

No. 672,548.

Patented Apr. 23, 1901.

D. S. DURALL.
STOVEPIPE JOINT.

Application filed Aug. 3, 1899.

(No Model.)

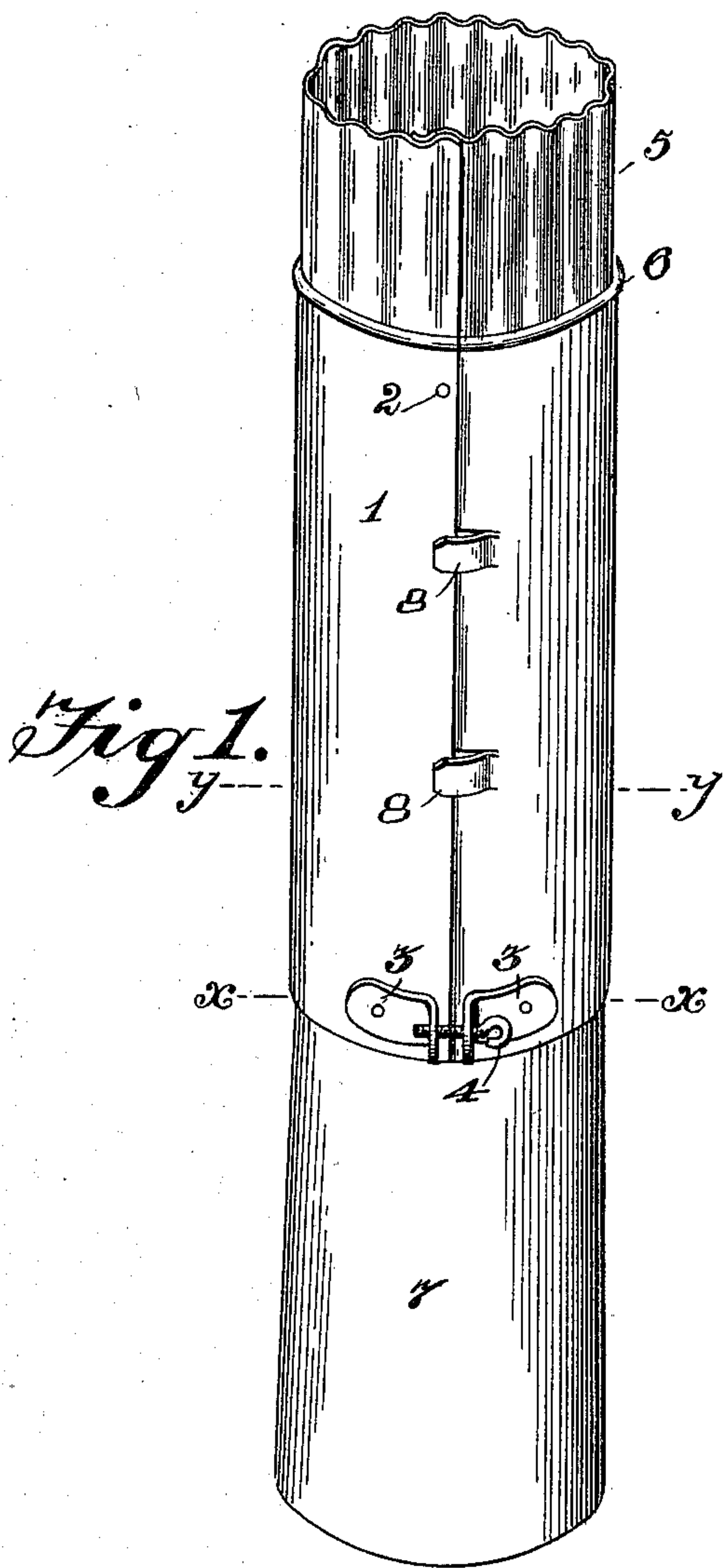


Fig 2.

