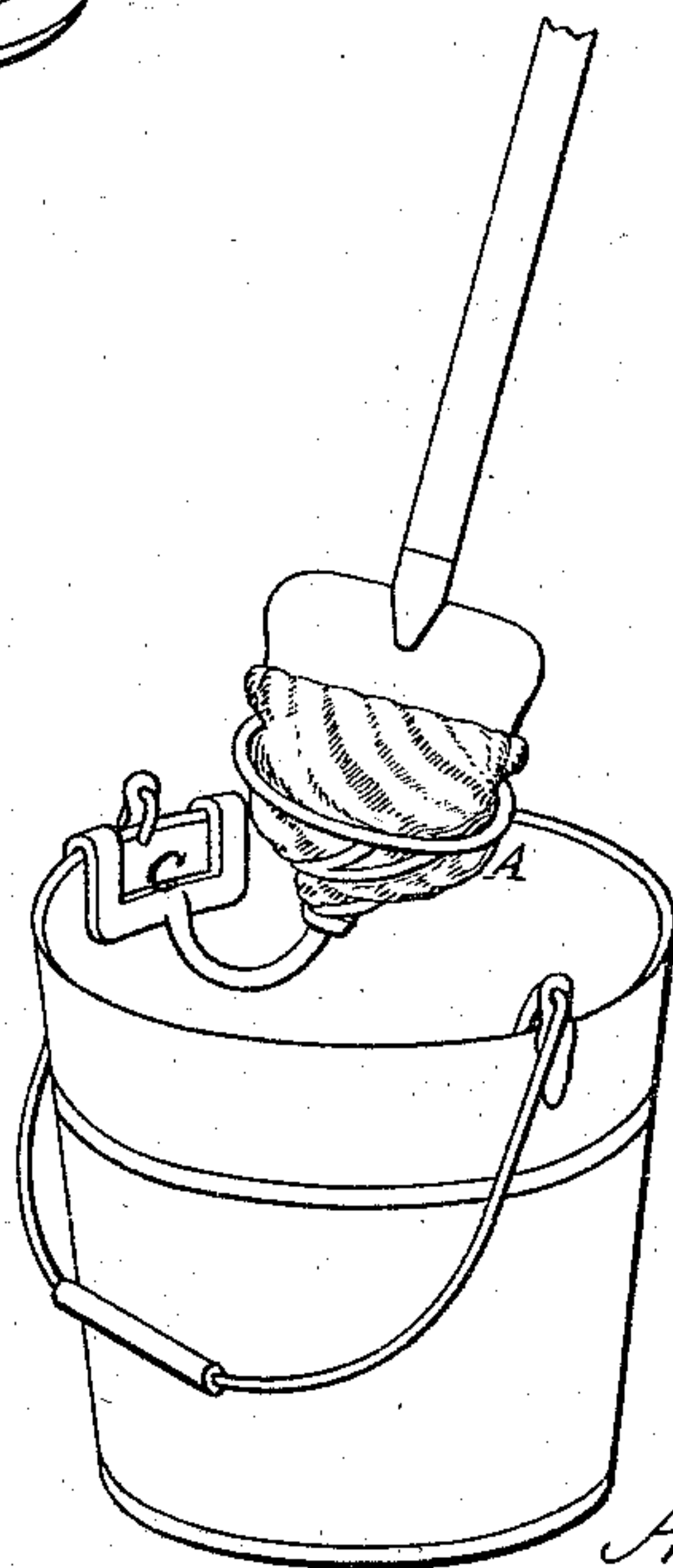
