

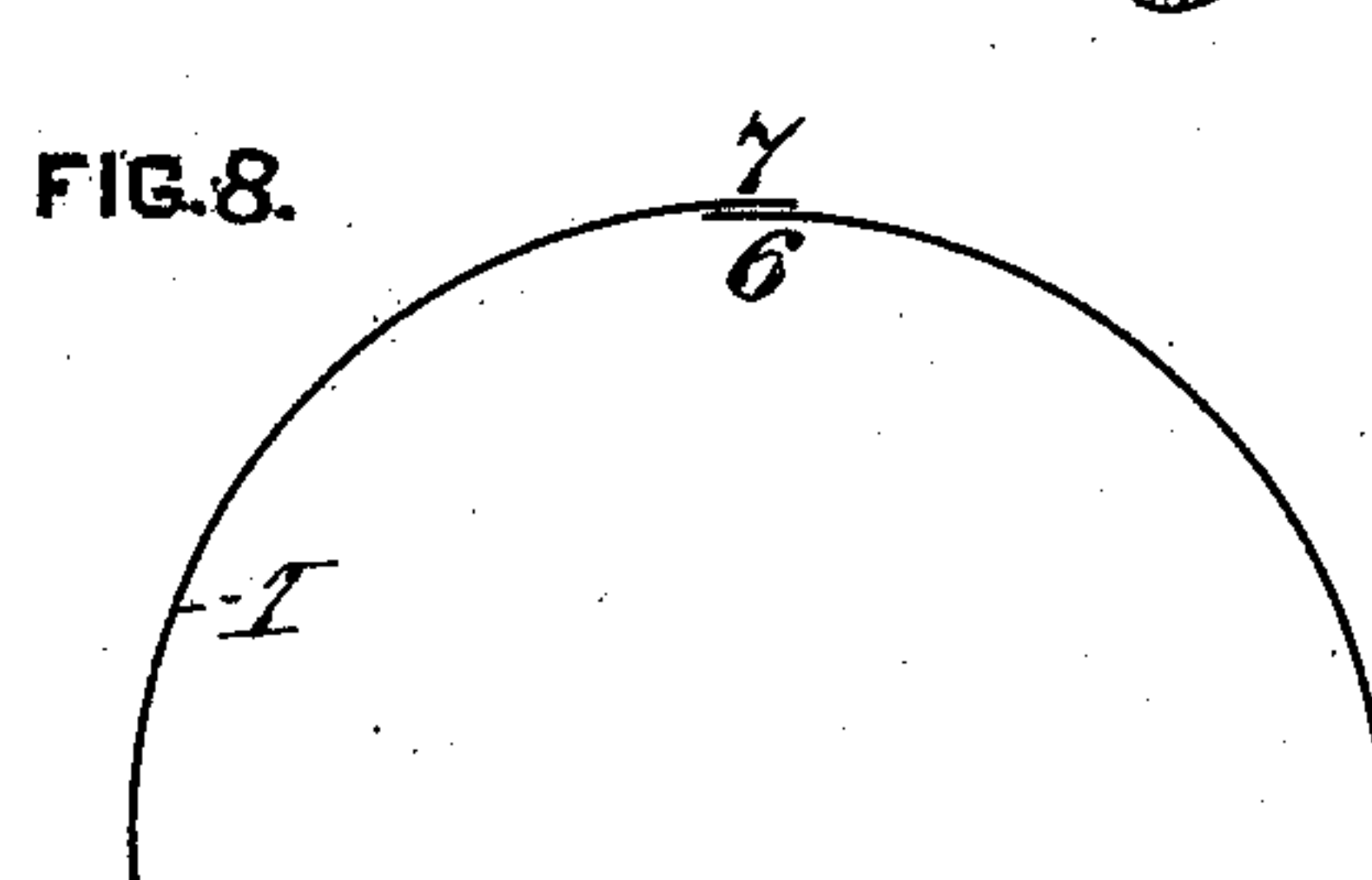
