

(No Model.)

J. E. SMILEY.
STOVEPIPE JOINT.

No. 528,816.

Patented Nov. 6, 1894.

Fig. 1.

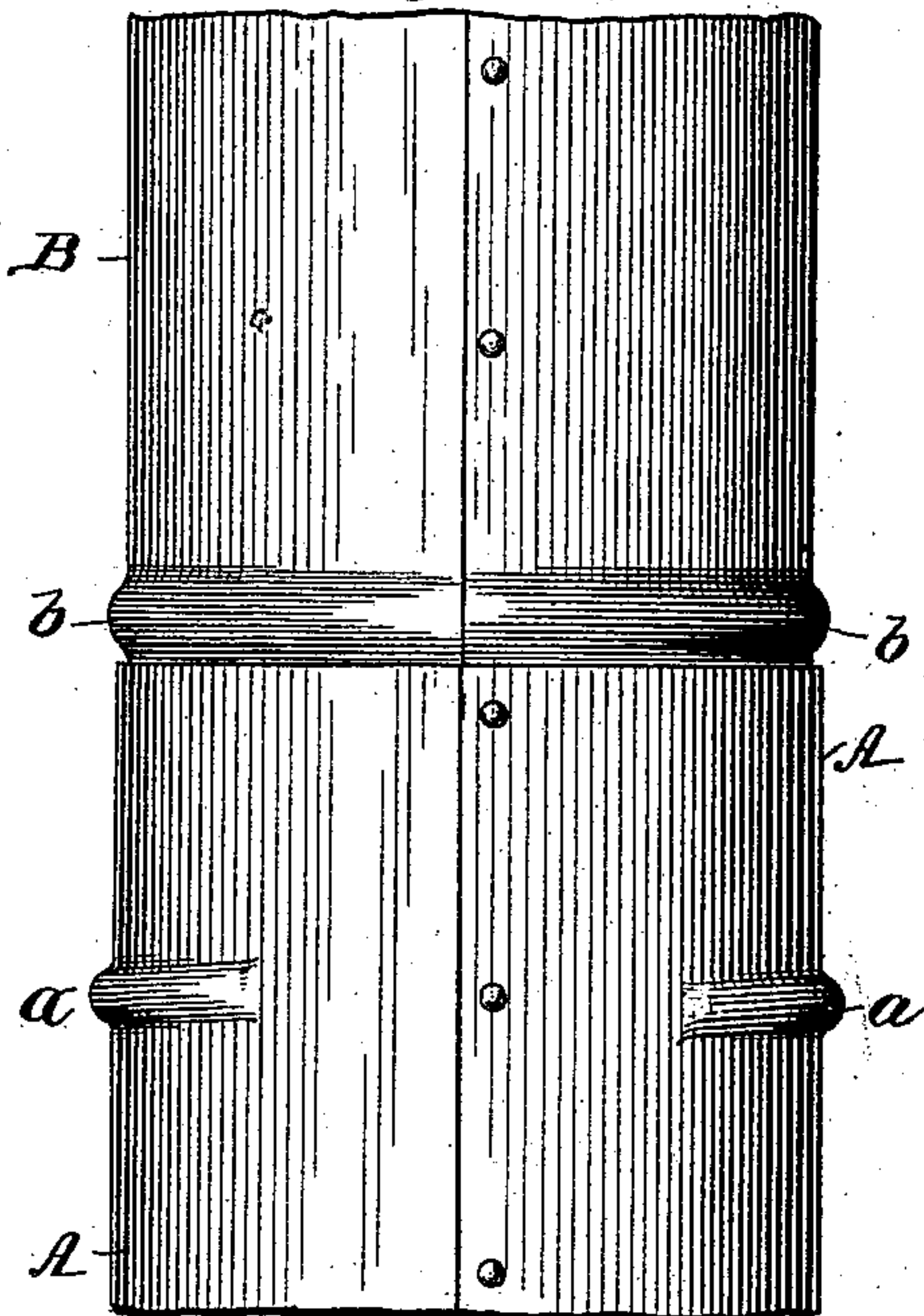


Fig. 2.

