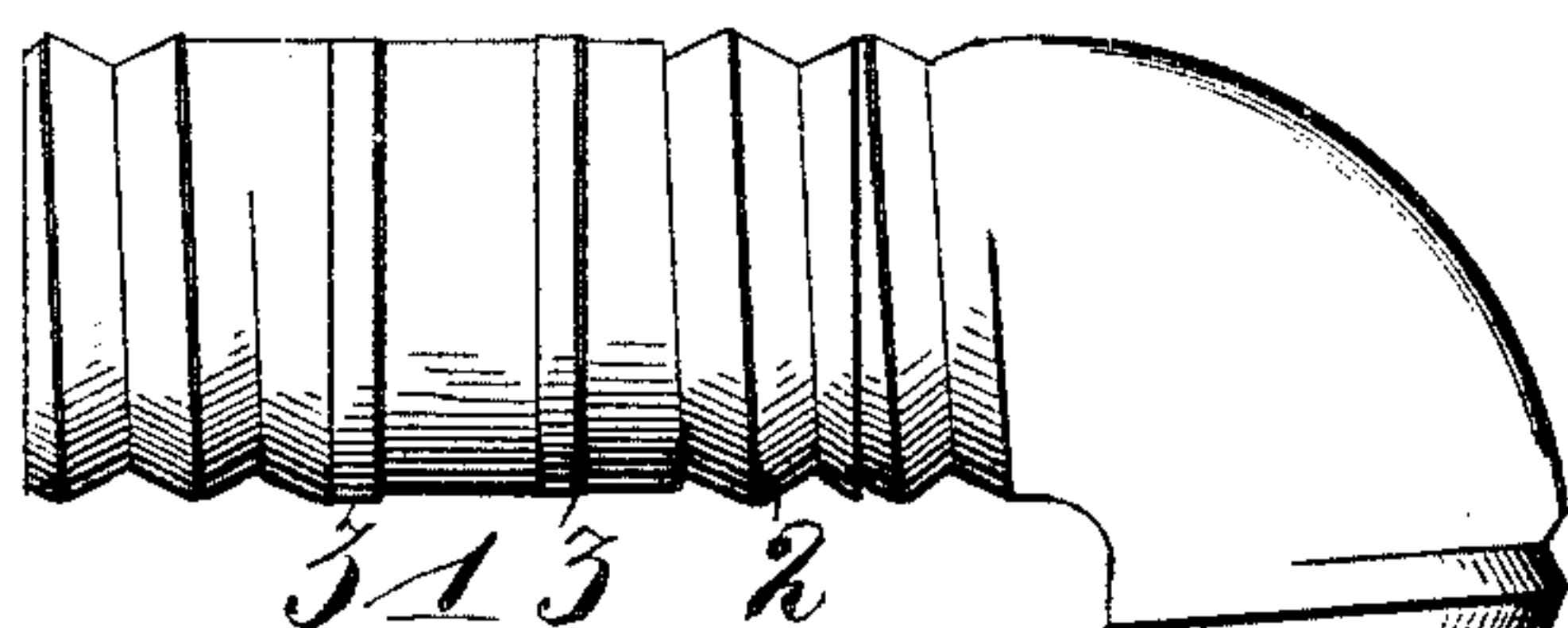


(No Model.)