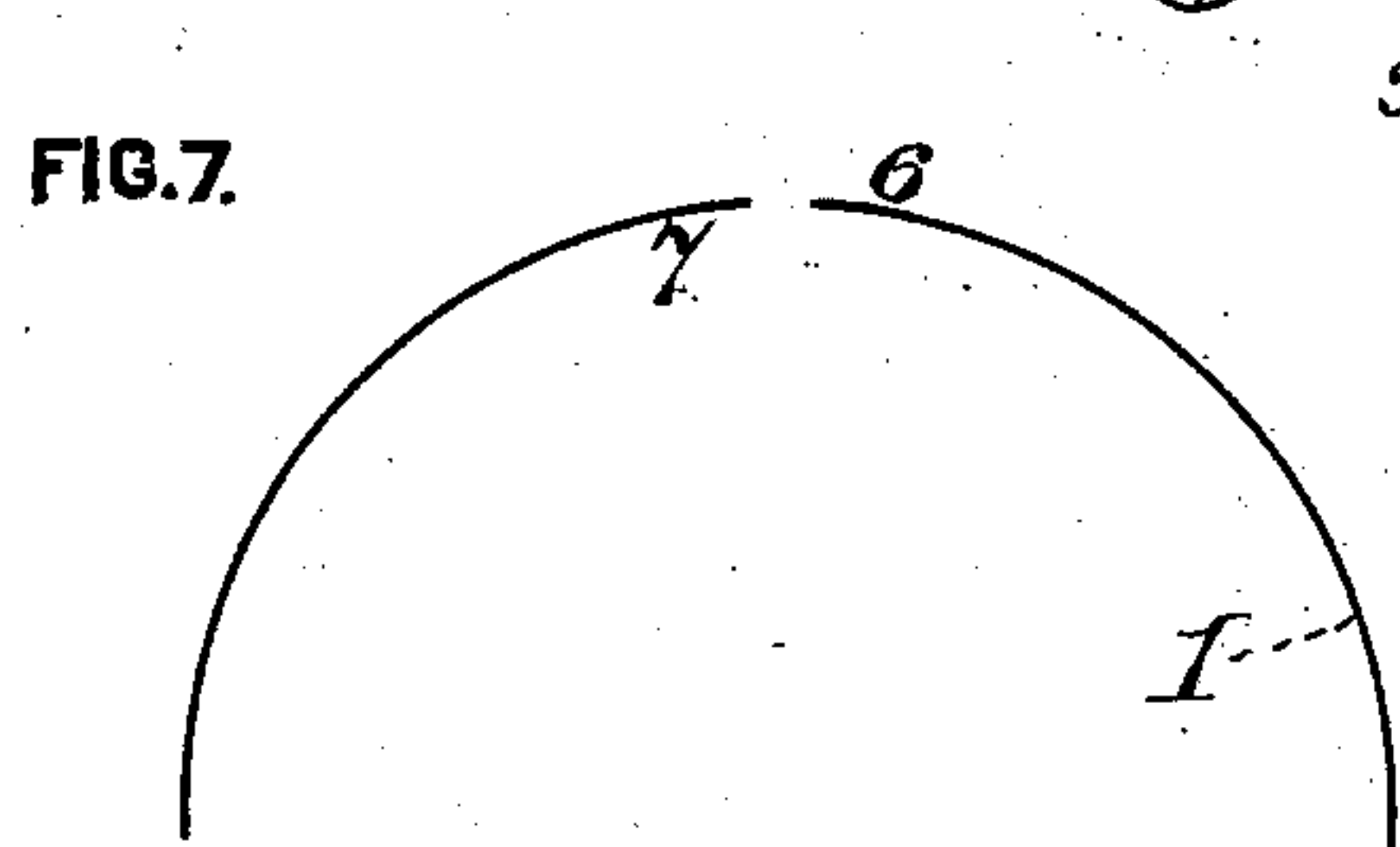
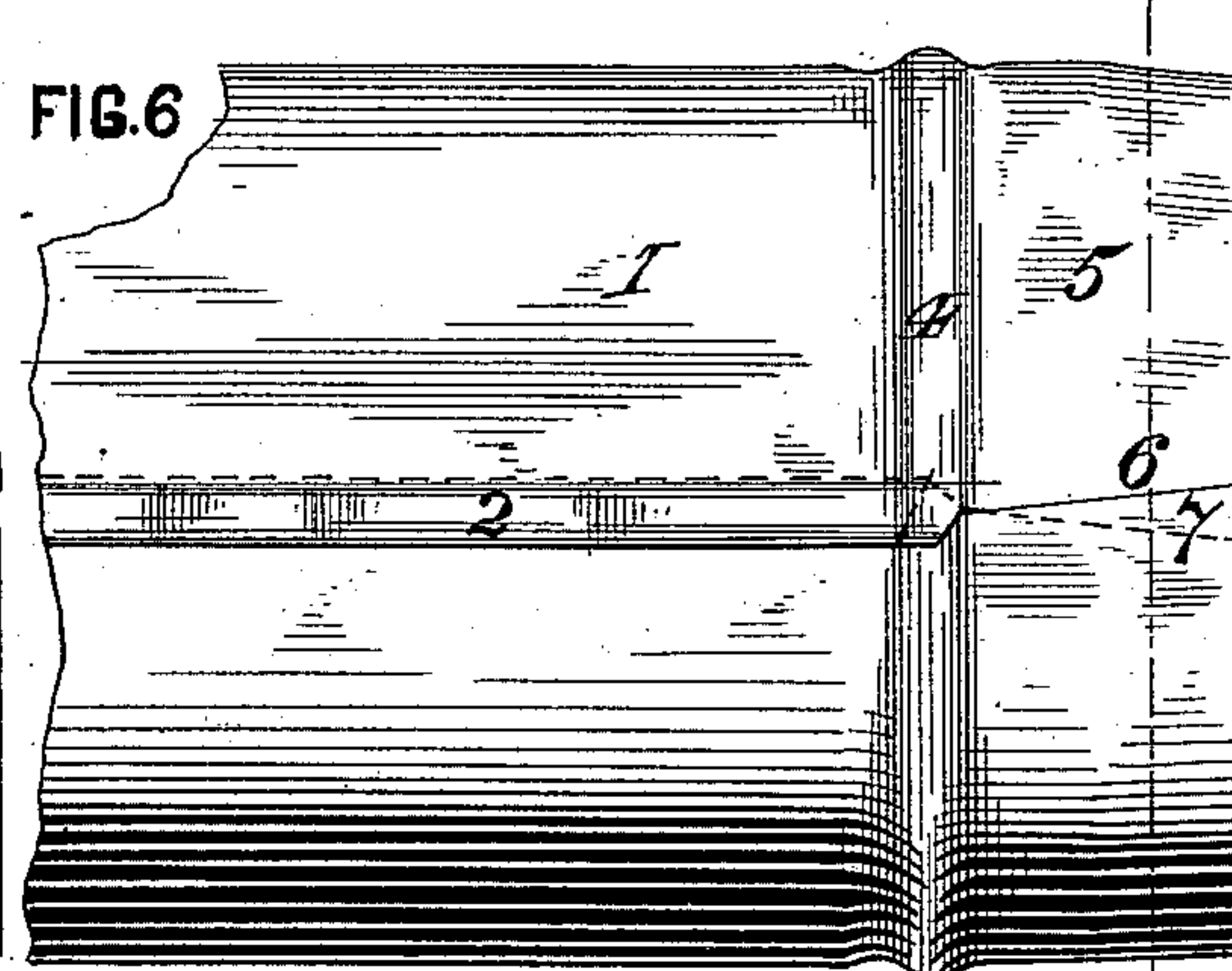
