A. S. MACKEY.

HINGE FOR GATE FRAMES.

APPLICATION FILED JAN. 13, 1908.

914,437. Patented Mar. 9, 1909.

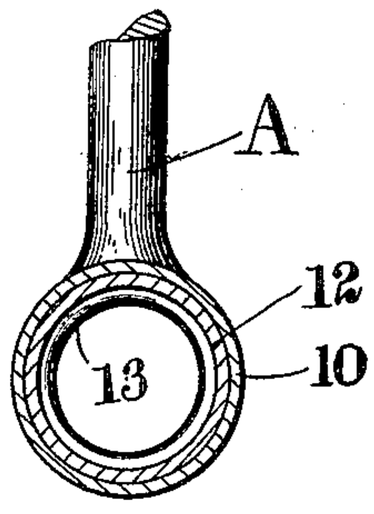

FIG. 2.

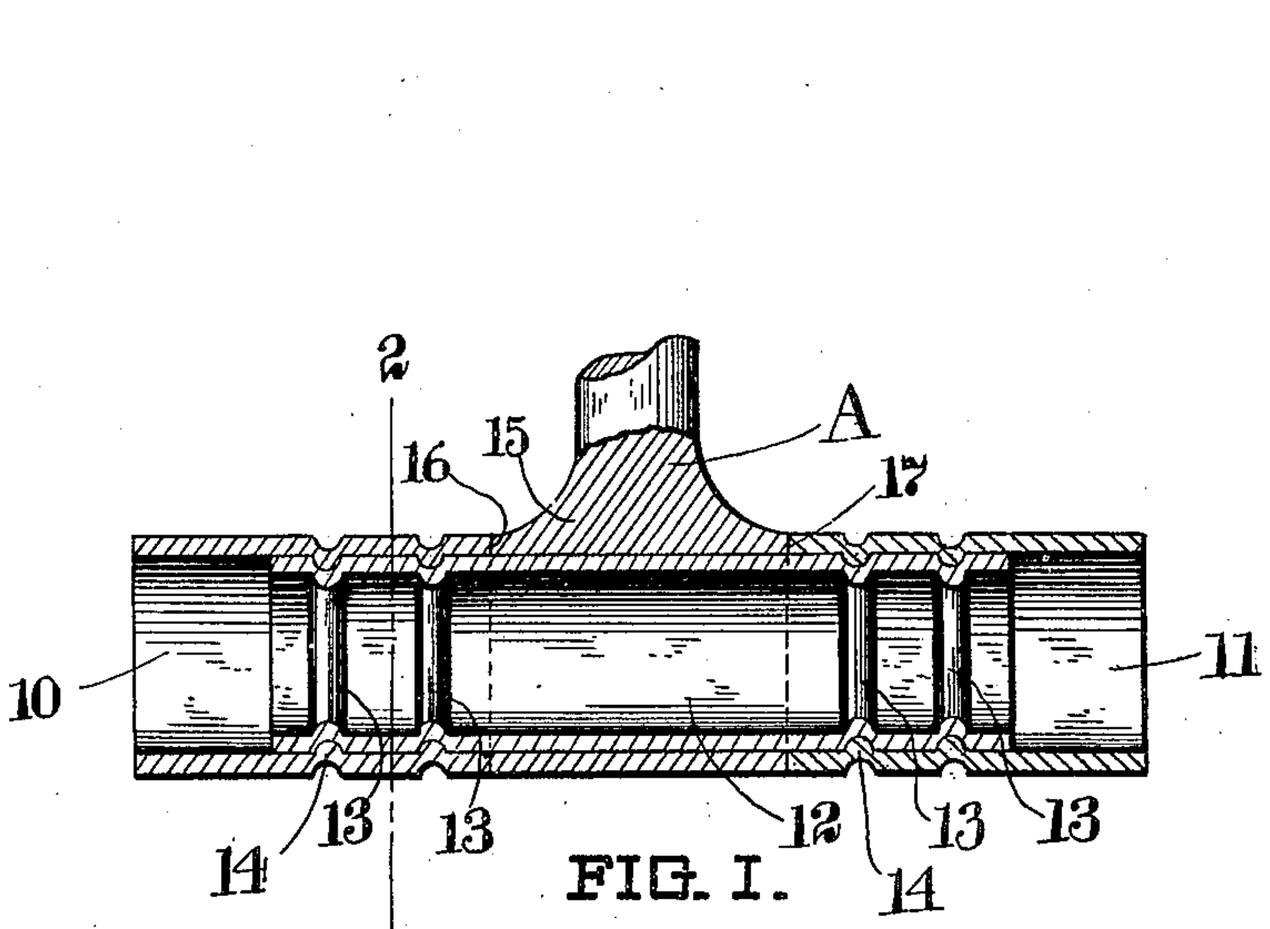

FIG. 1.

WITNESSES

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HINGE FOR GATE-FRAMES.

No. 914,437. Specification of Letters Patent. Patented March 9, 1909.

Application filed January 13, 1908. Serial No. 410,656.

To all whom it may concern:

Be it known that I, ALEXANDER SCOTT MACKEY, a subject of the King of Great Britain, residing at the city of Ottawa, in the county of Carleton, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Hinges for Gate-Frames, of which the following is a specification.

My invention relates to improvements in hinges for gate frames, particularly those constructed of hollow tubing, and the objects of my invention are to provide a simple but rigid form of hinge which will exclude the water from the interior of the pipe and in which there will be as little opportunity as possible for the water to enter between the fixed and rotary member, the details of the invention being described fully in the accompanying specifications and drawings.

In the drawings, Figure 1 is a longitudinal sectional view through the hinge. Fig. 2 is a section on the line 2—2, Fig. 1.

In the drawings, like characters of reference indicate corresponding parts in each figure.

Referring to the drawings, 10 and 11 represent the tubular members, which will, together with other members, form a gate frame of any suitable shape or character. These members are held in alinement with each other and are rigidly connected by an interior cylindrical member 12 having a plurality of peripheral annular grooves 13 formed in each end, and into which fit corresponding corrugations 14 formed on the interior of the members 10 and 11. In practically forming the joint, the said corrugations 14 are preferably formed in the members 10 and 11 after they are placed in position over the interior member, the said corrugations being conveniently formed by means of an ordinary pipe cutting tool, whose cutting element has been replaced by a disk having a rounded periphery, which will roll the corrugations into the pipe. The result of this operation is to very firmly and effectually lock the outer members to the interior members.

