April 14, 1953 A. B. WILLIAMS 2,634,760

LONGITUDINALLY SEAMED PIPE

Filed March 24, 1949 2 SHEETS—SHEET 1

Fig. 1.

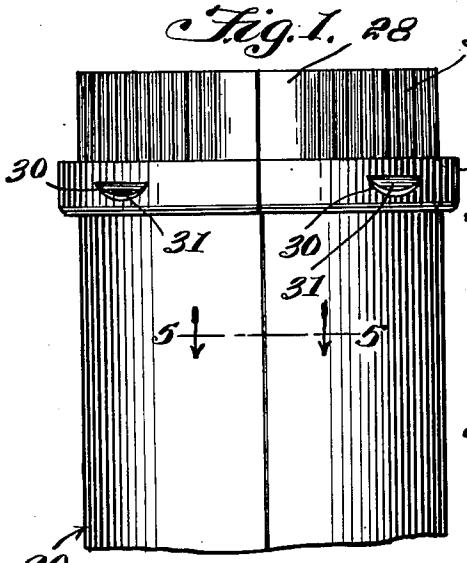


Fig. 3.

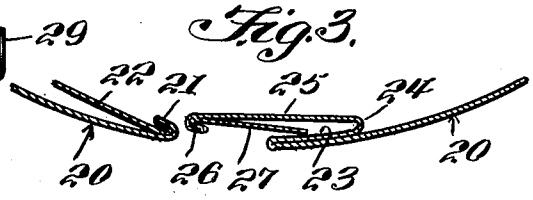


Fig. 4.



Fig. 5.

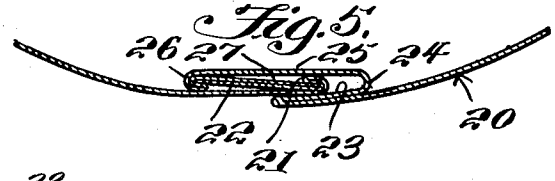


Fig. 2.

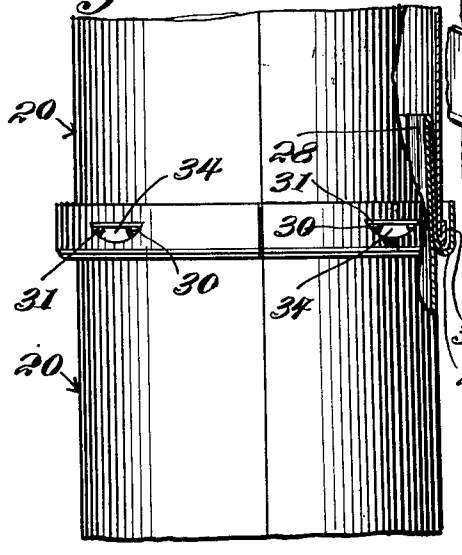
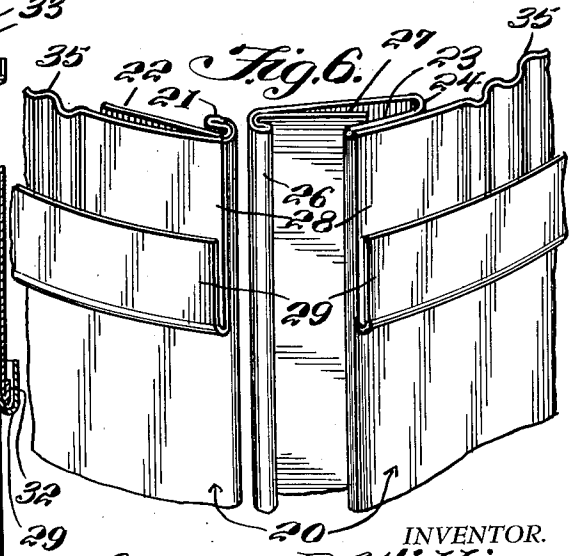


Fig. 6.



INVENTOR.

