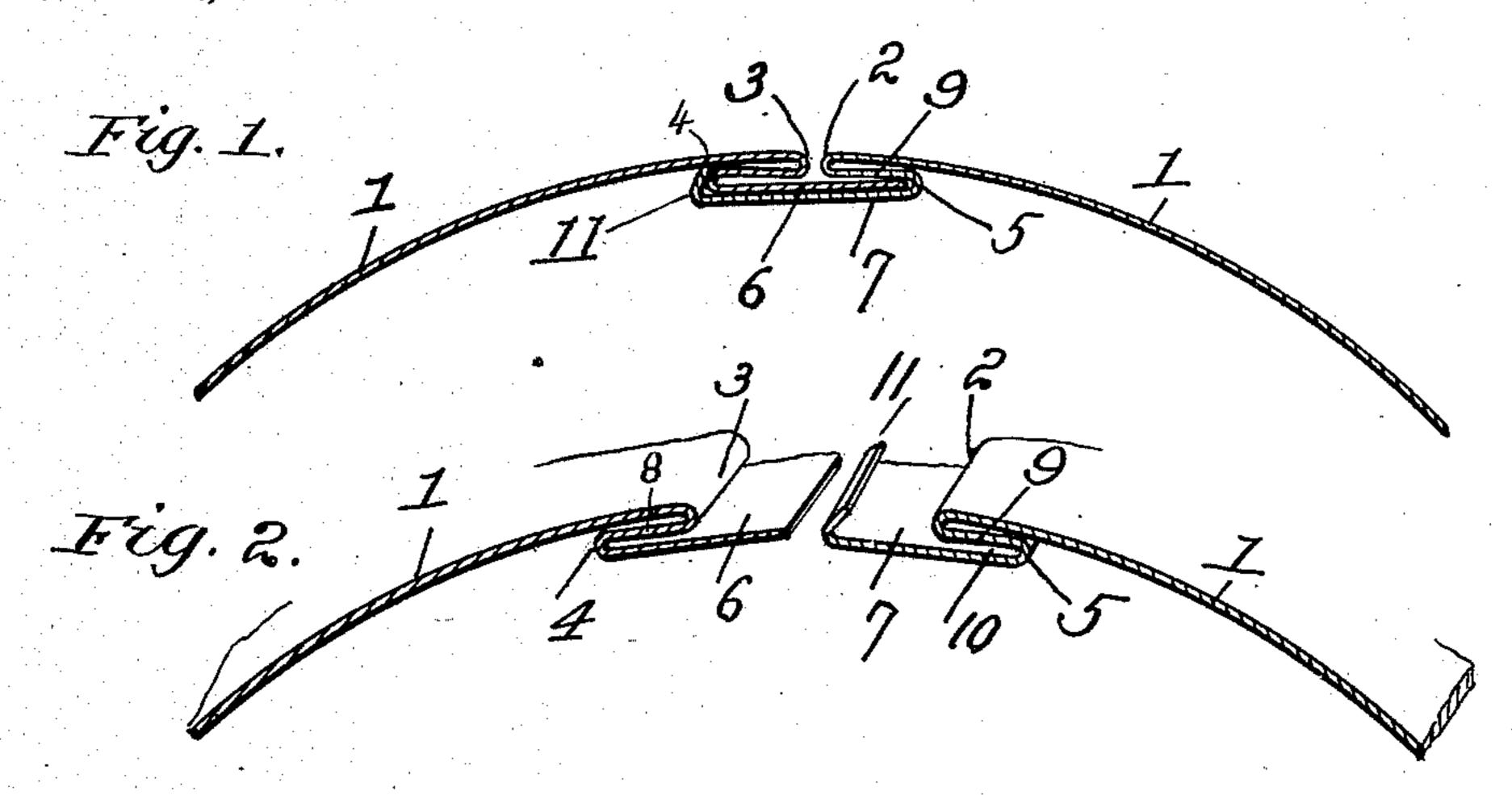
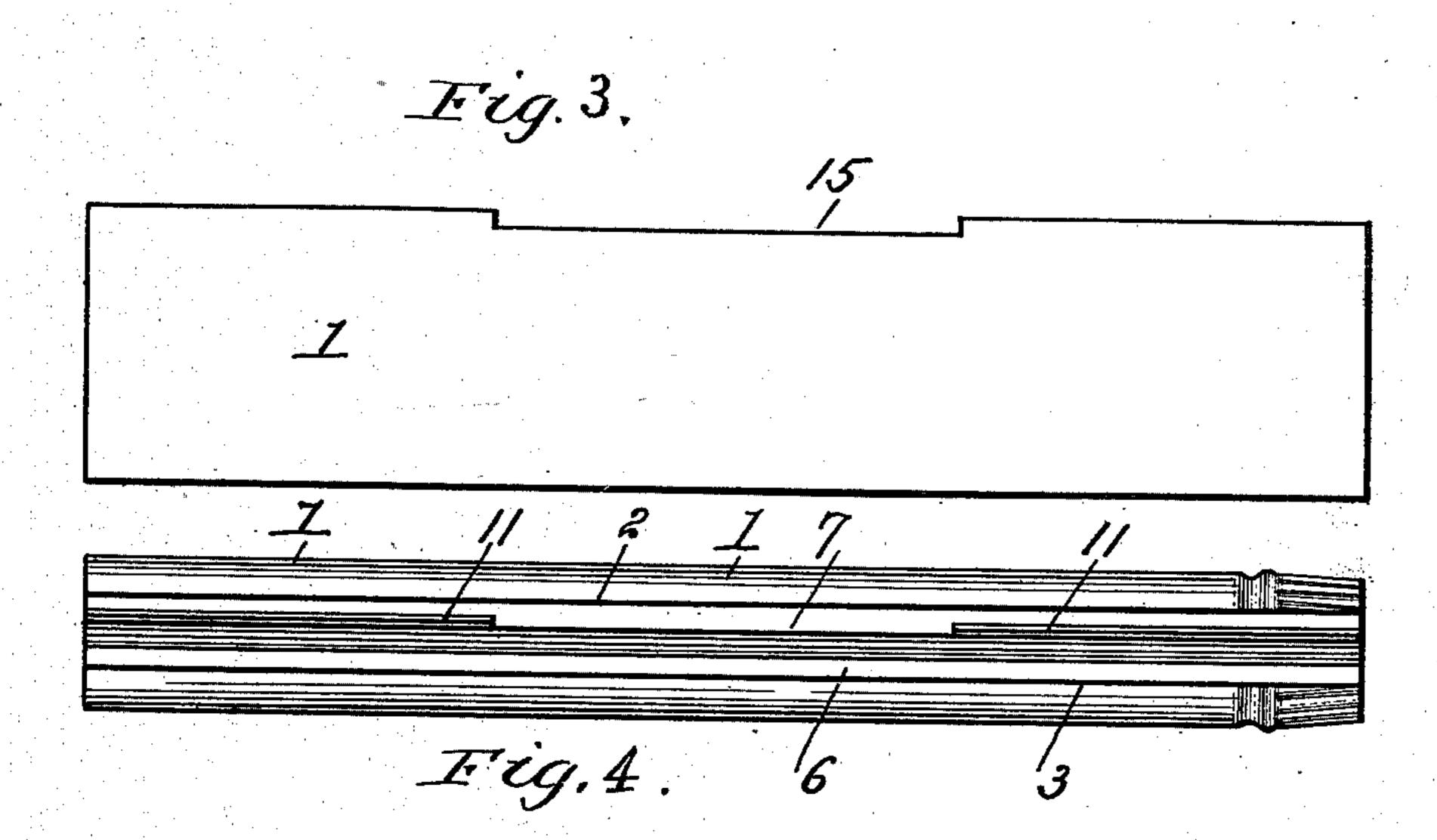
J. WYLIE. STOVEPIPE.