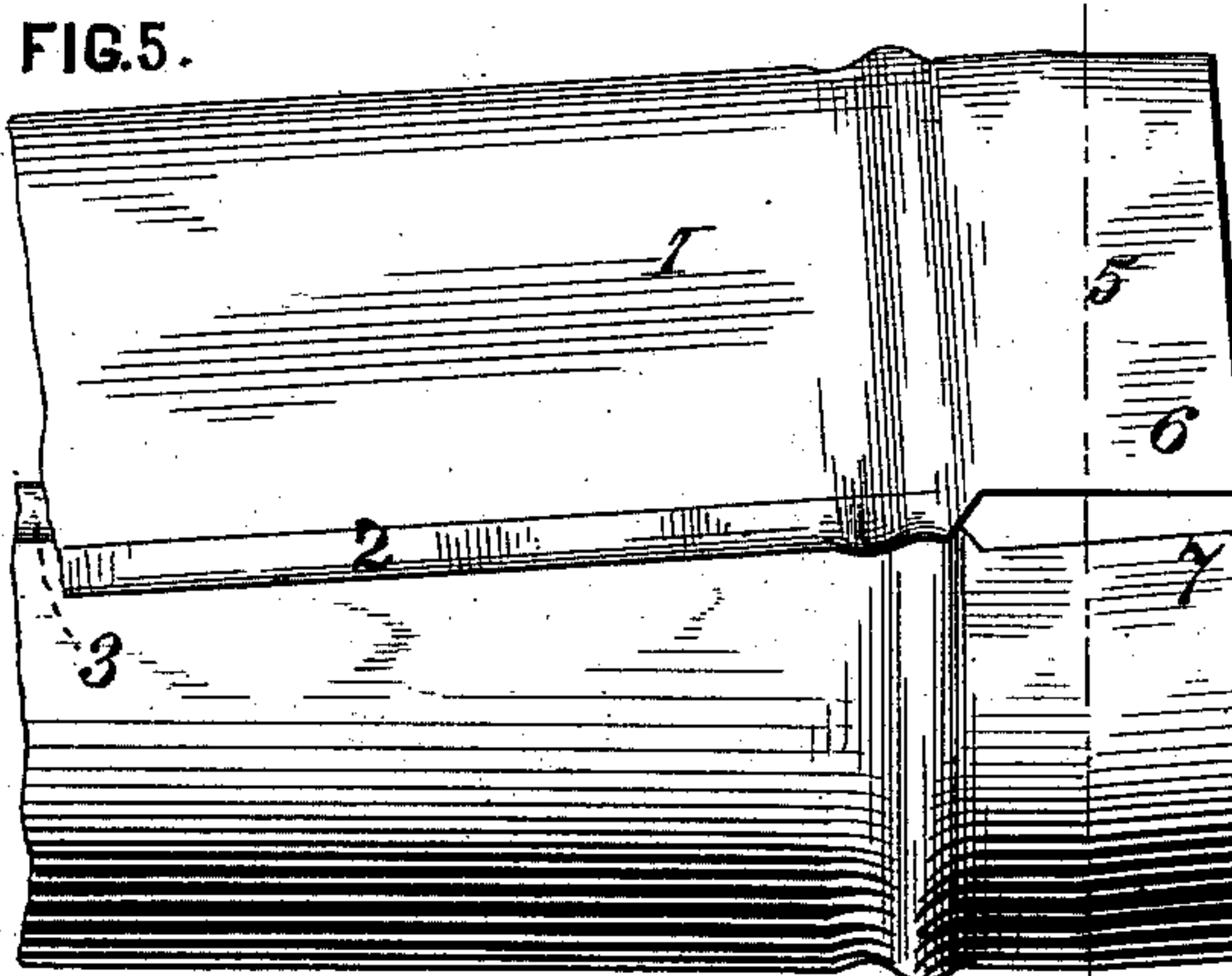