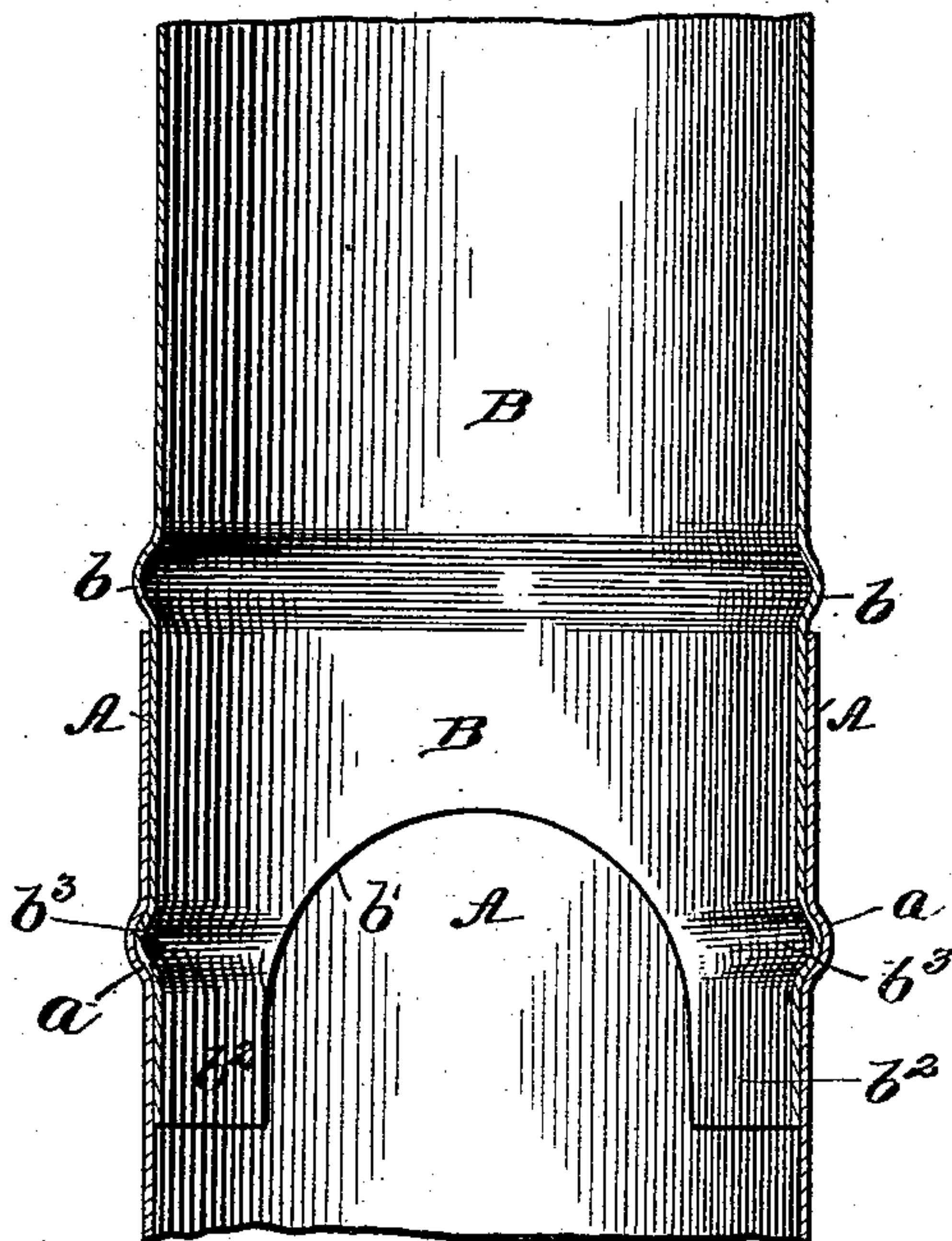


Fig. 3.