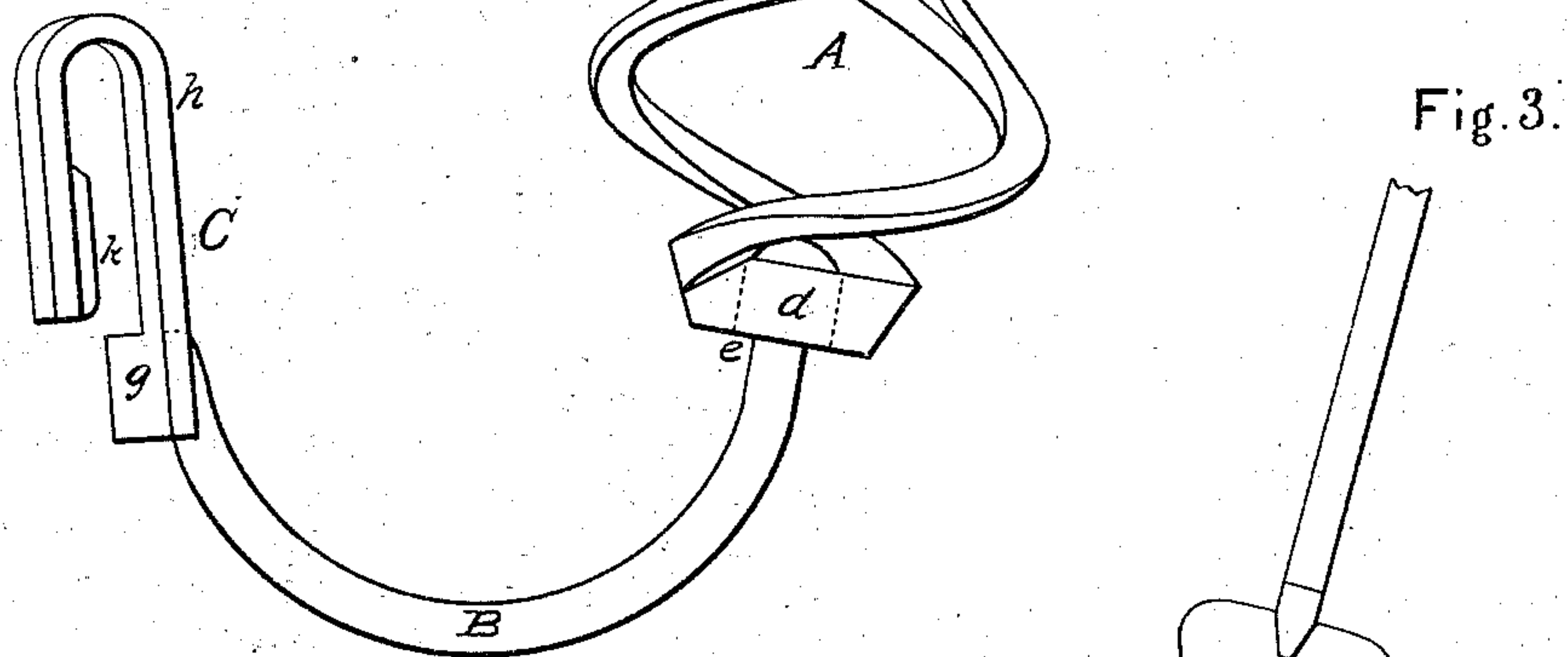
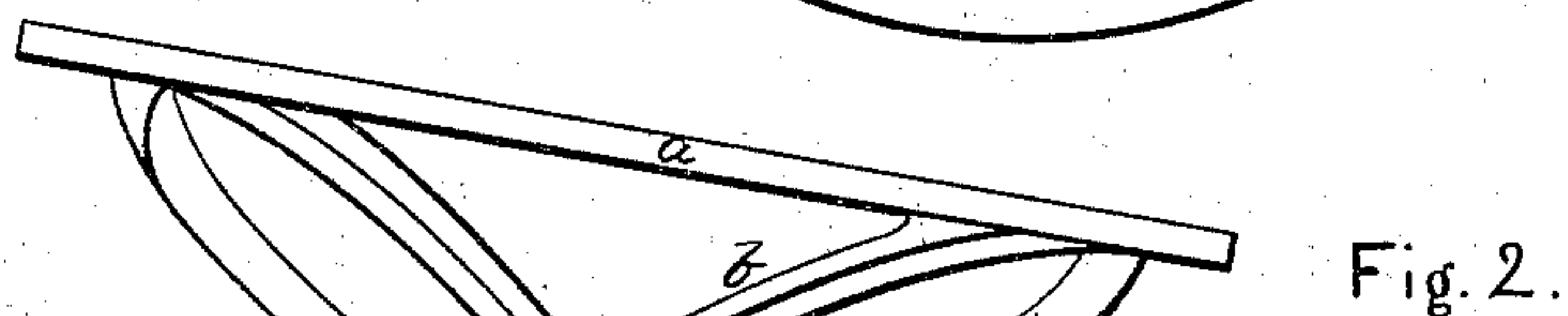