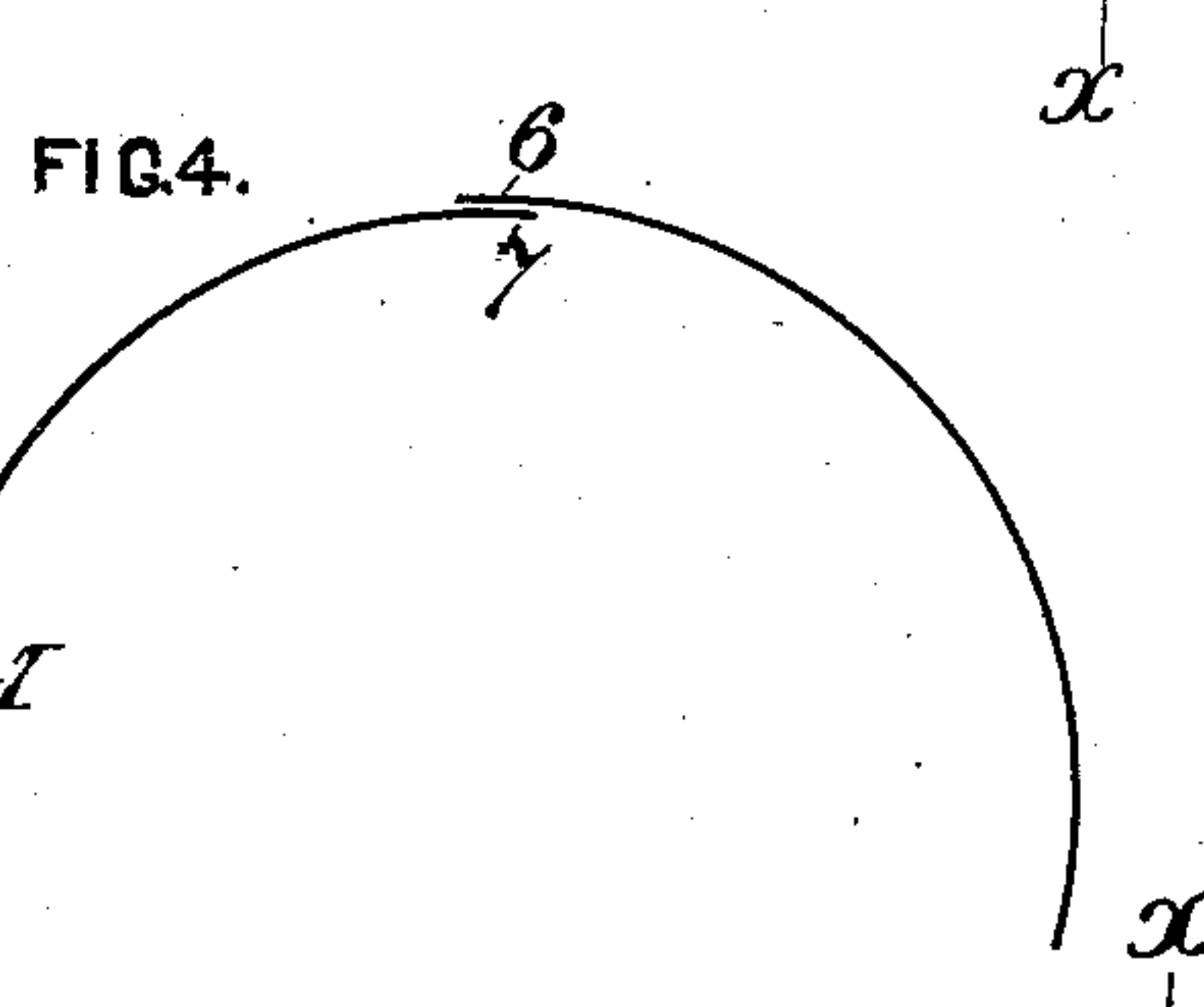
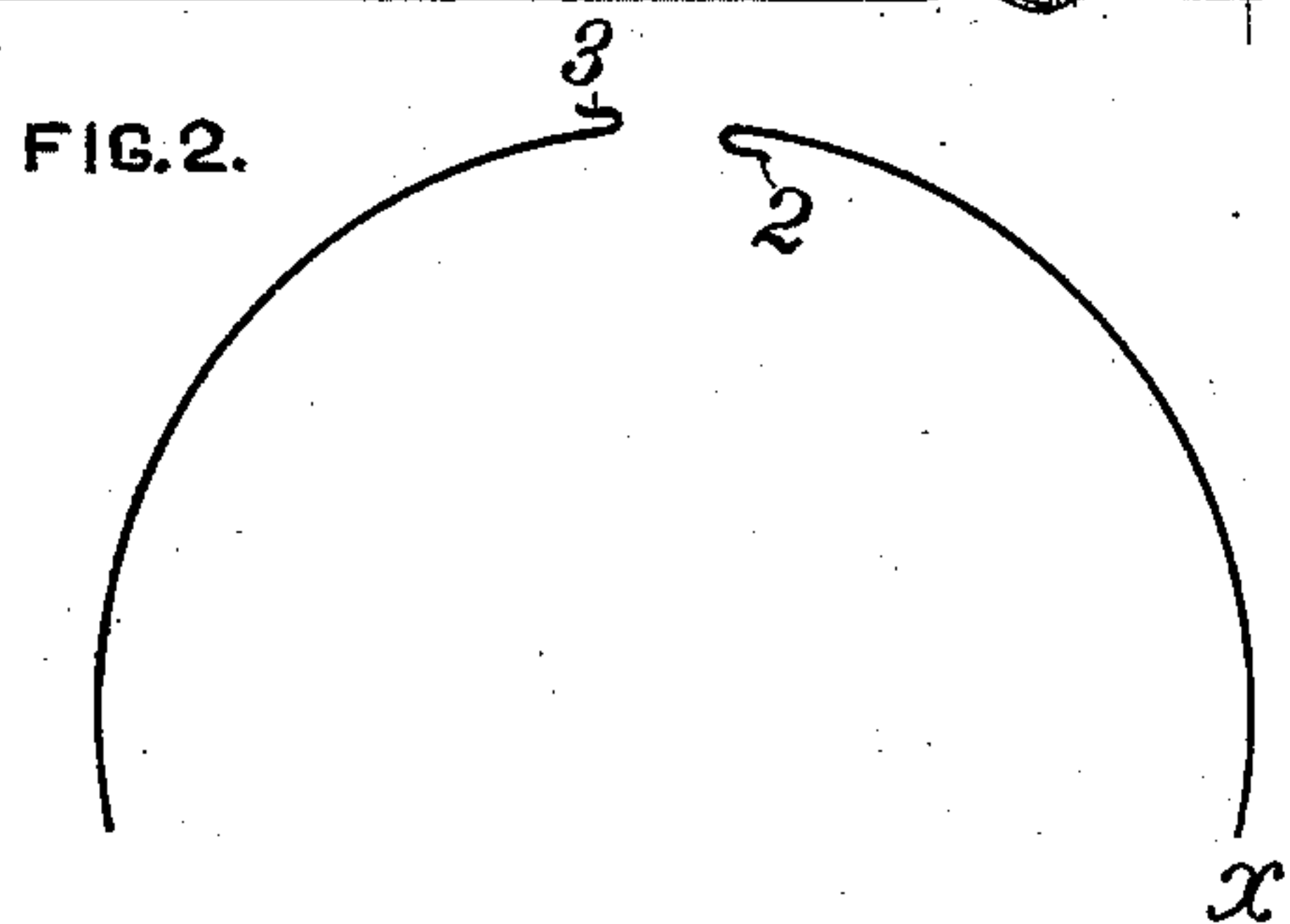