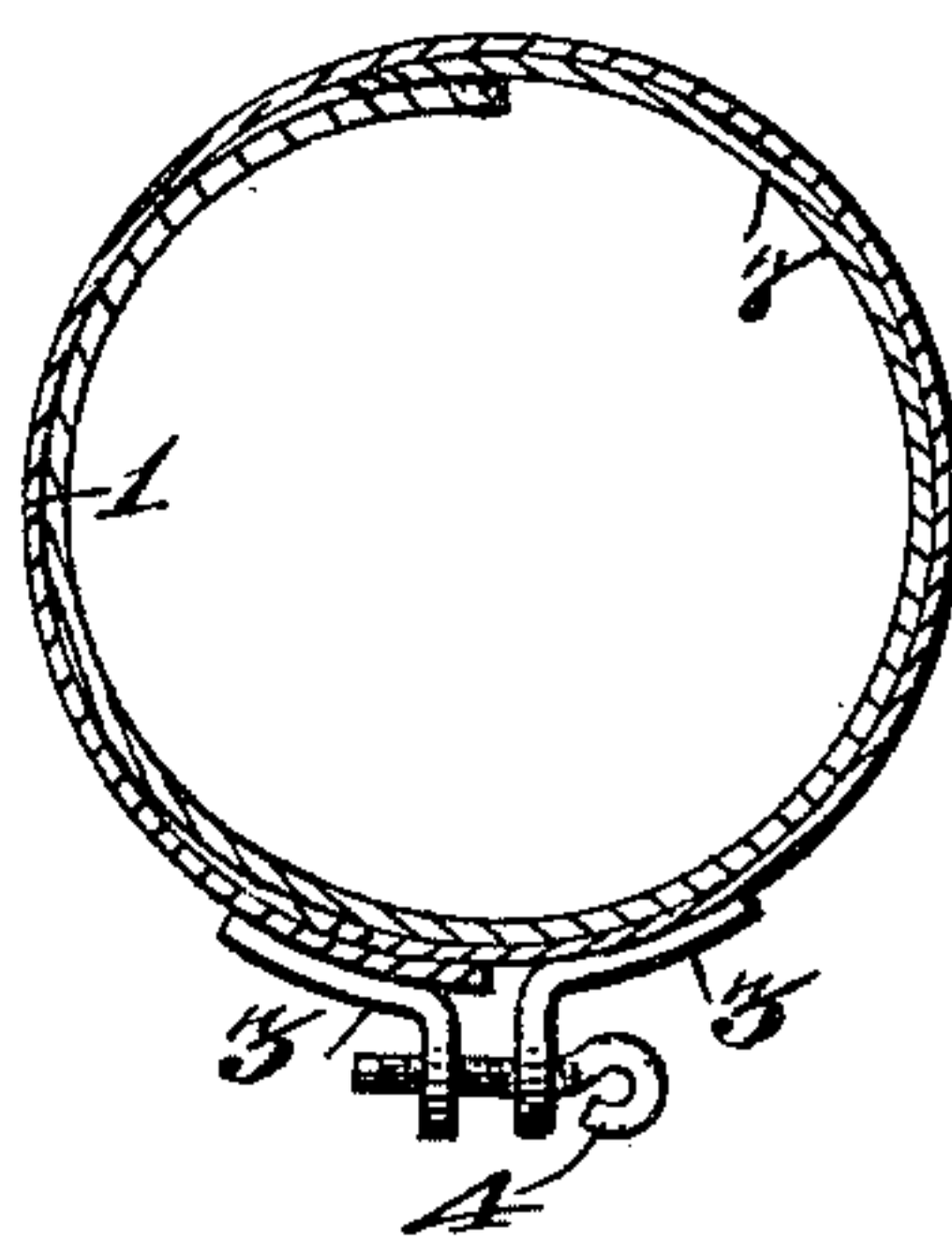
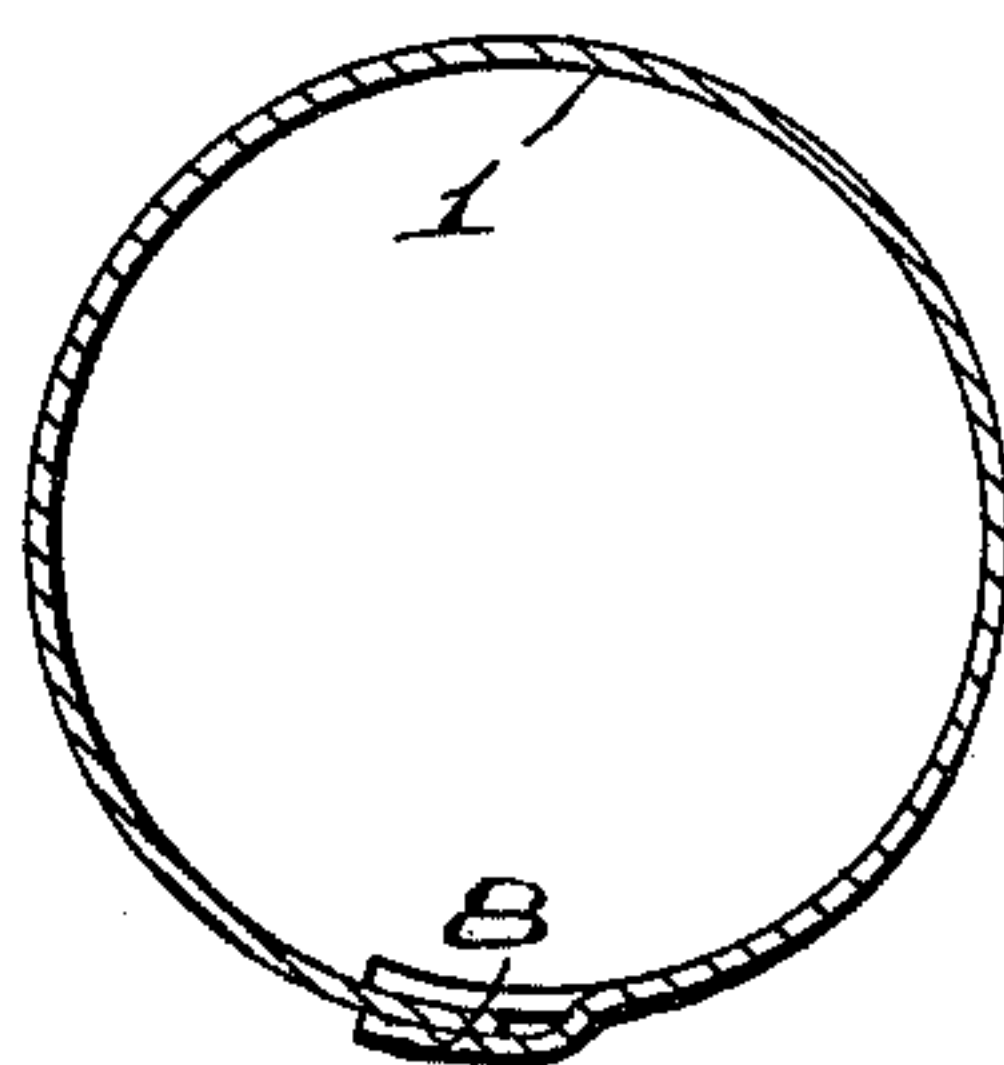


