

(No Model.)

W. N. GESNER.
FAIR LEADER.

No. 428,391.

Patented May 20, 1890.

Fig. 1

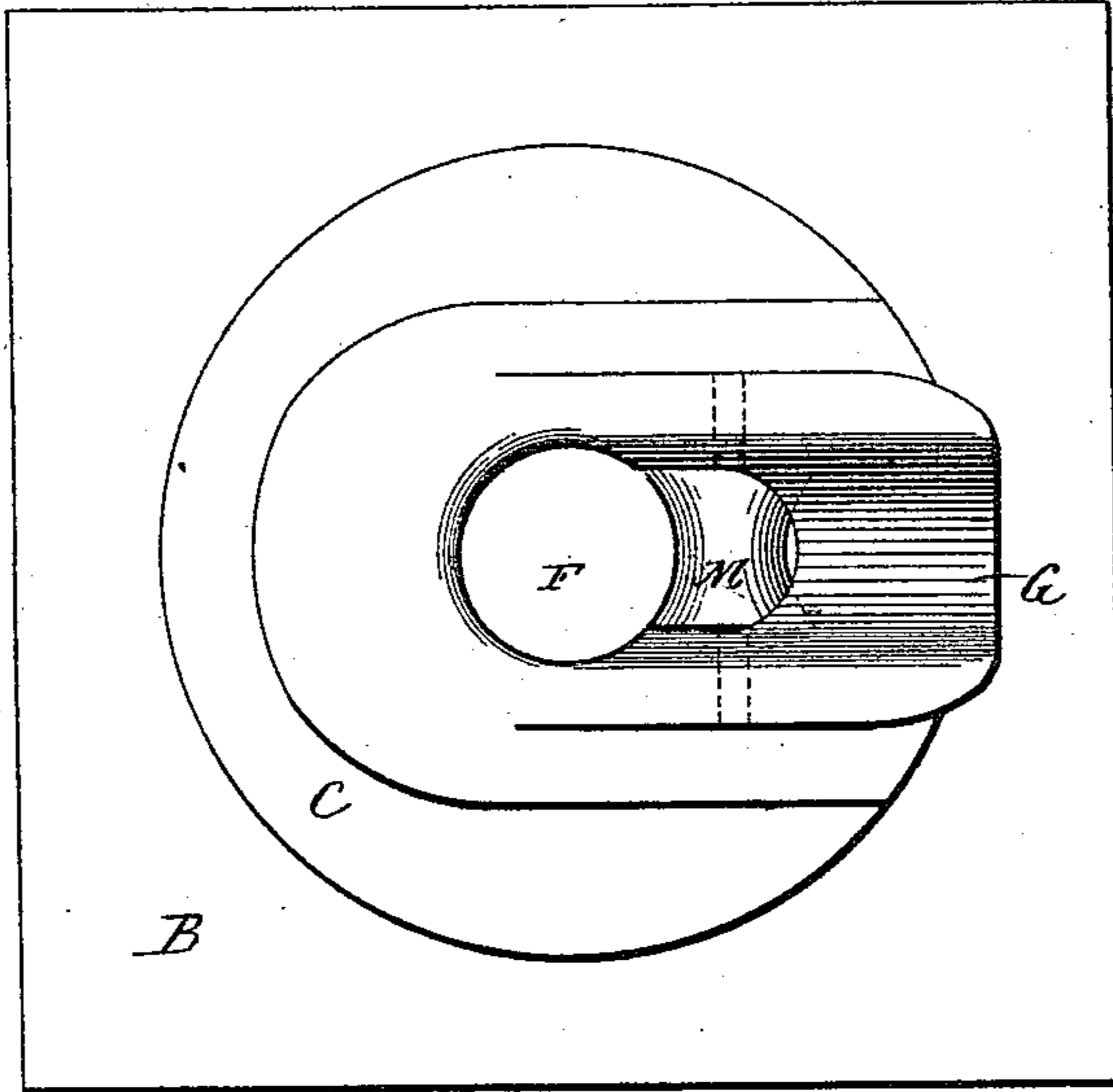


Fig. 2

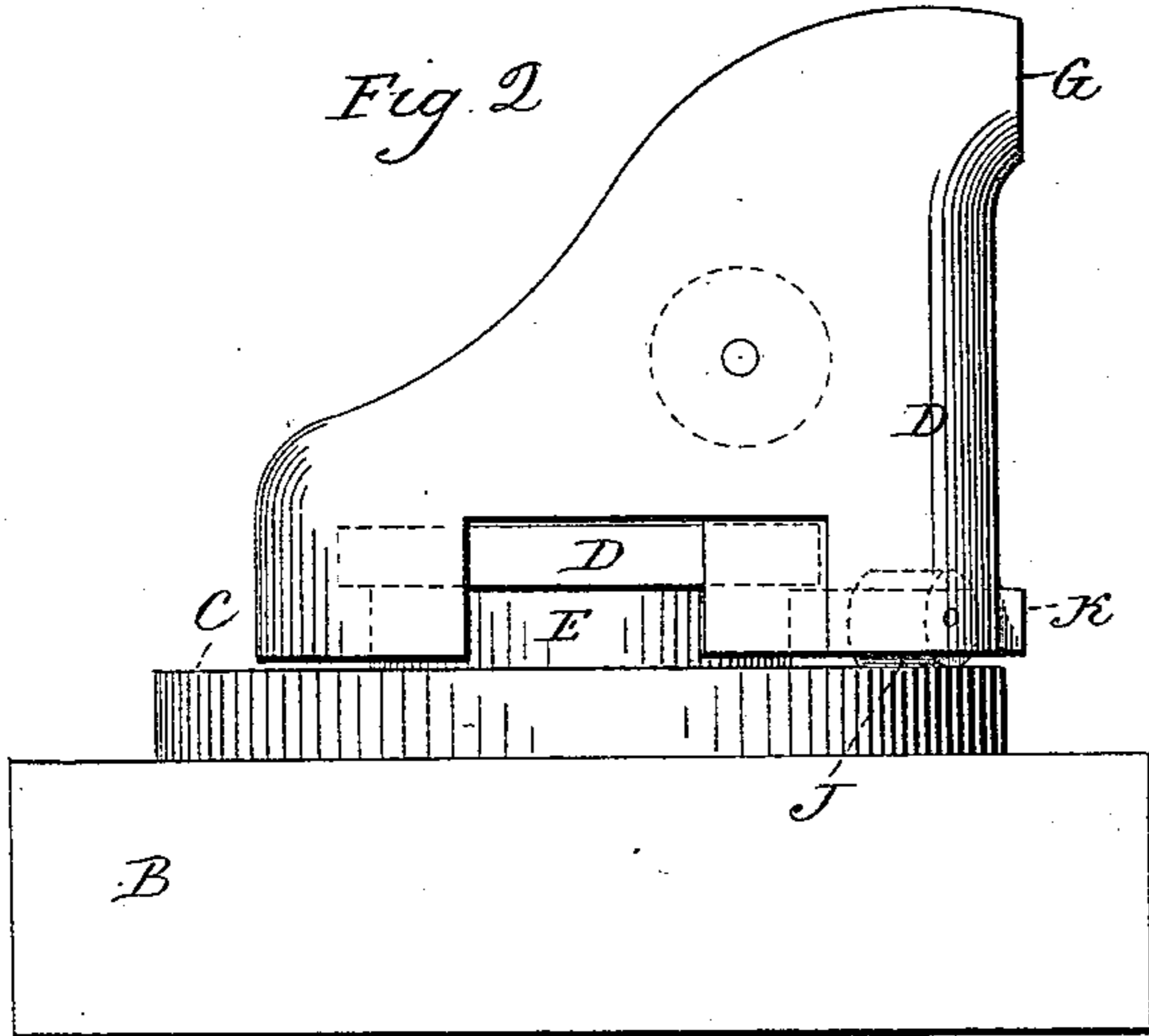