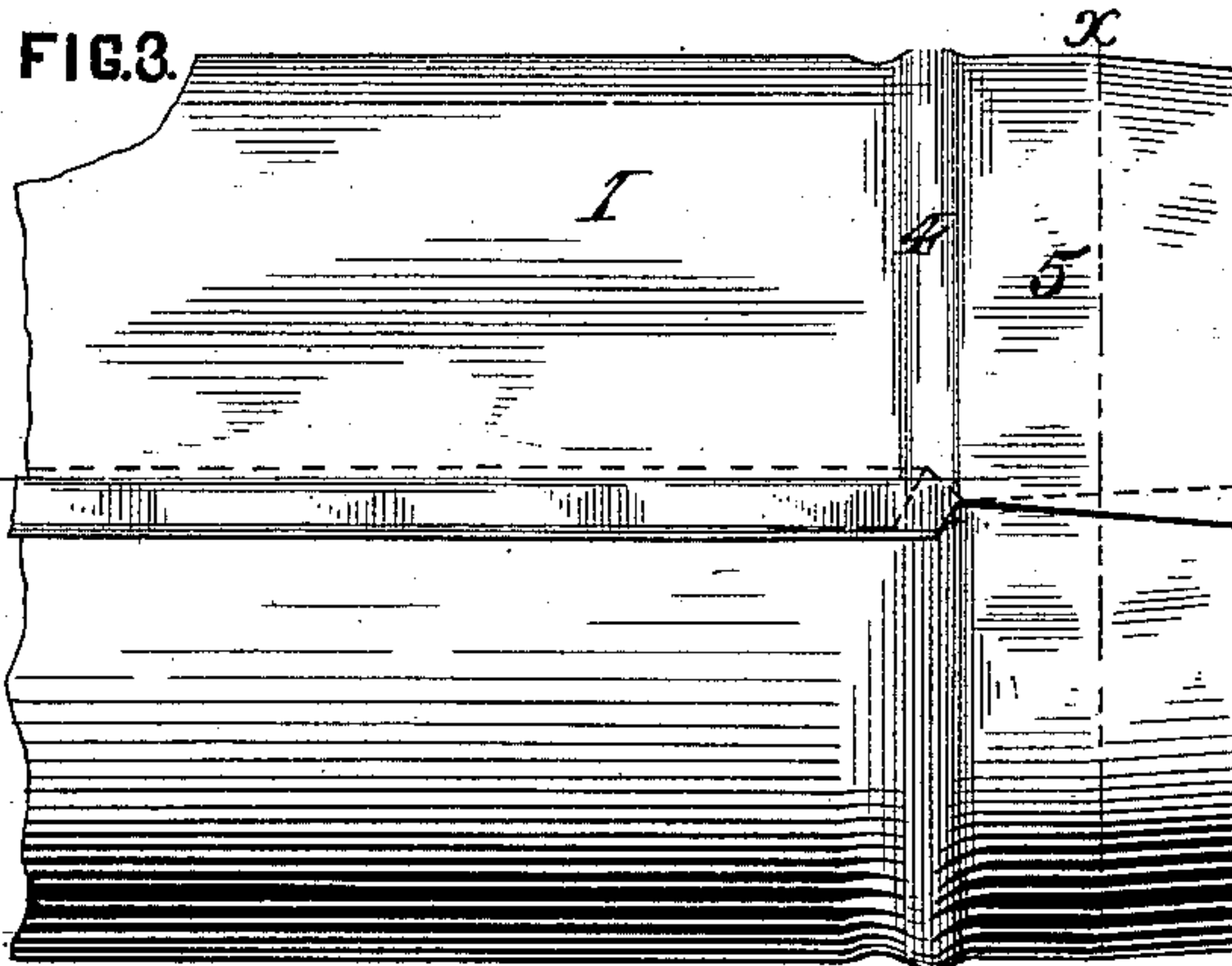