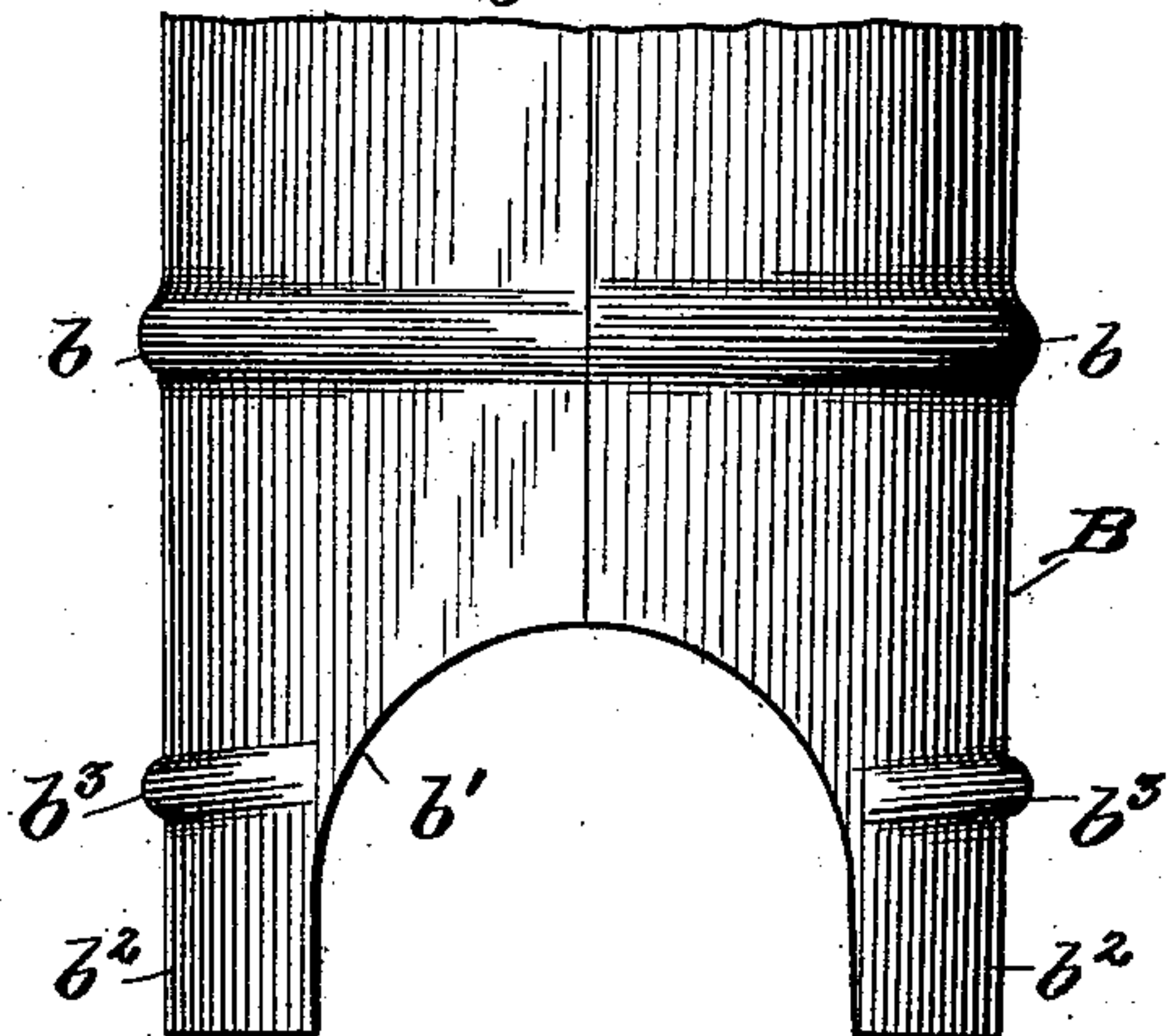


Fig. 4.