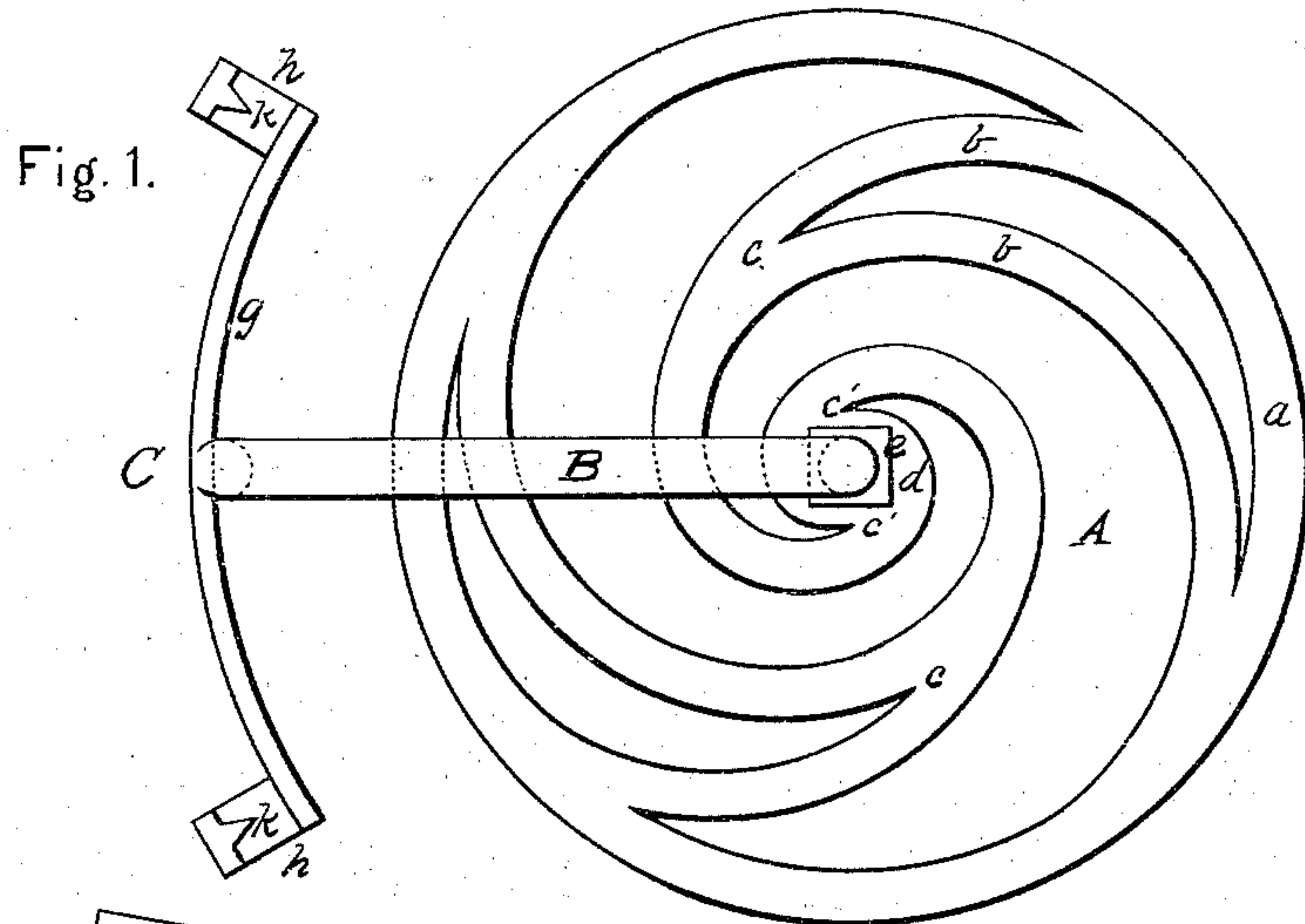