P. BIEBER.  
ADJUSTABLE STOVE PIPE.

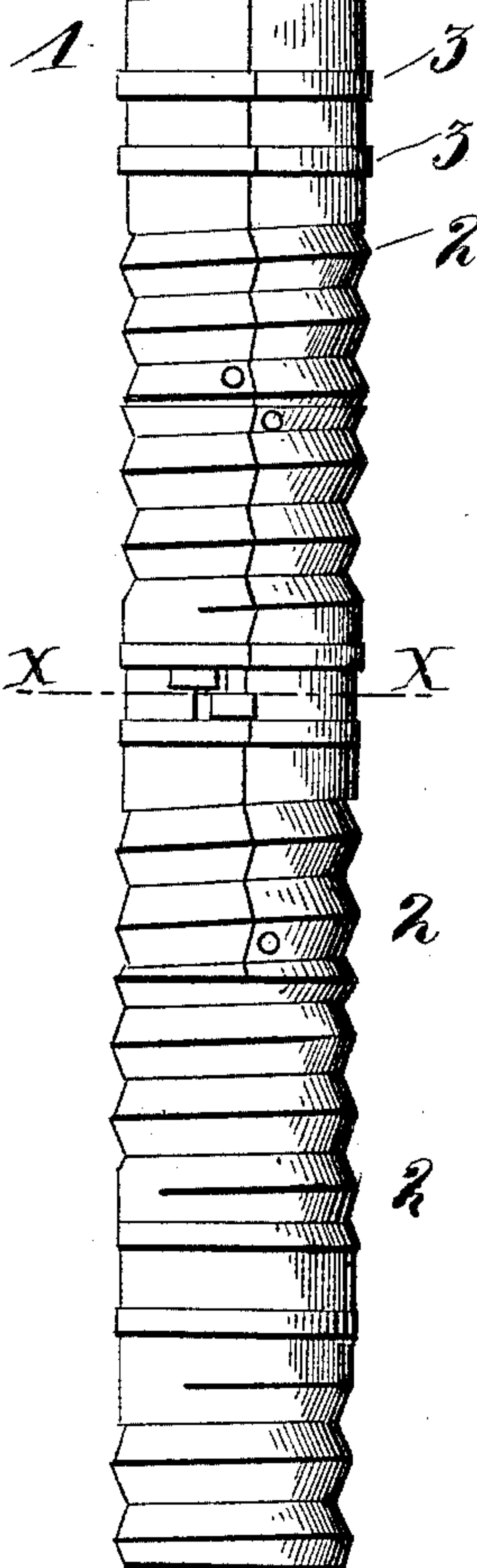
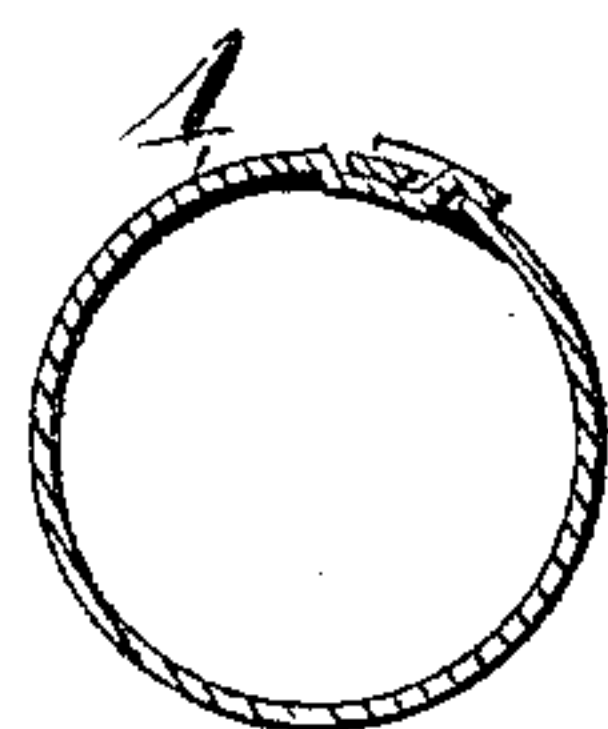
No. 458,994.

Patented Sept. 8, 1891.

