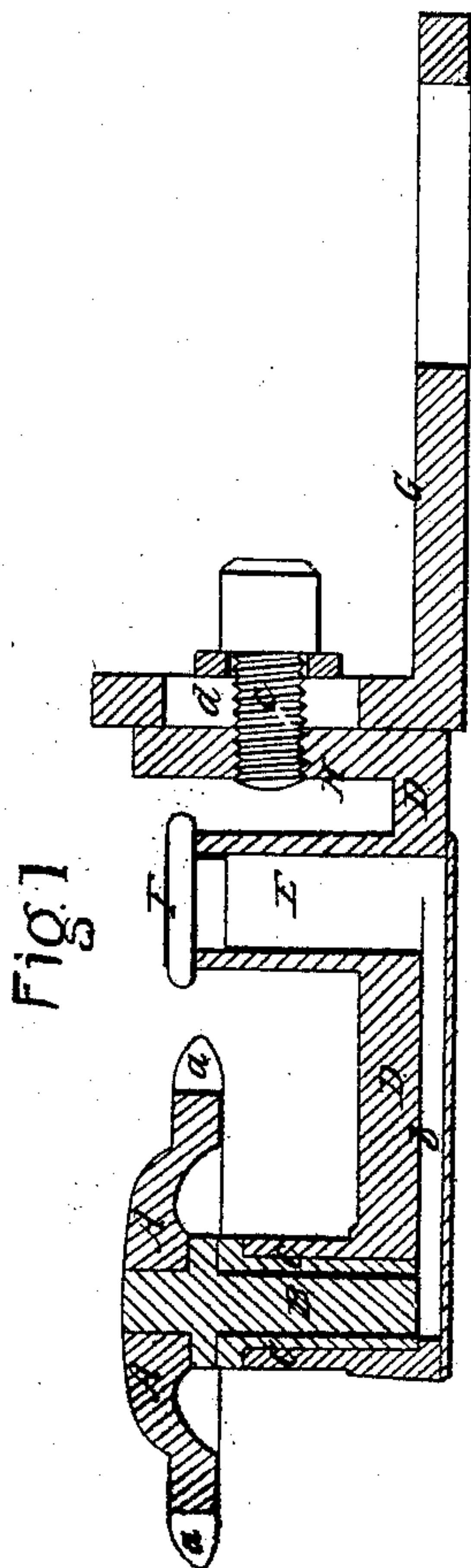
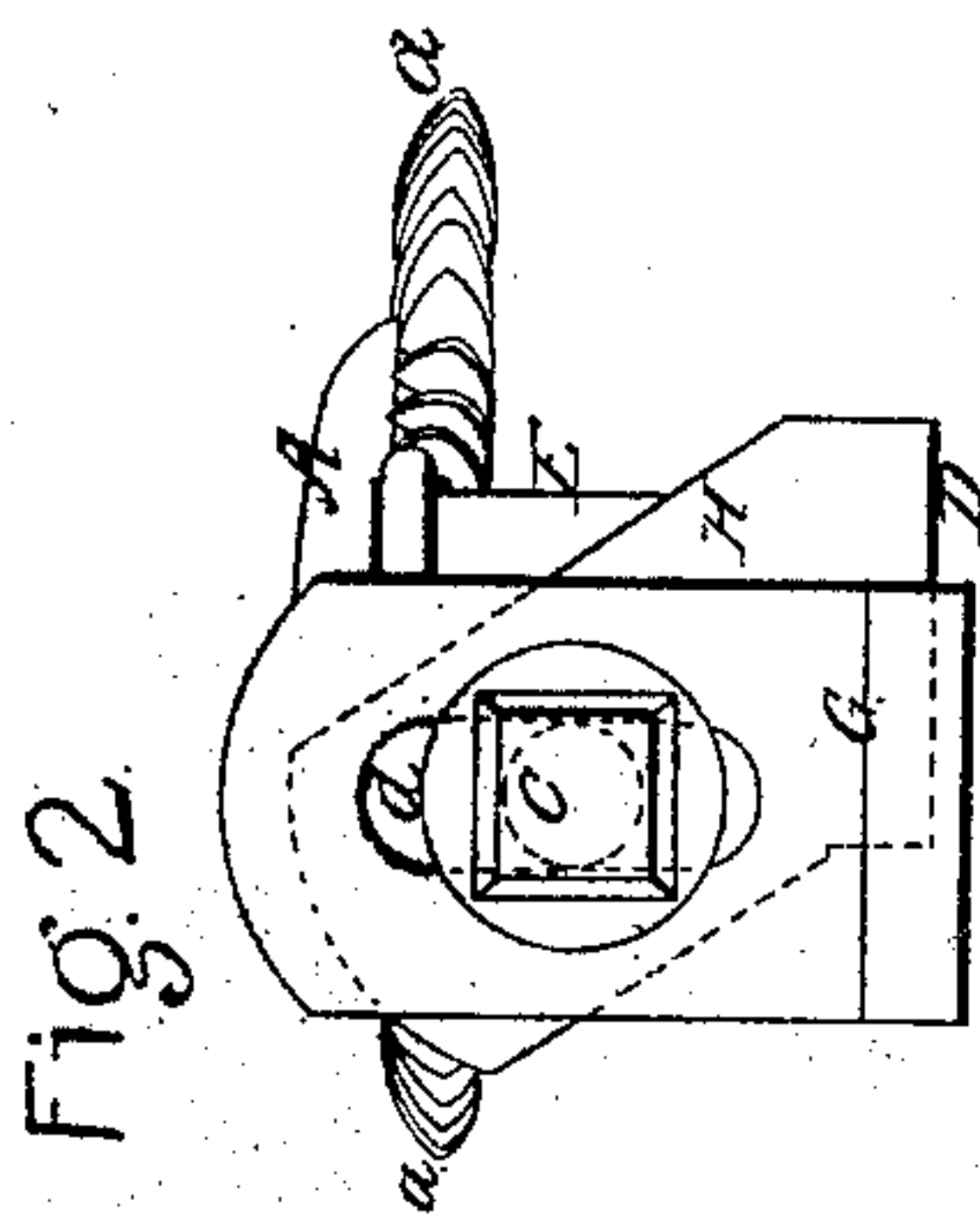