H. L. ENNES.
Mop-Wringers.

No. 153,815.

Patented Aug. 4, 1874.



WITNESSES
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By

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UNITED STATES PATENT OFFICE.

HOMER L. ENNES, OF LIBERTY CENTRE, OHIO.

IMPROVEMENT IN MOP-WRINGERS.

Specification forming part of Letters Patent No. **153,815**, dated August 4, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, HOMER L. ENNES, of Liberty Centre, in the county of Henry and State of Ohio, have invented a new and valuable Improvement in Mop-Wringers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my mop-wringer, and Fig. 2 is a side view of the same. Fig. 3 is a view of the same in operation.

This invention has relation to mop-wringers in which the mop-head is twisted; and it consists in providing the bracket by means of which the wringer is secured to the pail-wall with vertical inside lugs, which, when the bracket is put on the rim of the pail, will bite into the wood thereof and prevent lateral movement, as hereinafter described.

In the accompanying drawings, the letter A indicates a spiral socket, somewhat in the form of an inverted cone. The upper portion or mouth of this socket is designed to be annular in form, as indicated at *a*. From this ring proceed downward, and somewhat inward, spiral arms or branches *b*, two or more of which may be united, as shown at *c*, at intermediate points between the rim *a* and the apex of the conical socket, where they all finally become united in the small bearing portion *d*. The spiral branches *b* join the annular rim of the socket at a very acute angle, or almost tangentially, and the curve of the branches and arms gradually increases as they descend toward the center *d*, while the distance between them becomes less and less, finally terminating in acute angles, as shown at *c c'*. In this manner is formed an open-work socket, in which the mop-head can be placed, and wrung by turning its handle or stick, which will cause the cloth or mop-head to be drawn down into the narrow portion of the cone, and into the angular spaces between the branches or arms. To the central or bearing portion *d* is secured, by a square joint, *e*,

so that the socket cannot turn, the supporting-arm B, which is preferably curved downward, as shown in the drawings, so that it will form no obstruction to the twisting movement of the mop-head. The outer end of this arm is designed to be connected with a bracket or other attaching device. For an ordinary pail the bracket C may be employed. This consists of the transverse curved bar *g*, concave toward the socket, and provided at each end with a hook, *h*, which is designed to catch over the edge of the pail, the bar *g* forming the inside bearing. In order to prevent this bracket from taking the lateral motion on the edge of the pail, that the twisting of the mop-head in the socket would tend to impart, small vertical angular lugs *k* are provided on the inside of the outer branches or beaks of the hooks, which, running with the grain of the staves of the pail, when the hooks are attached to its edge, insert themselves into the wood, fastening the bracket securely against lateral movement.

It will be observed that the socket is, by these devices, supported over the middle of the pail, which is not, therefore, liable to be upset by the pressure; also, that the socket is well raised, keeping it away from the water in the pail, and giving sufficient room about it for dipping the mop into the pail.

With this simple attachment a floor can be thoroughly mopped and dried without bringing the hands in contact with the wet and soiled mop-head.

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

The mop-wringer bracket for pails herein described, consisting of the transverse curved brace *g*, the spring-hooks *h*, and the inside vertical angular lugs or ribs *k* of said hooks, arranged to bite against the pail-wall and prevent lateral movement, in combination with the wringer A, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses: HOMER L. ENNES.
GEORGE E. UPHAM,
ROBERT EVERETT.