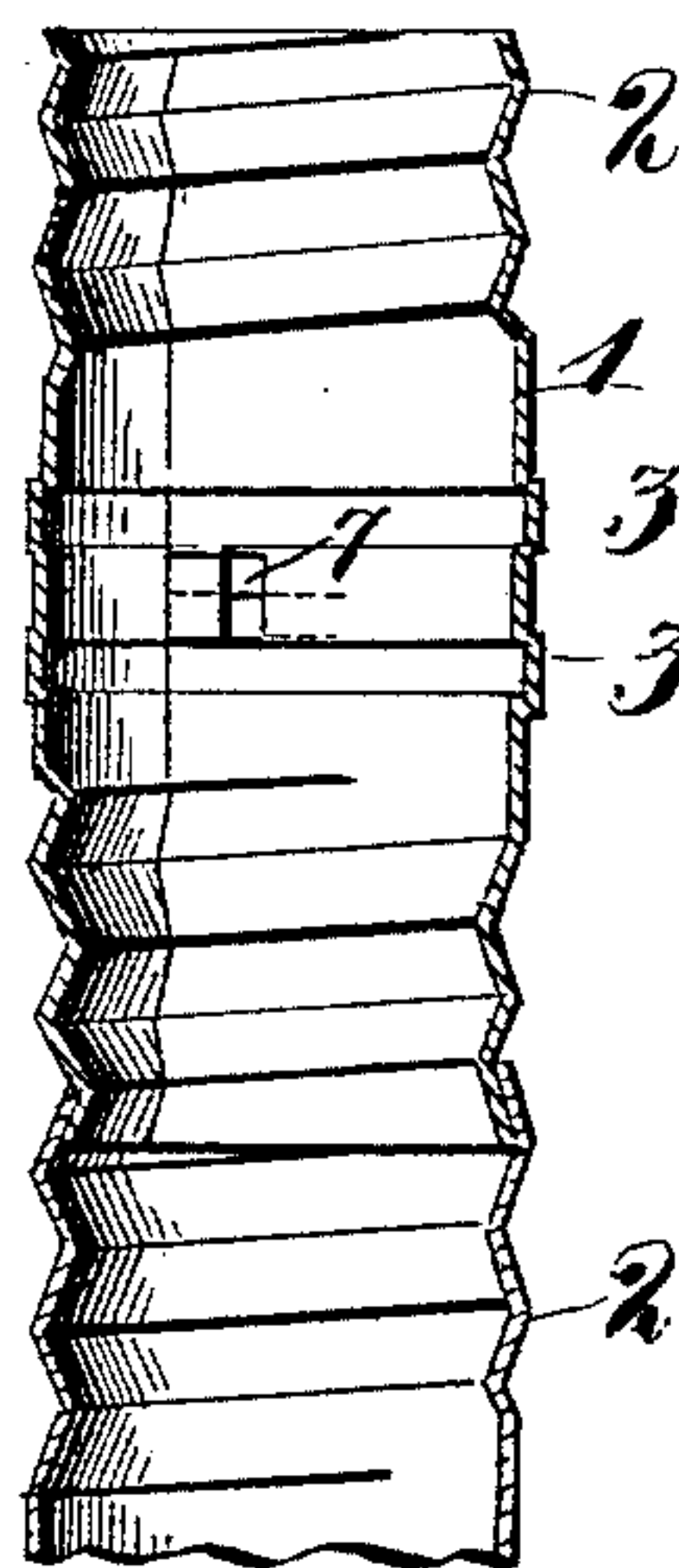


*Fig. 1.*

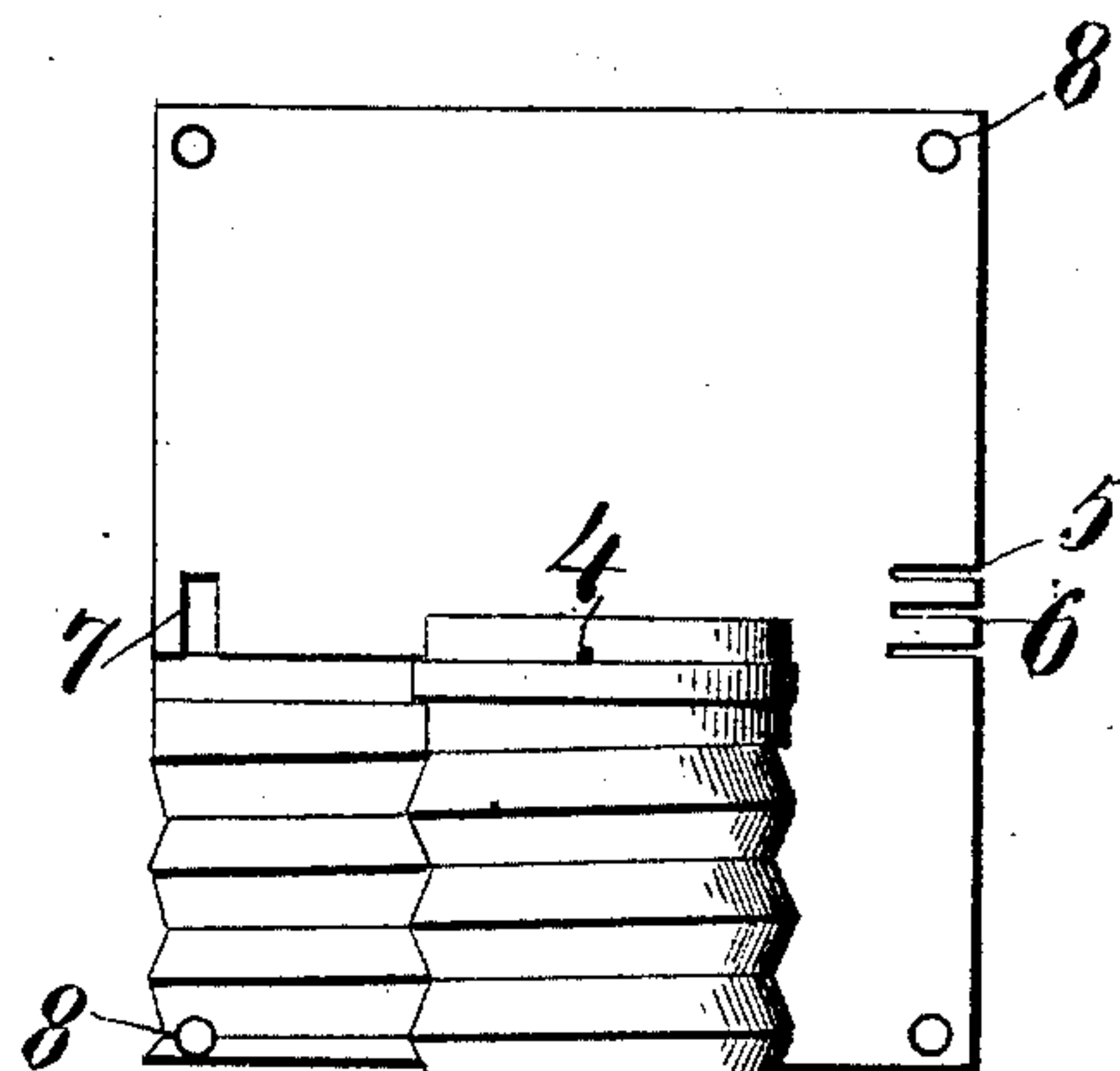
*Fig. 4.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
L. J. Keller.  
Edward Everett Lenzan

Inventor  
*Philip Bieber.*  
By *his* Attorneys *Higdon & Higdon*



# UNITED STATES PATENT OFFICE.

PHILIP BIEBER, OF ST. LOUIS, MISSOURI.

## ADJUSTABLE STOVE-PIPE.

SPECIFICATION forming part of Letters Patent No. 458,994, dated September 8, 1891.

Application filed January 24, 1891. Serial No. 378,934. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP BIEBER, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Adjustable Stove-Pipes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in adjustable stove-pipes; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and designated in the claim.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a vertical section taken through one of the joints, showing the peripheral extension and the spiral corrugation. Fig. 3 is a blank, out of which the joints are rolled and made; and Fig. 4 is a horizontal cross-section taken on the line *xx* of Fig. 1, showing the manner in which the joints are secured together.

The object of my invention is to construct a stove-pipe so that the same can be extended or reduced in length without necessitating the cutting of any of the joints or discarding any of the same.