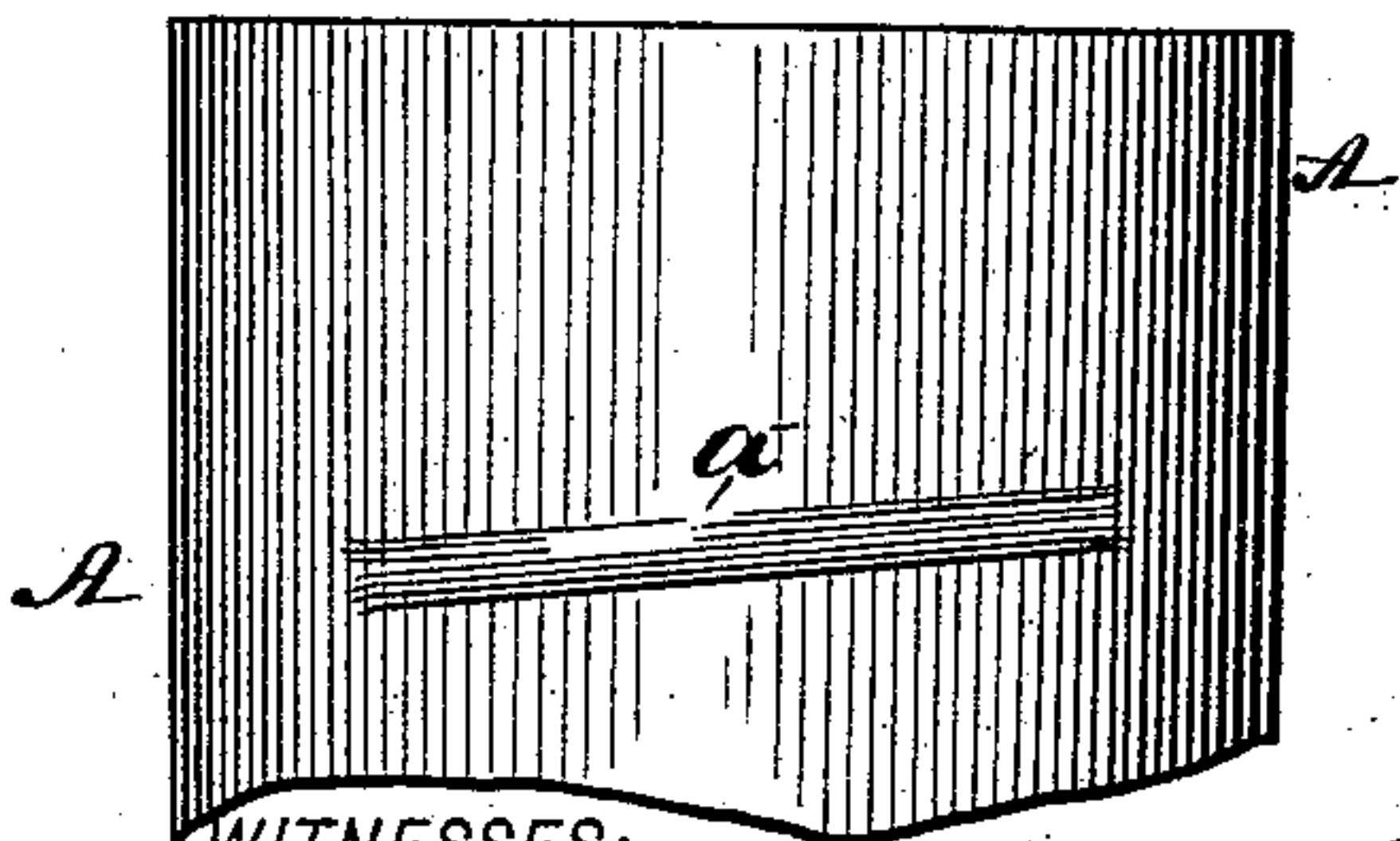