(Application filed June 20, 1902.)

(No Model.)





WITNESSES:

C. L. Mondel

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United States Patent Office.

JAMES WYLIE, OF CHATTANOOGA, TENNESSEE.

STOVEPIPE.

SPECIFICATION forming part of Letters Patent No. 714,629, dated November 25, 1902.

Application filed June 20, 1902. Serial No. 112,538. (No model.)

To all whom it may concern:

Be it known that I, James Wylle, a citizen of the United States, residing in Chattanooga, county of Hamilton, State of Tennessee, have invented certain new and useful Improvements in Stovepipes, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a transverse sectional view of a part of a stovepipe, showing the interlocking joint; Fig. 2, a similar view showing the parts separated and in perspective. Fig. 3 is a plan view of a blank from which a stovepipe-section is formed. Fig. 4 is an elevation of a stovepipe-section before the edges thereof are interlocked. Fig. 5 is a detail cross-sectional view of the joint, showing the locking-flange clenched.

One object of this invention is to provide a stovepipe-section with an interlocking joint between its two longitudinal edges, the two parts of which joint may be readily connected together and permanently locked, thus obviating the necessity of clenching the joint by hammering together the folds thereof or by riveting them to prevent the accidental separation thereof.

Another object of the invention is to provide a joint which will permit a piece of any de-30 sired length to be cut from either end of the pipe without in the least destroying the joint, the effect of such cutting being rather to make the joint closer and stronger.

