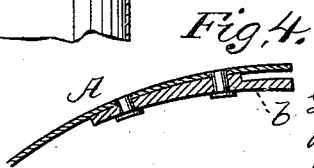
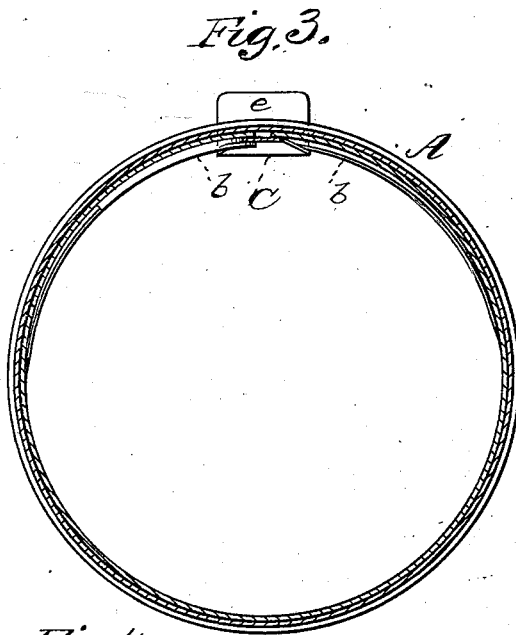
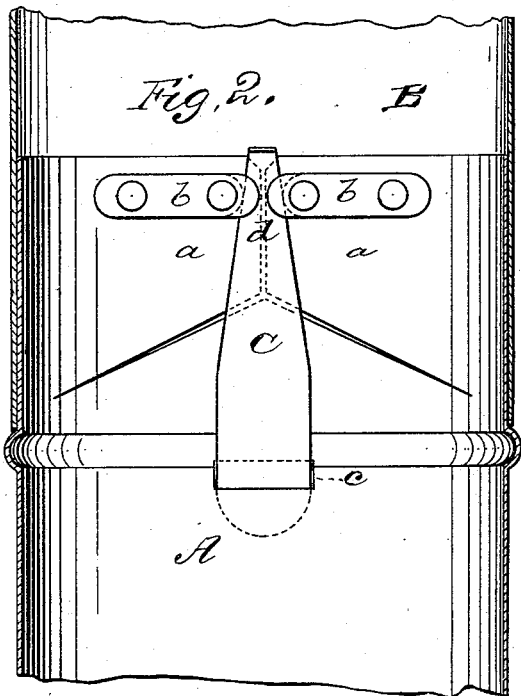
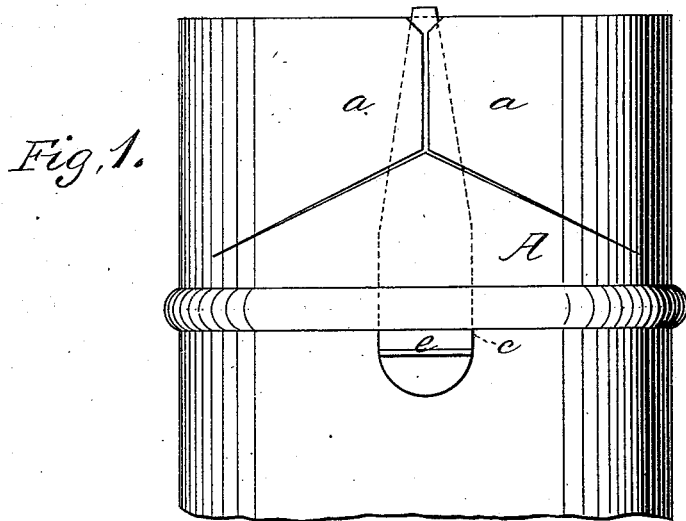


G. BURKHARDT.
Adjustable Pipe-Fastener.

No. 208,150.

Patented Sept. 17, 1878.



WITNESSES

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UNITED STATES PATENT OFFICE.

GUSTAV BURKHARDT, OF HOMER, ILLINOIS.

IMPROVEMENT IN ADJUSTABLE PIPE-FASTENERS.

Specification forming part of Letters Patent No. **208,150**, dated September 17, 1878; application filed August 17, 1878.

To all whom it may concern:

Be it known that I, GUSTAV BURKHARDT, of Homer, in the county of Champaign and State of Illinois, have invented a new and valuable Improvement in Adjustable Pipe-Fasteners; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

Figure 1 of the drawings is a side view of my improved fastener for pipes. Fig. 2 is a section of a pipe-section, showing my pipe-fastener applied. Fig. 3 is a top view of the fastener, showing the pipe in section; and Fig. 4 represents a detached view of the fastening devices.

This invention has relation to means for fastening together sections of stove-pipe or other light metal pipe; and it consists in the construction and novel arrangement of an inner expanding portion and a wedging slide or key, as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates a section of pipe, and B another section to be connected therewith, the latter being the outer section, or the one which is slipped over the end of the other in joining the two. The section A, or inner section, is provided at the end which is to be slipped into section B with expanding tongues or portions *a*, which are formed by cutting centrally into the pipe end from the edge, and then laterally in opposite directions. The tongues *a* thus formed are each provided with inside jaws or flanged bearings *b*, which may be riveted to the tongues *a*, or, if great pressure is not required, may be cut in the tongue-pieces and bent inward. In line with the middle division, between the tongues and at a distance therefrom sufficient to bring it outside of or at

about the end of the section B, is made a transverse slot or slit, *c*, through which extends the operating end of the wedge-slide or key C, whose tapering inner end, *d*, extends between the jaws *b* of the pressure-tongues.

In order to prevent the small end of the wedge from being pulled entirely out from between the tongue-jaws its end is bent inward, as shown in the drawings, and in order that the wedge or key may be handled easily an outward flange, *e*, is made at its operating or exposed end. When the two sections are to be joined the wedge is pulled outward, allowing the tongues *a* of the inner section to be readily pressed inward and passed by the end of the outer section B, which is slipped over the same and pressed on beyond the tongues. Then the wedge or key is pressed inward or toward the joint, forcing the jaws of the tongues apart and expanding the tongues against the interior of the outer section, which is in contact therewith, thereby causing a forcible binding, by which the sections are firmly secured together. It is evident that by reversing the form of the wedge it can be operated by a pulling movement to expand the tongues. Hence I do not desire in this particular to be confined to the precise construction described.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the pipe-sections A and B, of the expanding-tongues *a*, their jaws *b*, and the sliding wedge or key C, substantially as specified.

2. A pipe-section having pressure-tongues *a* cut in its edge, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GUSTAV BURKHARDT.

Witnesses:

JOHN A. GALUSHA,
JACKSON COOPER.