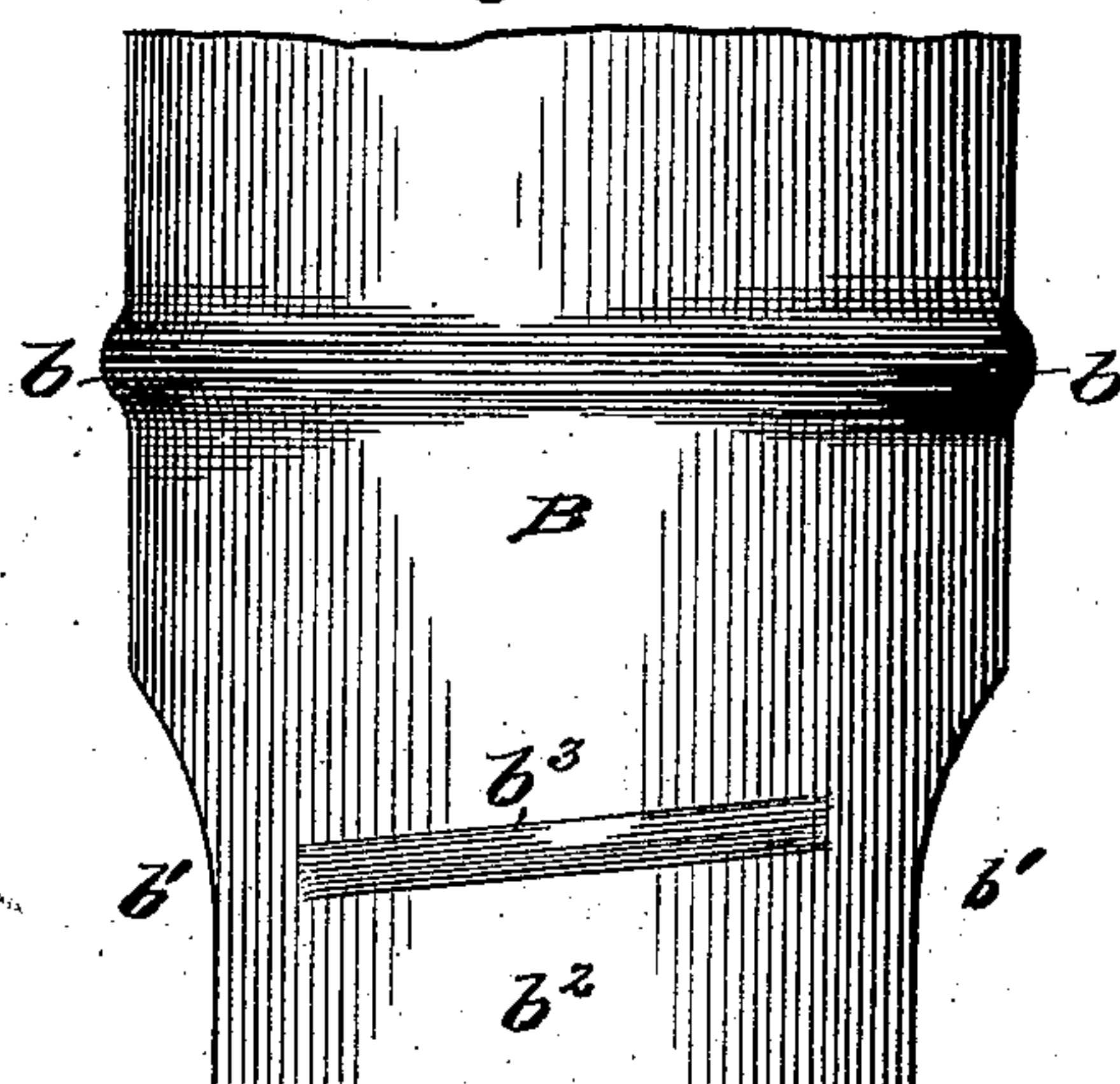