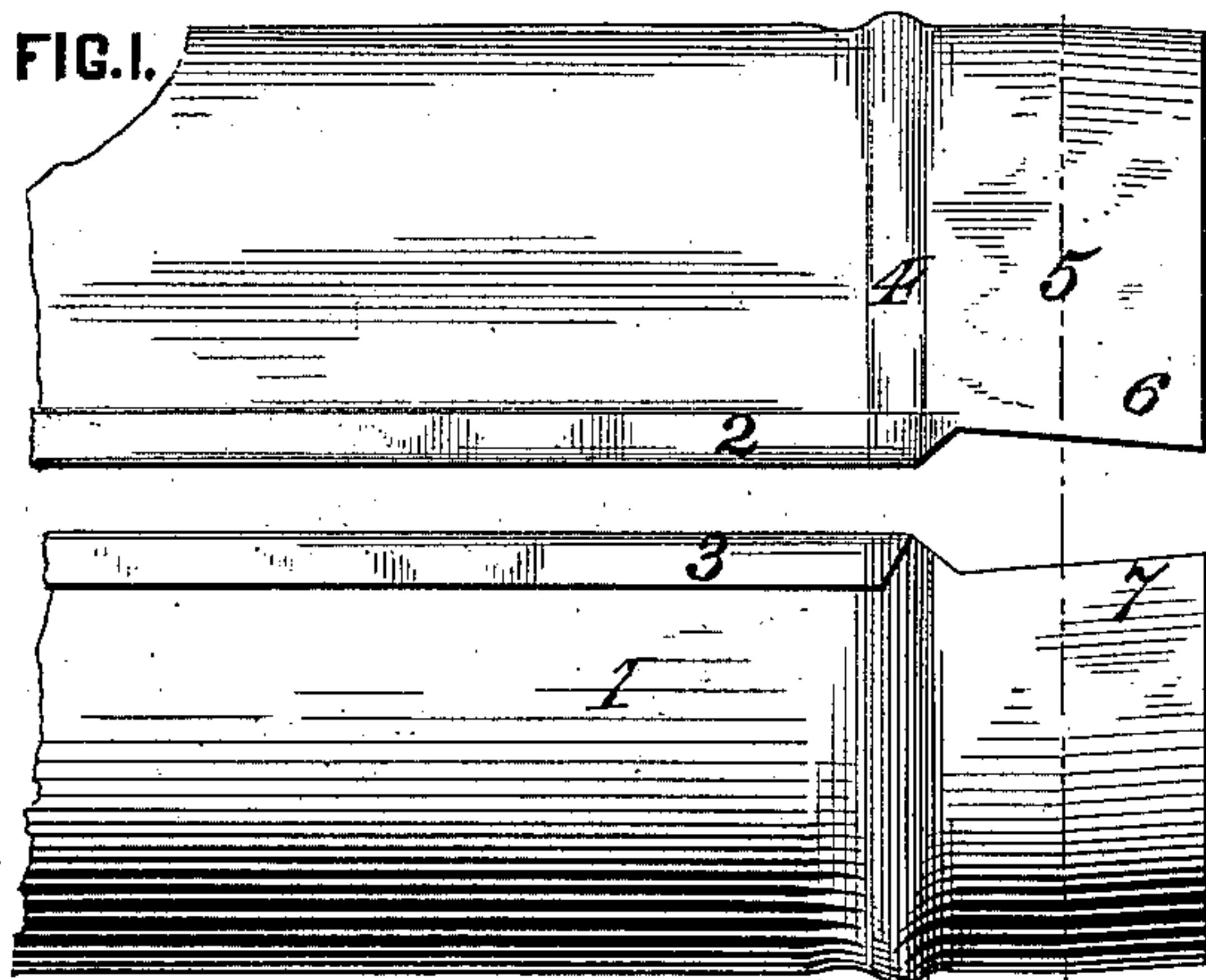
(No Model.)