L. KAVANAUGH.
KNITTING MACHINERY.

No. 41,381.

Patented Jan. 26, 1864.



Witnesses:
J. W. Coombs
G. W. Reed

Inventor:
L. Kavanaugh
per [signature]
attorneys

UNITED STATES PATENT OFFICE.

LUKE KAVANAUGH, OF WATERFORD, NEW YORK.

IMPROVEMENT IN KNITTING MACHINERY.

Specification forming part of Letters Patent No. 41,381, dated January 26, 1864.

To all whom it may concern:

Be it known that I, LUKE KAVANAUGH, of Waterford, in the county of Saratoga and State of New York, have invented a new and useful Improvement in Knitting-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of a rotary burr, and the parts by which it is attached to the knitting-machine. Fig. 2 is an elevation at right angles to Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to the rotary burrs used in knitting-machines, both as sinkers and for landing and casting off the loops. The stock or hub of the burr has heretofore been made with a hole in the center and fitted to rotate on a fixed stud, and has not only required a very frequent application of oil for lubrication, but the oil, having been applied above, has run over the exterior of the burr and injured the work.

The invention consists in securing the hub or stock of the burr to the stud, and fitting the latter to a socket-bearing lubricated from below by a fountain or other receptacle for the oil.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the stock or hub of the burr, and *a a* its teeth. The stock A is firmly secured to the central stud or spindle, B, which is fitted into

a steel-lined socket, C, formed upon the supporting-plate D.

E is an oil fountain or reservoir formed upon or attached to the plate D, and having a passage, *b*, leading from its bottom to the bottom of the socket C.

F is a cap which covers the reservoir or fountain, to exclude dirt and dust, movable for the purpose of filling with oil, the oil being poured into the reservoir or fountain E, and fed therefrom through the passage *b* into the socket C by gravitation and capillary attraction, keeping the stud or spindle C lubricated.

G is the bracket, to which the plate D is attached, secured to the stationary plate inside of the cylinder or to any other suitable part of the knitting-machine. The plate D is made with a standard, H, which is secured to the upright face of the bracket G by means of a screw-bolt, *c*, which passes through a slot, *d*, in the upright portion of the bracket and screws into a tapped hole in the standard H. The slot *d* permits the plate D to be raised and lowered to vary the height of the burr, and also permits the standard to be turned in a vertical plane to adjust the angle of the burr.

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

The combination of the stud or spindle B, secured in the stock or hub of the burr, and the socket-bearing C, supplied with oil from the bottom by a reservoir, E, or other means, substantially as herein described.

LUKE KAVANAUGH.

Witnesses:

JOHN A. WALDRON,
WM. A. WALDRON.