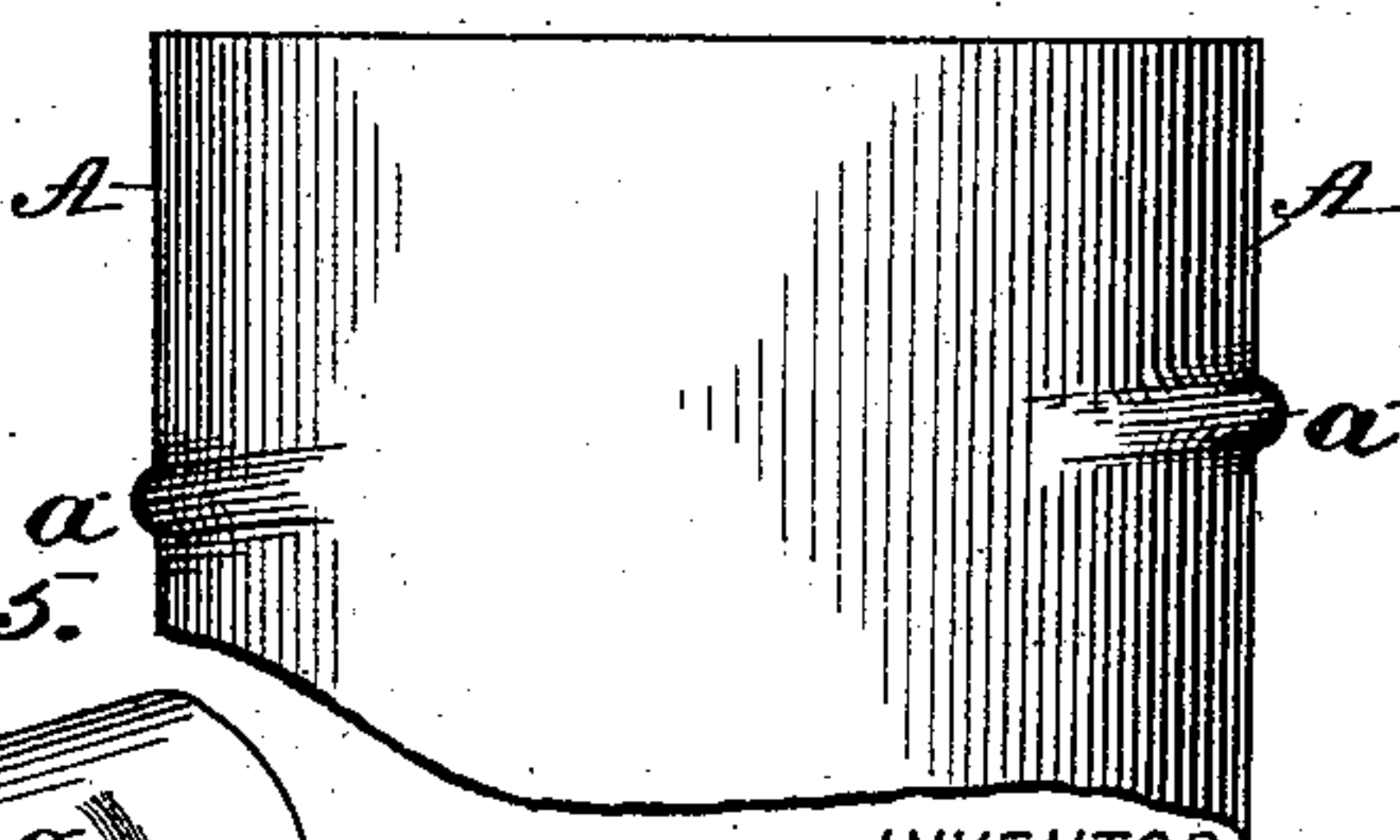
