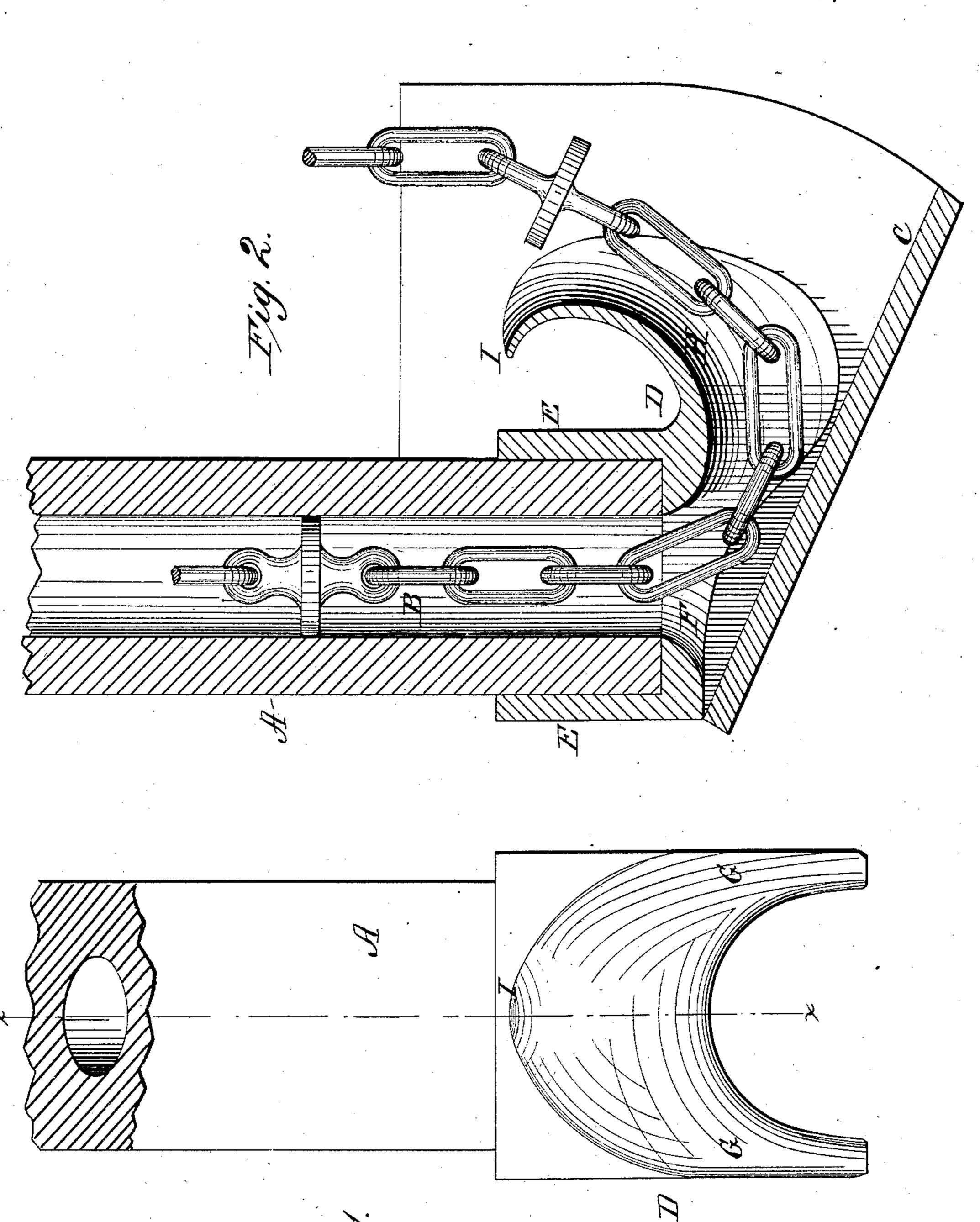
(No Model.)

J. B. BROWN.

PUMP GUARD.

No. 314,912.

Patented Mar. 31, 1885.



WITNESSES:

W.W. Hollingsworth

W. Heven.

INVENTOR:

BY MI ST

ATTORNEYS.

United States Patent Office.

JAMES B. BROWN, OF HANNIBAL, MISSOURI.

PUMP-GUARD.

SPECIFICATION forming part of Letters Patent No. 314,912, dated March 31, 1885.

Application filed December 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, James B. Brown, a citizen of the United States, residing at Hannibal, in the county of Marion and State of Missouri, have invented certain new and useful Improvements in Pump-Guards, of which the following is a description.

The object of this invention is to dispense with the usual foot-roller which guides the chain of a chain-pump into the lower end of the tube and guards the tube from wear, and to substitute therefor a device less likely to get out of order by wear and rough usage, and one that will serve all the purposes of a roller equally well without any moving parts.

To this end my invention consists in the construction and combination of parts forming a pump-guard, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a portion of a chain-pump tube, showing my guard attached thereto, and Fig. 2 is a vertical section of the same at the line xx, showing a chain in elevation.

A represents the pump-tube; B, the chain provided with buckets common to chain-pumps, and C the inclined bottom of the shoe, which keeps the chain from striking the bot-

D is my guard, which is made of metal or other hard material not likely to be softened by constant immersion in water. It is provided with two upward-projecting flanges, E, by which it is secured to the lower end of the

tube A. It has a down-facing trumpet-shaped mouth at F, coincident with the mouth of the tube, and completely shielding the latter from wear consequent to the passage of the chain in turning its lower curve.

To properly guide the chain to the mouth F, I extend the said mouth to one side and flare it out with a broad lip, G. The upper side or roof H of this sidewise-extended mouth curves over so as to face upward at the lip I, in order that it may guide the chain easily into the tube without any possibility of the chain being caught, even though it be violently agitated.

I am aware that a pump-guard having a 50 flaring mouth of similar form to mine has been before shown in the English Patent No. 530, of 1857, and I do not claim the same, broadly.

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

The combination, in a pump-guard, of the trumpet-shaped mouth F, extending to one side and flared out, forming the lips G G I, and the flanges E, projecting upward at a sufficient distance from the sides of the upper 60 opening of the mouth F to admit the pumptube A between the flanges and the said opening, substantially as shown and described, whereby the guard may be secured to a wooden tube and the end of the tube be guarded from 65 being worn by the chain.

JAMES B. BROWN.

Witnesses:

W. H. BREWINGTON, E. E. RAY.