Referring to the various parts by numerals, 35 1 designates the sheet of metal from which the pipe-section is formed. This sheet of metal is bent transversely to substantially cylindric form, and each edge of this curved sheet is folded inward upon itself and is 40 caused to lie substantially flat against the interior surface of the main portion of the sheet, the rounded edges 2 and 3 being thereby formed. These folded-under portions of the sheet are then bent upon themselves to 45 form the edges 4 and 5 and the outward-extended parts 6 and 7, which parts lie substantially flat against the inward-extending folded parts 8 and 9, a slight channel 10 being formed between the parts 7 and 9, for a pur-50 pose which will hereinafter appear. The outward-extending parts 6 and 7 project a suitable distance beyond the edges 2 and 3, the

part 7 being broader than the part 6. The outer edge of the part 7 is bent outward and is inclined toward the edge 2 to form a sub- 55 stantially radial locking-flange 11.

The projecting part 6 forms a locking-tongue which is adapted to fit in the channel 10 formed between the parts 7 and 9, and the locking-flange 11 is adapted to engage the edge 4 60 and to thereby lock the tongue 6 within the channel 10. When the parts are in this position, the two edges 2 and 3 are very close together, thereby forming a very neat joint. The part 7 forms a spring member which will snap 65 into place after the locking-tongue has been forced into the channel 10, the said spring member in the operation of connecting the two members being forced inward sufficiently to permit the insertion of the tongue 6 in said 70 channel. When the tongue 6 has been forced into the channel as described, the lockingflange 11 passes off the part 6 and snaps back of the edge 4, thereby locking the tongue in the channel. It will be readily seen that the 75 locking-flange 11 prevents the withdrawal of the tongue from the channel and that the edges 2 and 3 abutting together would prevent the collapsing of the pipe by any strain tending to compress it. The edge of the tongue 80 6 by contacting with the inner surface of the fold 5 also prevents the collapsing of the pipe except under a severe strain or pressure tending to compress it. Such strain, however, in order to collapse the pipe would have to be 85 great enough to bend the metal of the body of the pipe, as the joint would resist a greater compressing strain than the body of the pipe.

Instead of forming the locking-flange throughout the entire length of pipe-section, 90 which construction is preferred, the sheet from which the pipe-section is to be made may be cut out along one longitudinal edge, as shown at 15 in Fig. 3, so that when the edge is turned up to form the locking-flange 10 95 said flanges will extend only part way along the edge of the pipe-section, as shown in Fig. As stated, however, it is preferred that the edge be continuous, so that the pipe may be made, as usual, from a substantially rec- 100 tangular sheet, my main object in reserving the right to cut out a portion of the edge being that it might thus be made easier on a flanging-machine.

It is customary to ship stovepipes from the factory to the retail merchant in a knockdown condition—that is, the longitudinal joint of each section is separated, and the sec-5 tions in this condition are placed one within the other or "nested," the object of this being to pack the sections in the smallest space possible. The retail merchant must before selling the pipe connect the longitudinal edges to of the sections permanently together. With the stovepipes of the ordinary construction it is necessary to hammer or otherwise compress the overlapping joint and to rivet the parts together. This assembling of the stovepipes 15 by the retailer is very annoying, requires considerable time, and necessitates the maintaining by the retailer of a more or less extensive tin-shop. With stovepipes constructed according to this invention the assembling of 20 the pipes in completed form will be a very simple matter, requiring no hammering or otherwise compressing of the joints, and when the joints are assembled the pipe cannot be collapsed by pressure tending to separate its 25 edges. It is obvious that riveting is avoided and that compressing the joint is unnecessary.

It will be noted that should the pipe be cut at any point the folds of the metal in the joint will be forced closer together and that by reason of the inclination of the flange 11 toward the edge 2 said flange will be forced against the edge 4, should said flange be cut, and more securely lock the parts of the joint together.

It will be seen also that the flange 11 is bent over slightly more than a right angle, so that when it snaps into place over the rounded edge 4 the edges 2 and 3 will be prevented

from drawing apart. When the parts are thus interlocked, it is preferred that the flange 40 11 be bent or clenched down over edge 4 at one or both ends, but preferably at the larger end only of the pipe-section, as shown in Fig. 6, this clenching or setting of the flange being best accomplished by the simple stroke 45 of a mallet.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

A lock-joint for pipes comprised of two mem- 50 bers one of which is formed on each edge of the sheet forming the pipe, one of said members being comprised of the inward-folded part 9, the outward-folded spring part 7 and the locking-flange 11 formed on the outer edge 55 of the part 7, a channel being formed between the parts 7 and 9; the other member being formed on the other edge of the sheet and being comprised of the inward-folded part 8, and the outward-folded part 6 forming a lock- 60 ing-tongue, said tongue being adapted to enter the channel formed between the parts 7 and 9, and the locking-flange being adapted to be sprung inward to permit the part 6 to be passed into the channel between the parts 65 7 and 9, and to then spring outward to engage back of the fold at the inner edge of the said part 6, to lock the parts in engagement.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, 70

this 17th day of June, 1902.

JAMES WYLIE.

Witnesses:

C. W. STOCKARD, E. I. POOL.