2 Sheets—Sheet 1.

U. D. ALEXANDER.
STOVE PIPE.

No. 381,871.

Patented Apr. 24, 1888.



WITNESSES:

J. Howard Bell
F. E. Gaither

INVENTOR,

Urbane D. Alexander
by Dan W. Wolcott Att'y

(No Model.)

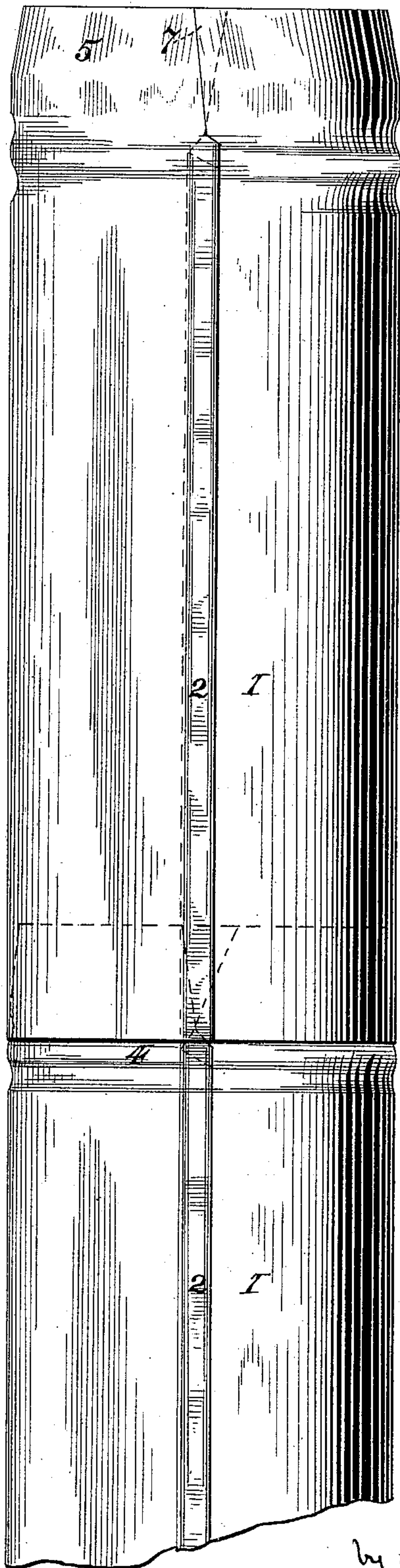
2 Sheets—Sheet 2.