Fig 3.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID S. DURALL, OF HURDLAND, MISSOURI, ASSIGNOR OF ONE-HALF TO
WILLIAM H. BUHL, OF SAME PLACE.

STOVEPIPE-JOINT.

SPECIFICATION forming part of Letters Patent No. 672,548, dated April 23, 1901.

Application filed August 3, 1899. Serial No. 726,032. (No model.)

To all whom it may concern:

Be it known that I, DAVID S. DURALL, a citizen of the United States, residing at Hurdland, in the county of Knox and State of Missouri, have invented a new and useful Stovepipe-Joint, of which the following is a specification.

This invention relates to pipe-joints, and especially to means for connecting the sections of stovepipes, and has for one object to provide improved means for adjusting the length of a line of pipe and also to firmly connect the adjustable sections, so that the pipe may be normally maintained in a rigid condition.

A further object of the invention is to provide a construction which is adapted to inclose a pipe-section with one end and to enter a second pipe-section with its other end, the inclosing end of the joint being provided with a clamp and the structure being so pivoted that the operation of this clamp will simultaneously grip the inclosing end upon the pipe-section therein and will expand the opposite end within the other pipe-section.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details of construction may be made within the scope of the appended claim without departing from the spirit or sacrificing any of the advantages of the present invention.