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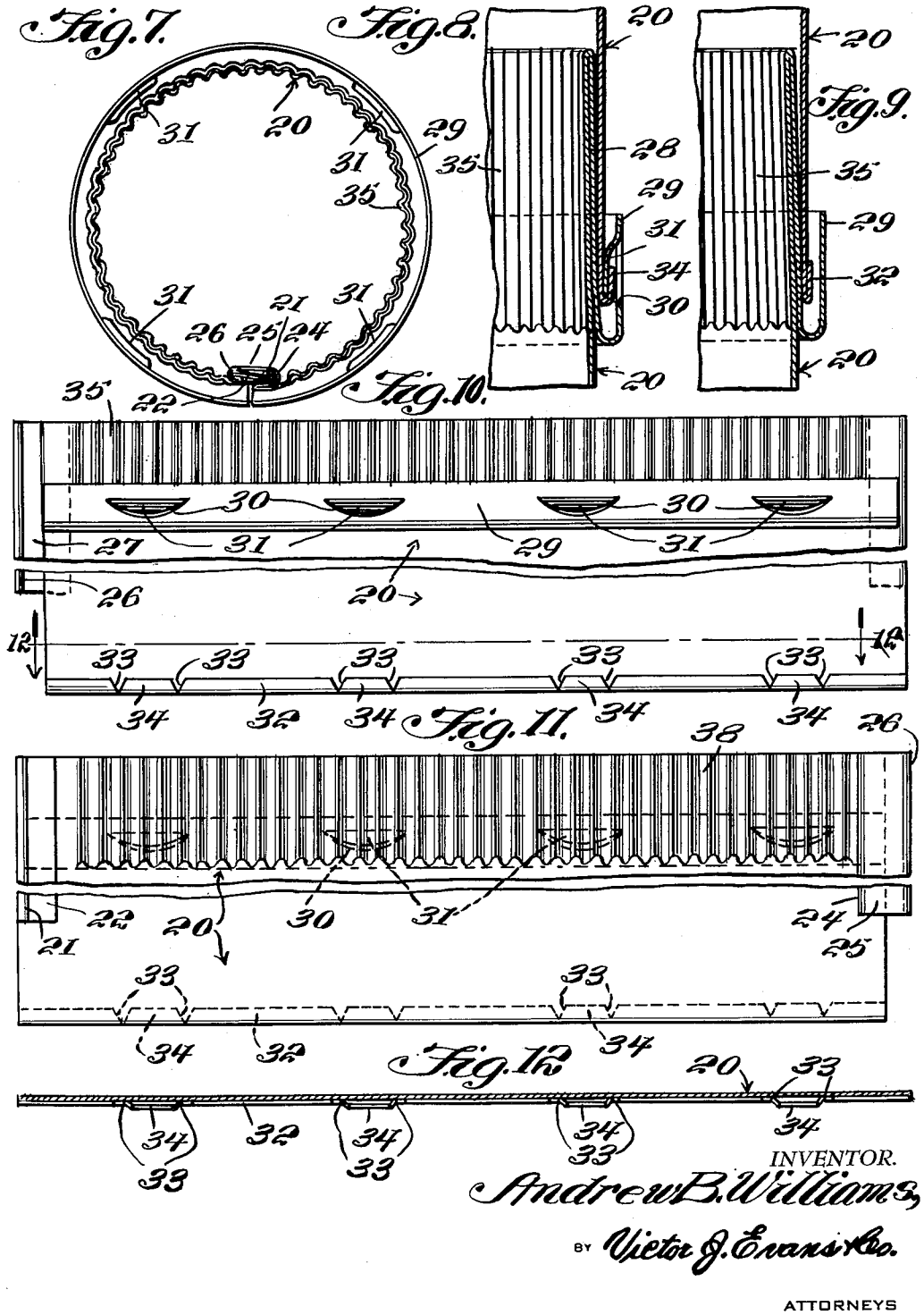
BY Victor J. Evans & Co.

ATTORNEYS

April 14, 1953 A. B. WILLIAMS 2,634,760

LONGITUDINALLY SEAMED PIPE

Filed March 24, 1949 2 SHEETS—SHEET 2



Patented Apr. 14, 1953

2,634,760

UNITED STATES PATENT OFFICE

2,634,760

LONGITUDINALLY SEAMED PIPE

Andrew B. Williams, Boaz, Ala.

Application March 24, 1949, Serial No. 83,230

1 Claim. (Cl. 138—74)

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This invention relates to pipes and more particularly to joints for stove pipes.

The object of the invention is to provide a stove pipe section having interlocking joints between its two longitudinal edges whereby the parts of the joints can be readily connected together and locked, the joints being of the type which are capable of expansion and contraction upon fluctuation of temperature so that separation of the pipes will be prevented.

Another object of the invention is to provide a stove pipe embodying a plurality of pipe sections arranged in end-to-end relation with respect to each other and which may readily be attached together.

