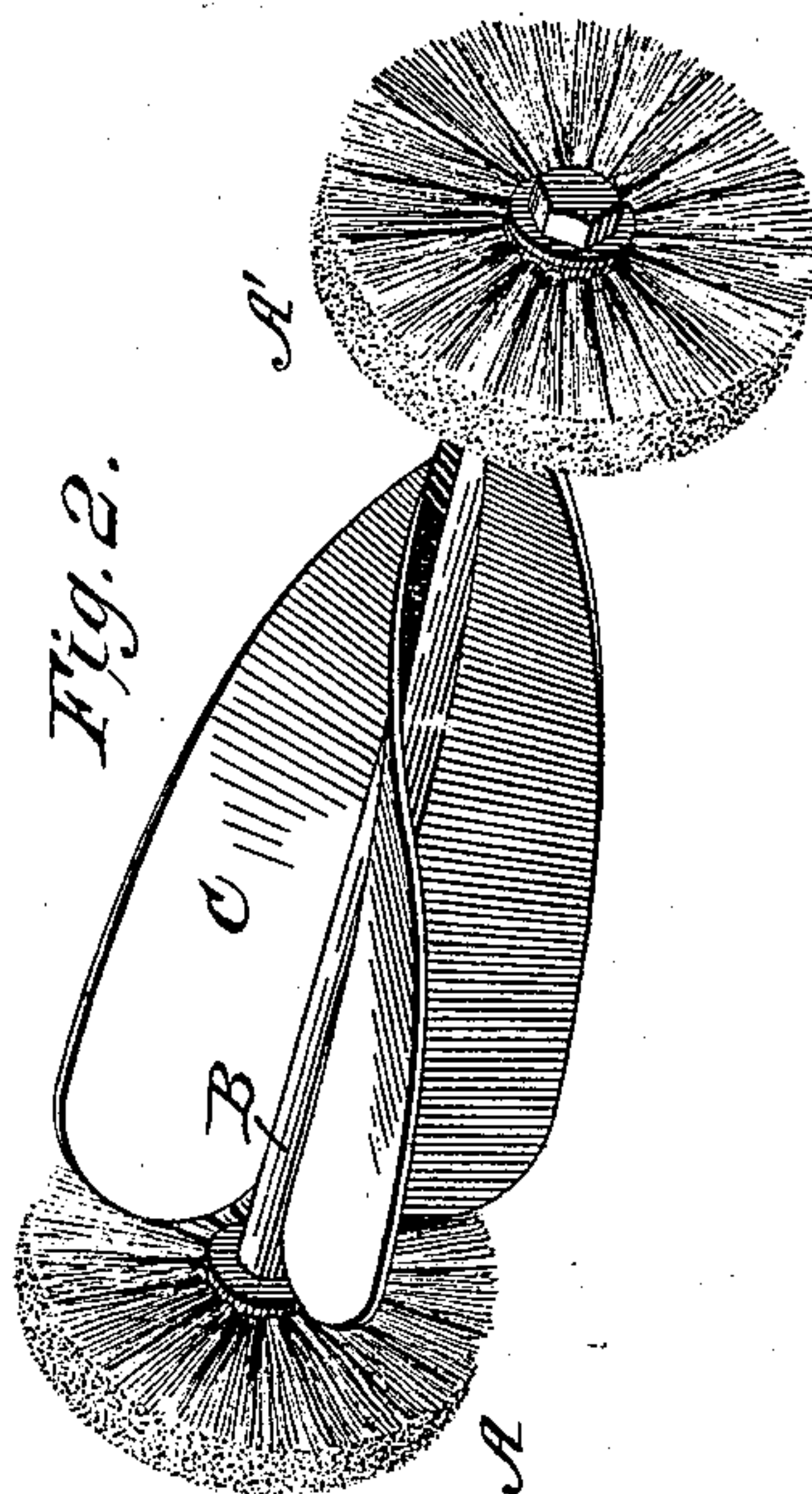
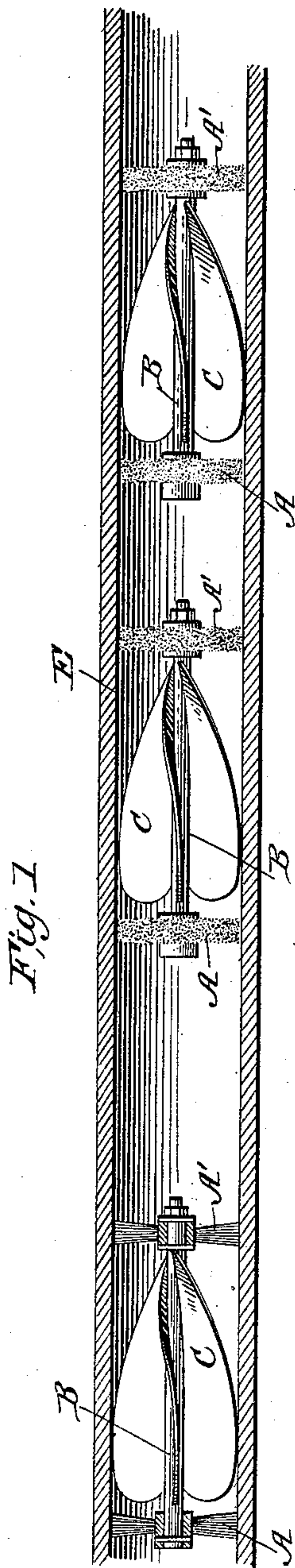