To complete the hinge, the bracket member A is provided having a sleeve 15 formed at the end thereof, which fits over the interior member 12 in the space between the two members 10 and 11 and has faces 16 and 17 on the edge thereof, which abut and fit closely to the ends of the members 10 and 11. The result of this is to form a water-tight joint between the two members. The bracket member A may be secured to any fixed support and in this case, the gate frame may swing on the bracket.

In case where the members 10 and 11 on the gate frame extend vertically either of the faces 16 or 17, will form an effectual bearing to give vertical support to the frame.

As many changes could be made in the above construction, and many apparently widely different embodiments of my invention, within the scope of the claim, could be made without departing from the spirit or scope thereof, it is intended that all matter contained in these specifications and drawings, shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

A hinge for gate frames, including an interior cylindrical member formed with peripheral grooves at each end, tubular end members having interior annular corrugations in engagement with the grooves on the interior member, the said members being non-rotatably connected to said interior member, a bracket member having a sleeve rotatably mounted on the interior member between the end members and being adapted to be secured to a fixed support, and having the ends of the sleeve abutting and fitting closely to the ends of the end members, whereby a water-tight joint will be provided, and support given to the end members when they are in a vertical direction.

Signed at Ottawa, this 7th day of January, 1908.

ALEXANDER SCOTT MACKEY.

In the presence of—

W. T. CUFF QEENI,

CORA BENNETT.