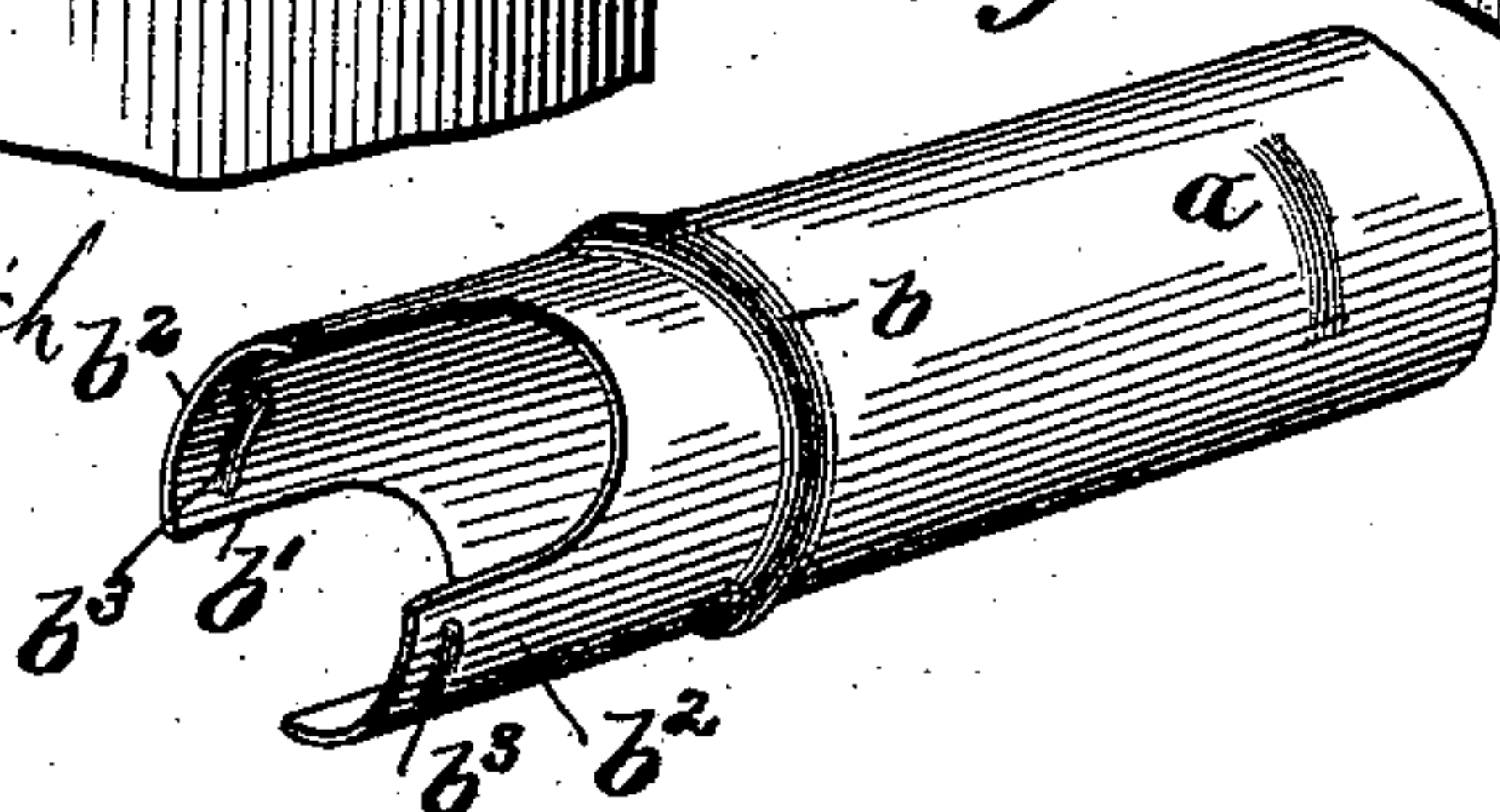