A further object of the invention is to provide a stove pipe which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is an elevational view of one of the stove pipe sections, according to the present invention;

Figure 2 is an elevational view of a pair of the pipe sections connected together, and with parts broken away and in section;

Figure 3 is a transverse sectional view of a part of the stove pipe, showing the parts of the interlocked joints separated;

Figure 4 is a view similar to that in Figure 3, but showing the position of the parts when the joint is connected and in contracted position;

Figure 5 is a sectional view taken on the line 5—5 of Figure 1;

Figure 6 is an enlarged perspective view of the interlocked joints, with the parts thereof separated;

Figure 7 is an end view of the completed pipe;

Figure 8 is a fragmentary sectional view of a portion of the joints for connecting two stove pipe sections together;

Figure 9 is a sectional view showing certain constructional details of the joint for connecting two stove pipes together;

Figure 10 is a plan view of the sheet of metal from which one of the stove pipe sections is made;

Figure 11 is a view similar to 10 but showing the opposite side of the sheet of metal;

Figure 12 is a sectional view taken on the line 12—12 of Figure 10.

Referring in detail to the drawings, the

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numeral 20 designates a stove pipe section which is preferably made of sheet metal. In the stove pipe section 20, the sheet of metal is bent so that one of its longitudinal edges is provided with a longitudinally extending hook 21, and the hook 21 has projecting therefrom a flat strip 22 which extends longitudinally along the edge of the stove pipe for most of its length. The other longitudinal edge of the stove pipe section 20 is shaped to define a flat portion 23 which is positioned contiguous to the inner surface of the pipe section when the latter is in its folded position.

The flat portion 23 terminates in an arcuate portion 24 and a straight section 25 projects from the arcuate portion 24, the arcuate portion 24, the straight section 25, and the arcuate flange 26 coact to define a channel whereby the longitudinal edges of the stove pipe section 20 can be readily and safely secured together. Thus, in locking the longitudinal edges together, the hook 21 is positioned so that it is embraced or received by the arcuate portion 24, and the free edge of the strap or plate 27 is inserted into the space between the hook 21 and the strip 22. Further, the free edge of the strip 22 is inserted in the space provided between the arcuate flange 26 and the strap 27. This construction insures that the pipe sections will not accidentally become separated and the construction is such that the pipe sections will not become separated as the result of fluctuations of temperature. Thus, the interlocking joint is constructed so that the parts thereof can expand and contract as shown in Figures 4 and 5, without causing a separation of the joint, upon fluctuations in temperature within the pipe sections.

A means is provided for interlocking a plurality of pipe sections 20 together when the pipe sections are arranged in end-to-end relation. Thus, each of the pipe sections 20 has a portion thereof bent back upon itself to define a collar 28 which embraces the outer surface of the pipe section. The collar 28 terminates in an annular rim 29 which is spaced from the collar 28. The rim 29 is provided with a plurality of spaced grooves or cutouts 30 for a purpose to be later described. In forming the cutouts 30, a portion of the metal is bent back to define a lip 31.

Each of the pipe sections 20 has its other end bent back to define a skirt portion 32 which closely embraces the outer surface of the pipe section 20. The skirt portion 32 has notches 33 cut therein and these notches define a plurality of tongues 34 which project away from the skirt portion 32. In use, a plurality of the pipe sec-

tions 20 may be arranged in end-to-end relation, and the pipe sections are arranged so that the rim 29 of one pipe section receives therein the skirt 32 of another section. Thus, the tongues 34 can be moved into engagement with the lips 31 of the rim 29 so that a locking joint will be provided between the pipe section 20. The pipe section 20 is preferably crimped as at 35 whereby in order to insure a close or tight fitting between pipe sections.

From the foregoing, it is apparent that a pipe has been provided which is easily assembled and safe to use, thus, each of the pipe sections are provided with a means for interlocking the longitudinal meeting edges of the pipe sections together and this interlocking joint is constructed so that fluctuations in temperature, such as that caused by flue gases passing therethrough, will not cause the pipe sections to separate since the various parts of the joints are capable of expansion and contraction as shown in Figures 4 and 5. Further, a plurality of the pipe sections can be readily connected together by means of the tongues 34 and lips 31. In Figures 10, 11, and 12, there is shown a pipe section in its open or extended position.

While I have shown and described a preferred embodiment of my invention, this is by way of

illustration only and I consider as my own all such modifications in construction as fairly fall within the scope of the appended claim.

I claim:

A stove pipe section comprising a sheet of metal having one of its longitudinal edges bent to define a hook portion, a strip projecting outwardly from said hook portion, the other longitudinal edge of said stove pipe section being shaped to define a channel receiving said hook portion, a flat portion positioned contiguous to the inner surface of the pipe section, said flat portion terminating in an arcuate portion, a straight section extending from said arcuate portion, an arcuate flange arranged opposite said arcuate portion, a strap extending from said arcuate flange, said arcuate flange receiving the free end of said strip, said strap projecting inwardly from said flange and inserted in the hook portion.

ANDREW B. WILLIAMS.

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