(No Model.)

M. C. SILSBEE & E. & F. KRENTZ.
PIPE CLEANER.

No. 541,693.

Patented June 25, 1895.



WITNESSES:

Edwin L. Bradford
Ralph Wormelle

INVENTORS
Morgan C. Silsbee
Emil Krentz & Friedrich Krentz
BY
Patrick O'Faell
ATTORNEY.

UNITED STATES PATENT OFFICE.

MORGAN C. SILSBEE, EMIL KRENTZ, AND FRIEDRICH KRENTZ, OF AVOCA,
NEW YORK.

PIPE-CLEANER.

SPECIFICATION forming part of Letters Patent No. 541,693, dated June 25, 1895.

Application filed November 26, 1894. Serial No. 529,981. (No model.)

To all whom it may concern:

Be it known that we, MORGAN C. SILSBEE, EMIL KRENTZ, and FREIDRICH KRENTZ, citizens of the United States of America, residing at Avoca, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Pipe-Cleaners, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to cleaners for cleaning pipes, and more particularly to that class of pipes used in drawing beer or other liquids from vats or kegs, to remove the slime and such foreign matter as may be deposited on the inside of the pipe, which if left to remain are liable to clog up the pipes and render the beer impure, thus lowering its quality.

Heretofore pipes have been cleaned by flushing with a solution of soda and other chemicals, which was liable to give a foreign taste to, and injure the beer.

Figure 1 is a longitudinal sectional view of a pipe, showing the invention inserted therein. Fig. 2 is a perspective view of our improved brush, showing the brushes A and A', the rod or axle B, and the propeller C.

Similar letters refer to similar parts throughout both views.

A and A' designates two brushes spherical in form, and composed of any suitable material, such as bristles, splints or wire.

The brushes A and A' are placed at the opposite ends of rod or axle B, the brush A to be secured firmly to the rod, while the other brush A' is secured to the screw-propeller C, and rotates with it on the axle B. The screw-propeller is situated between the two brushes and furnishes the motive power for revolving the brush A' and forcing the invention through the pipe to be cleaned.

The screw-propeller is acted upon, and revolved by the pressure of the water passing through the blades of the propeller, while pass-

ing through the pipe, which operation will be more fully explained hereinafter.

The operation of cleaning the pipe is as follows: One or more of our improved brushes are inserted into the pipe E—the said brushes to fit snug inside of the pipe, so as to come in close contact with the sides, then water is squirted from a hose into the pipe to be cleaned, which is compelled to pass through the blades of the screw-propeller C, thereby causing them to revolve, and as the brush A' is secured to one end of the propeller it revolves at the same time, and being in close contact with the inside of the pipe to be cleaned, it scrapes and removes all slime and sediment from the pipe. The rotary motion given to the propeller by the pressure of the water passing through the blades forces the invention through the pipe, thereby causing the stationary brush A to force out of the pipe all slime and other foreign substance detached from the inside of the pipe by the rotary brush A'.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

In a pipe-cleaner, the combination of a propeller, a rod or axle upon which the propeller revolves, brushes situated at each end of the rod or axle, one of which is securely attached to the propeller and revolving with it, and the other or rear brush situated at the end of the rod opposite from the brush on the propeller and rigidly connected to the rod, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

MORGAN C. SILSBEE.
EMIL KRENTZ.
FRIEDRICH KRENTZ.

Witnesses:

CHARLES L. SMITH,
DAVID SEAGER.