Fig. 5.



WITNESSES:

Fred G. Dieterich
Amos W. Hart



INVENTOR

Josiah E. Smiley.

BY

Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSIAH E. SMILEY, OF SMILEY, OHIO.

STOVEPIPE-JOINT.

SPECIFICATION forming part of Letters Patent No. 528,816, dated November 6, 1894.

Application filed March 22, 1894. Serial No. 504,665. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH E. SMILEY, residing at Smiley, Paulding county, in the State of Ohio, have invented a new and useful Improvement in Stovepipe-Joints, of which the following is a specification.

My invention is an improvement in the class of stove-pipes whose sections are connected by joints that are locked by means of devices which permit detachment of the sections when desired.

I have adopted the construction and combination of parts hereinafter described, and shown in accompanying drawings, in which—

Figure 1 is a side view of the ends of two stove-pipe lengths, or sections, connected and interlocked by my improved joint. Fig. 2 is a central longitudinal section of the same. Figs. 3 and 4 are side views of the same parts detached, but placed end to end in the position required for engagement. Fig. 5 is a perspective view of a complete stove-pipe length, or section, embodying my invention.

The larger or receiving end of the stove-pipe "length" or section, A, is provided with two sections, of a spiral groove, or grooves, a , the same being arranged directly opposite each other, preferably, at a distance of about two, or two and a half inches from the end of the pipe section. Thus one half the circumference of the pipe section, A, is grooved, and the other half plain or ungrooved.

The smaller or entering end of the stove-pipe section, B, has the usual circumferential stop-collar, or rib, b , and otherwise possesses the following characteristics, namely: It is cut out at the end on each side, or, in other words, provided with deep and approximately semi-circular notches, b' , and the intervening portions, b^2 , which constitute one half the circumference of the pipe, are provided with spiral ribs, b^3 , which correspond in pitch with the grooves, a , in the receiving end of pipe section, A. The said ribs, b^3 , are located at the same distance from the stop-collar, b , of pipe section, B, as the grooves, a , are from the narrowest end of section, A. To connect the said sections, the notched end of section, B, is inverted in section, A, with its ribbed portions, b^2 , in position to coincide with the plain or ungrooved portions of the latter which intervene the grooves, a . The two sections are forced together until the end of section, A, abuts the stop-collar, b , of section B, and then the latter is rotated one fourth of its circum-

ference, which causes the spiral ribs, b' , to enter and lie in the spiral grooves, a , thus locking the two sections together. To disengage the said sections, it is obvious the above-described operation must be reversed; that is to say, the section, B, is rotated one fourth of its circumference backward, or to the left, thus bringing the parts, b^2 , of section, B, into coincidence with the ungrooved portions of the other section, A, when the said sections may be readily drawn apart.

It will be noted, that, by reason of the notches, b' , in section, B, the intervening portions, b^2 , are rendered elastic to a considerable degree, so that they yield readily when inserted in section, A, notwithstanding the projection of the ribs, b^3 , from their outer surfaces.

The grooves and ribs are formed by the same means, namely, by integral hollow projections formed by means of a suitable tool or machine.

Having thus described my invention, what I claim is—

1. The combination of two pipe sections, one of which has notches in one end and intervening elastic portions provided with spiral ribs, the other section having corresponding spiral grooves arranged oppositely, as shown and described.

2. The combination, with a pipe section, having spiral grooves arranged oppositely, in its receiving end, and a section provided with a stop-collar, and having notches in its entering end, and spiral ribs formed on the elastic portions that intervene said notches, the arrangement of said grooves and ribs coinciding, as shown and described, so that when the two pipe sections are connected, the ribbed portions of the entering section enter the plain spaces which intervene the grooves of the other section, and then, upon rotating one section, the ribs and grooves interlock, as specified.

3. As an improved article of manufacture, a stove-pipe section having its entering end provided with spiral grooves which are separated by plain spaces, and its entering end provided with spiral ribs and intervening notches, the said grooves and ribs coinciding in arrangement and pitch, as specified.

JOSIAH E. SMILEY.

Witnesses:

MARTHA A. SMILEY,
ORRIS E. BROWN.