U. D. ALEXANDER.
STOVE PIPE.

No. 381,871.

Patented Apr. 24, 1888.

FIG. 9.



WITNESSES:

Thorndew Bell
F. E. Haither

INVENTOR,

Urbana D. Alexander.
by Danvers S. Wolcott
Atty.

UNITED STATES PATENT OFFICE.

URBANA D. ALEXANDER, OF CANONSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THE CANONSBURG IRON AND STEEL COMPANY, OF SAME PLACE.

STOVE-PIPE.

SPECIFICATION forming part of Letters Patent No. 381,871, dated April 24, 1888.

Application filed August 19, 1887. Serial No. 247,357. (No model.)

To all whom it may concern:

Be it known that I, URBANA D. ALEXANDER, residing at Canonsburg, in the county of Washington and State of Pennsylvania, a citizen of the United States, have invented or discovered certain new and useful Improvements in Stove-Pipes, of which improvements the following is a specification.

The invention herein relates to improvements in joints for stove-pipe sections, and has for its object such a construction and arrangement of the meeting edges of the sheet forming the sections that the same may be easily and securely locked together when required for use and may be quickly unlocked, so that a number of sheets or sections may be nested together for transportation or storage.

To these ends the invention consists in the construction and combination of parts, substantially as hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figures 1, 3, 5, and 6 are plan views of pipe sections embodying my invention, and showing the joint open in different positions assumed in locking and locked. Figs. 2, 4, 7, and 8 are transverse sectional views on the lines *xx* of Figs. 1, 3, 5, and 6, respectively. Fig. 9 is a plan view of two pipe-sections embodying my invention joined together.

In the practice of my invention I form along the adjacent edges of the sheet 1 the members or parts 2 and 3 of the ordinary interlocking joint, such joint being of such a character, as shown, that when the members are in engagement the sheet will be held in cylindrical form as against any outward pressure, but can be readily collapsed and the members of the joint disengaged by pressure on the sides inwardly. This joint extends from what might be termed the "bowl" end only to the bead 4, formed at the base of the neck 5 of the section. The adjacent edges of the neck portion 5 of the section are cut away with re-entering angles, or notched, as shown in Figs. 1 and 5, in order to permit of said edges being interlocked and forming what I, for convenience,

term the "tongues" 6 and 7, as will be more fully described.

In order to lock the adjacent edges of a section of pipe, the members 2 and 3 of the joint are caused to engage each other for the entire length of the section, as shown in Fig. 3, when the tongues 6 and 7 of the neck will have the relative positions shown in Fig. 4, the tongue 6, which is on the same edge as the outside member, 2, of the joint, being outside of the tongue 7 and overlapping the same. The operator then holds the members 2 and 3 of the joint in engagement with each other at the point *a*, or where the joint ends, and at the same time collapses the opposite end of the section, causing one edge of the sheet to slide over the other, (see Fig. 5,) the two parts turning on each other at the point *a* as on a pivot, until the tongue 7 is moved out from under the tongue 6. (See Figs. 5 and 7.) The tongue 6 is then pressed inwardly or the tongue 7 pulled outwardly, and the bowl end of the pipe is allowed to expand back to normal position, the two members of the joint again interlocking throughout their entire length. As the section springs back to normal position, care should be taken that the tongue 7, which is on the same edge as the inner member, 3, of the joint passes outside of and over the tongue 6, thereby locking the neck or small end of the pipe-section into its cylindrical form as against either inward or outward pressure.

In erecting a line of stove-pipe the neck or small end of one section of pipe, which has been locked at its small end, as above described, is inserted into the large end of the next adjacent section, as shown in Fig. 9, thereby preventing any collapsing of the larger end of the section.

It will be noticed that hooks or joint members 2 and 3 are formed parallel with the wall of the body of the section, and will therefore prevent any radial as well as collapsing movement of the edges of the section.

I am aware that pipe-sections have been formed having a tongue along one of the edges bent out radially from the body of the pipe

and a radial hook formed on the other edge thereof, in combination with end tongues constructed to overlap in a contrary direction to said tongue and hook.

5 I claim herein as my invention--

A stove-pipe section having the joint or locking members 2 and 3 along its meeting edges, and having said edges notched or cut away with re-entering angles, as described, 10 whereby the edges of the section are permitted

to cross each other at or near the ends of the hooks, and to overlap each other at or near the end of a section, substantially as described.

In testimony whereof I have hereunto set my hand.

URBANA D. ALEXANDER.

Witnesses:

J. LINCOLN RALPH,

DARWIN S. WOLCOTT.