Referring to the drawings, 1 indicates a series of joints, which are provided on their terminal portions with spiral elevations, screw-threads, or corrugations, and are so constructed that they are adapted to be screwed into each other.

2 indicates a series of spiral elevations or screw-threads, which are formed on the terminal portions of the joints, as above stated. The elevations of one joint are adapted to screw and fit over corresponding depressions in the adjacent joints.

3 indicates peripheral extensions which are formed in the median portion of the joints. Said peripheral extensions may be angular, oval, or round, simply formed, at the discretion of the manufacturer, in either shape, but preferably as shown in the drawings. Said peripheral extensions have no exclusive external function, but are simply formed on the joints to give the same a decorative effect. Said spiral elevations or screw-threads 2 and peripheral extensions 3 are formed in a metal sheet by means of a roller 4, as shown

in Fig. 4. Said roller, of course, is provided with peripheral extensions or corrugations, which are adapted to fit in the depressions formed in the corresponding bed-plate on which the sheet of metal is placed. By passing said roller over said metal and by the application of sufficient force the corrugations and peripheral extensions or screw-threads are formed in the sheet of metal. After these extensions have been formed in the terminal portions of the joints, before the same can be functionally used they must be thrown in a circular form and secured in said form, which is effected by cutting in one side of the metal sheet out of which the joints are formed slits 5, thereby forming tongues 6, the outer ends of which are flush with the edge of the blank. Said tongues are adapted to pass through elongated perforations 7 formed in the opposite side of sheet of metal when the sides are bent and lapped over each other, as shown in Fig. 3. When said tongues have been inserted in perforations 7, they are bent over the side of the overlapping side of the sheet, and are bent in opposite directions, as shown in Fig. 1, thereby holding said sides securely together and holding the joints in a circular form. The ends of said joints may be then secured together by means of rivets adapted to pass through perforations 8, or by any other suitable mechanical means; but the ends should be so secured together that a smooth surface is formed so that the projection formed by the connection does not interfere with screwing said joints into each other. The joints 1 may be screwed into or on each other, thereby extending the pipe or reducing the length, at the discretion of the operator.

Heretofore to lengthen the pipe required the employment of additional joints, and to reduce the length of the pipe required the discarding of some of the joints or cutting the joints in two, which, as is well understood, requires considerable trouble and expense.

Having fully described my invention, I will now give a more explicit description of the method in which the joints are made and the means employed for making the same.

I do not desire to claim the method of making the stove-pipe described; but for the sake



of clearness, in order that the same may be fully understood, I will describe one way in which the stove-pipe may be made.

Referring to Fig. 4, 9 indicates an ordinary  
5 metal sheet, which is stamped out, of suitable dimensions for the construction of a stove-joint, provided with the perforations 7, slits 5, and tongues 6. The next step in making said joint is to form the spiral screw-threads  
10 2, and peripheral extensions 3 in the same, which is done by laying said sheet on a metallic base-plate or bed and then passing over said sheet roller 4, having corresponding spiral screw-threads and peripheral projections,  
15 as is deemed fit, to make the desired peripheral extensions and spiral screw-threads in the joint.

When the sheet has been provided with the parts herein stated, the next step is to secure the same together for functional use,  
20 which is done by bringing the side of the metal sheet 9 provided with the slits and tongue over and in juxtaposition or contact

and underneath the side provided with perforations 7, and then passing the tongues 6  
25 through said perforation and bending them over in an opposite direction, as shown in Fig. 1.

Having fully described my invention, what I claim is—

A stove-pipe consisting of a sheet of metal, an elongated aperture 7 formed therein and adjacent to one edge thereof, and tongues 6,  
30 formed in the opposite edge thereof, the outer ends being flush with the edges of the blank, said tongues passing through said aperture 7 and having their ends bent in opposite directions, whereby a tight and non-collapsing pipe is made, substantially as described.

In testimony whereof I affix my signature  
40 in presence of two witnesses.

PHILIP BIEBER.

Witnesses:

E. H. KELLER,  
EDWARD E. LONGAN.