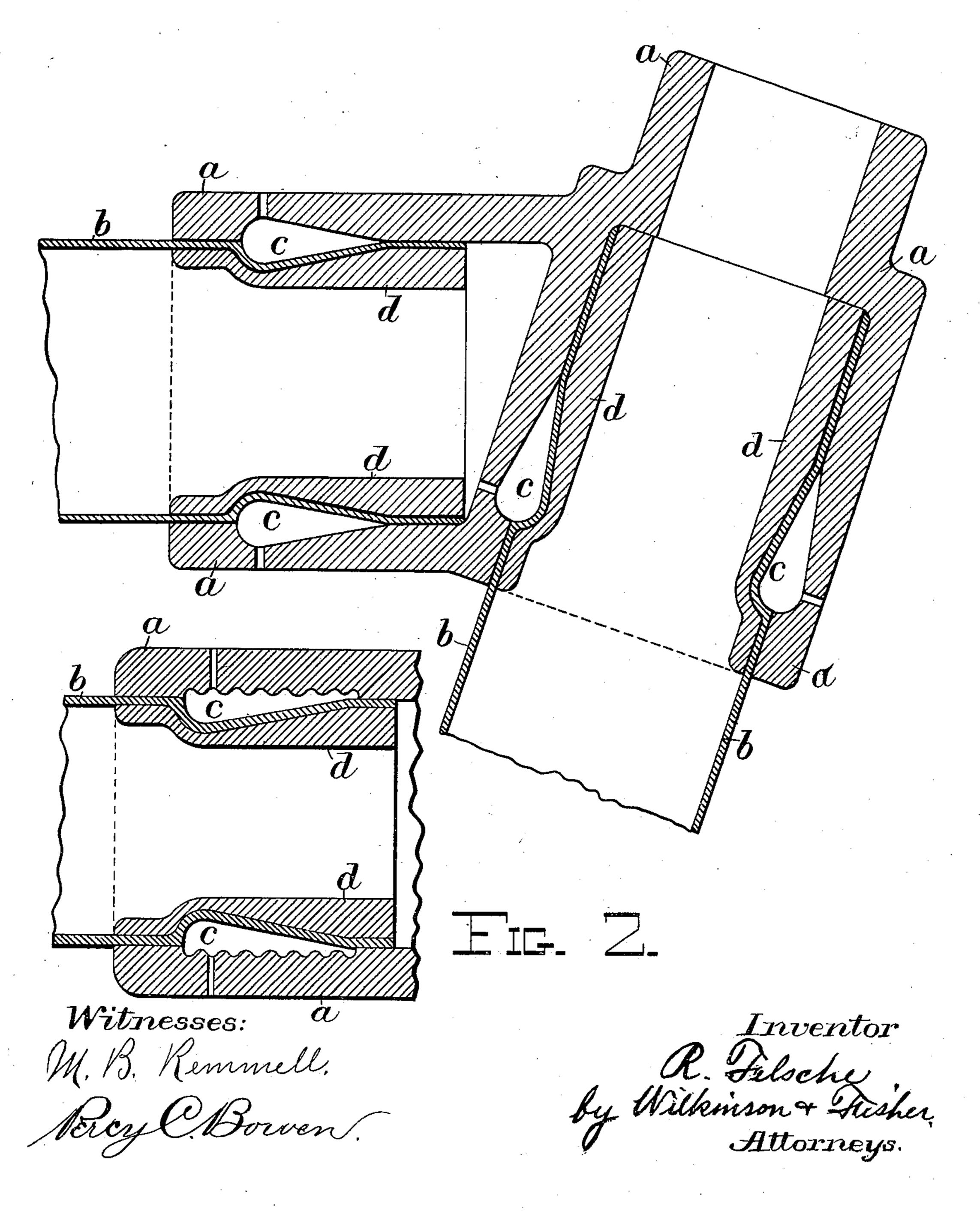
R. FELSCHE. TUBULAR JOINT FOR BICYCLES.

(Application filed Feb. 28, 1898.)

(No Model.)

EIG. 1



United States Patent Office.

REINHARD FELSCHE, OF MAGDEBURG, GERMANY.

TUBULAR JOINT FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 615,976, dated December 13, 1898.

Application filed February 28, 1898. Serial No. 672,118. (No model.)

To all whom it may concern:

Be it known that I, REINHARD FELSCHE, a German subject, residing at Magdeburg, Germany, have invented certain new and useful Improvements in Tubular Joints for Bicycles, of which the following is a specification.

My invention relates to tubular joints for bicycles; and its object is to provide a simple, cheap, and durable joint of this kind.

In the accompanying drawings, Figure 1 represents in cross-section part of the frame of a bicycle, showing tubular joints; and Fig. 2 is a cross-section of a modified form of joint.

a represents a part of the frame, which is bored out to form a sleeve, as shown, for the reception of the tube b. It is then still further hollowed, and holes are bored through the sides thereof for the reception of molten metal. In the tube b is inserted a tapering hollow ferrule d. The tube and ferrule are then partially collapsed by pressure, so that there is a space c nearly conical in cross-section between the sleeve and the tube. Into this space the molten metal is poured, forming a strong and simple joint.

In Fig. 2 is shown a modification in which the sleeve, instead of being hollowed out, is corrugated.

Having thus described my invention, what I claim as new, and desire to secure by Letters 30 Patent of the United States, is—

A tube-joint for cycles, composed of a perforated sleeve, said sleeve being hollowed out internally, a tube and an internal ferrule, said tube and ferrule each having an exterior degreesion, the tube and sleeve being so located with respect to each other as to leave a space between them which is wedge-shaped in cross-section, and a filling of easily-fusible metal in said space, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

REINHARD FELSCHE.

Witnesses:

PAUL MÜLLER, WILLIAM EGGELING.