In the drawings, Figure 1 is a perspective view of a section of stovepipe constructed in accordance with the present invention. Fig. 2 is a transverse sectional view taken on the line $x x$ of Fig. 1. Fig. 3 is a transverse sectional view taken on the line $y y$ of Fig. 1.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 designates the improved stovepipe-section, which is formed, as usual, from a single blank of sheet metal; but instead of connecting the

meeting edges throughout their entire length and forming a rigid seam said edges are pivotally connected together at or near one end of the pipe-section, preferably by means of a rivet 2, while the remaining portions of said edges are capable of being drawn together or forced apart, so as to increase or diminish the diameter of the pipe. The means for adjusting the opposite edges of the pipe is located at one end thereof and opposite the pivot 2 and comprises outwardly-projecting ears 3, which are riveted or otherwise secured to the exterior of the pipe and at opposite sides of the seam thereof. These ears are adjustably connected by means of a suitable thumb-screw 4 passing through screw-threaded openings in the ears, and by operation of the thumb-screw the opposite edges of the pipe may be drawn together, as will be understood.

The end of the pipe adjacent to the pivot 2 is crimped or corrugated longitudinally, as at 5, in the usual manner, and an external bead 6 is provided at the base of this corrugated portion, and the latter is of the usual gage to fit within the end of the adjacent stovepipe-section. Thus it will be understood that the longitudinal meeting edges of the pipe flare or diverge from the pivotal connection thereof, so that the adjustable end of the pipe is normally larger than the standard gage, thereby permitting of the present improved section overlapping the ordinary adjacent section 7 to any extent, whereby the length of the piping may be readily adjusted, as will be understood.

In order that the pipe may be prevented from buckling or collapsing along the meeting edges or seam thereof and between the pivotal and adjustable points, there are provided several tongues 8, which are carried by one side of the pipe and overlap the opposite side thereof. As illustrated in Figs. 1 and 2, it will be seen that the tongues are struck up from the inner edge of the pipe and overlap exteriorly the opposite edge thereof, whereby the outer edge of the pipe is substantially clamped between and embraced by the inner edge of the pipe and the tongues 8, which arrangement provides a rigid seam and prevents collapsing of the pipe. Instead of strik-

ing up the tongues 8 the latter may be made separate and riveted or otherwise secured to the pipe.

It will be noted that the outer edge portion 5 of the stovepipe-section is free from slots, projections, indentations, or sockets, and is therefore substantially smooth and even, so that the tongues may loosely overlap the outer edge, and thereby permit of the lateral move- 10 ments of the edges during the adjustment of the pipe-section. In view of the pivotal connection the edges of the pipe-section move laterally in an arc struck from the pivotal connection as a center, and for this reason it 15 is essential that the tongues be entirely free from the outer edge, so as not to interfere with such movement. Furthermore, as the tongues overlap exteriorly the edges of the pipe may be readily brought together in 20 proper relation should they become disconnected. Furthermore, it will be seen that normally the corrugations of the overlapping edges are in mesh and that when the corrugated end is spread these meshing corruga- 25 tions will be caused to ride one over the other, thus further increasing the diameter of this end of the pipe, and owing to the corrugated end this increase will be distributed throughout the circumference of the pipe.

30 From the foregoing description it will be obvious that the present invention provides an exceedingly durable and useful stovepipe-section, the additions to the ordinary stovepipe being so slight, and may be conveniently 35 provided with the present improvements. Furthermore, it will be seen that by locating the pivot 2 some distance from the corrugated end of the joint the operation of the clamping-screw 4 acts to draw one end of the joint

inwardly, while the other end of the joint is 40 expanded. Thus when the pipe-section is placed over the corrugated end and a second pipe-section is placed within the other end the operation of the clamping-screw will act to simultaneously clamp the joint upon one pipe- 45 section and expand it within the other pipe-section, and thus firmly hold the two joints in place.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 50 ent, is—

A pipe-joint comprising a tubular section adapted to receive a pipe-section in one end and to enter a pipe-section with its other end, the entering end of the section being corru- 55 gated with its corrugations extending longitudinally thereof, and said section being split longitudinally to form edges disposed to overlap, a pivot connecting the edges of the section adjacent to the base of the corrugated 60 portion, and a clamp connected with the edges of the section at the receiving end thereof, for contracting the receiving end of the section and simultaneously expanding the en- 65 tering end thereof the corrugations at the overlapping edges of the entering end being adapted to normally mesh and to ride one over the other when the opposite end of the section is contracted, whereby the corrugated end will be further expanded. 70

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DAVID S. DURALL.

Witnesses:

WALTER L. HUNTER,
GEO. W. SNELLING.