the asbestos 31, and the clips 32 are extended to form guides 35, which engage the inner wall of the thimble 12'.

The terminal of the thimble 12' has an outwardly flaring annular flange as at 28', beyond the ring of the thimble. Adapted to abut the flange 28' is a curled marginal portion 36 of the plate 30, such flange 28' and marginal portion 36 being engaged and clamped in place by the clamp sections 19'.

The aforesaid stovepipe 25' is adapted to be passed through the central opening of the plate 30 and the asbestos 31 and in order to fasten the same in place the adapter has an outwardly flared flange 37 which engages the bulge 26'. In addition, the adapter has hinged thereto at a bracket 17', identical with the bracket 17, a pair of clamp sections 38, of interior channel form, which embrace the flange 37 and the bulge 26', the same being fastened together by a suitable bolt at 39 operating and mounted identically with the bolt and nut at 23 and 24.

It will be realized that pipes such as 25', of different diameters are accommodated in a chimney opening and thimble of a larger size.

The asbestos 31 is employed so as to eliminate discoloring of the faces of the plate 30 or the equivalent.

Obviously the various parts constituting the invention are simple and for the most part may be stamped from sheet metal and readily formed into shape inexpensively. The metal may be as heavy as desired and different parts such as the

clamps, reenforced and stronger than the other parts.

The invention is not only adapted for use in connection with stovepipes but may be used in connection with sanitary toilets, brooder houses and otherwise. It will be realized too that the joints produced by the rings and associated parts, are non-vibrating and are substantially tight, preventing the escape of fumes, smoke and the like, reducing the fire hazard and danger of injury from suffocation.

I claim as my invention:

1. A device of the class described comprising a thimble having an outwardly flared flange at one end, a ring surrounding the thimble and secured thereto adjacent said flange, an adapter member having a portion to abut said flange, clamping sections pivoted to the ring and surrounding said flange and portion, and means on the adapter to fasten a pipe therein.

2. A device of the class described comprising a thimble having an outwardly flared flange at one end, a ring surrounding the thimble and secured thereto adjacent said flange, an adapter member having a portion to abut said flange, clamping sections pivoted to the ring and surrounding said flange and portion, means on the adapter to fasten a pipe therein, comprising clamp sections pivoted to the adapter, the pipe having a bulge, and the clamp sections being interiorly channeled to engage said bulge.

3. A device of the class described comprising a thimble having an outwardly flared flange at one end, a ring surrounding the thimble and secured thereto adjacent said flange, an adapter member having a portion to abut said flange, clamping sections pivoted to the ring and surrounding said flange and portion, means on the adapter to fasten a pipe therein, comprising clamp sections pivoted to the adapter, the pipe having a bulge, and the clamp sections being interiorly channeled to engage said bulge, asbestos on the interior of the adapter, clips securing the asbestos to the adapter and having guides extending therefrom and engaging the thimble.

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