Fig. 3

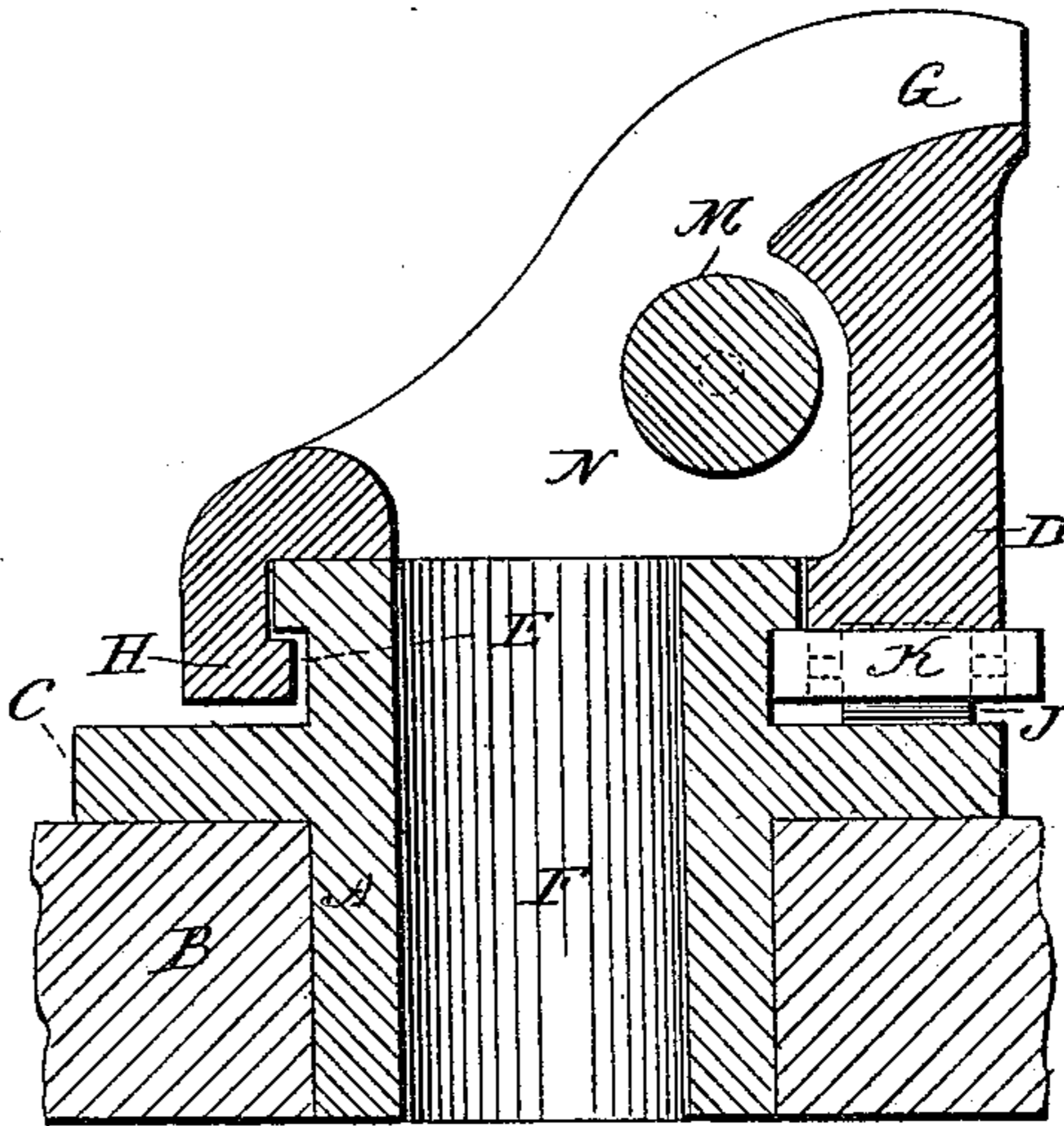
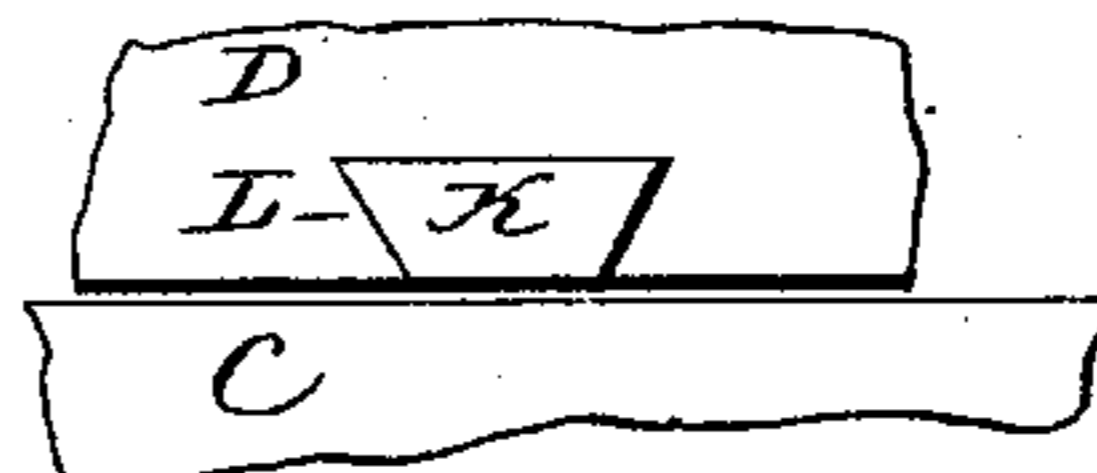


Fig. 4



Witnesses,
J. H. Stearnway
Edmund D. Kelsey

Wm. N. Gesner
Inventor
By Atty.
Earle Keyman

UNITED STATES PATENT OFFICE.

WILLIAM N. GESNER, OF HAMDEN, CONNECTICUT.

FAIR-LEADER.

SPECIFICATION forming part of Letters Patent No. 428,391, dated May 20, 1890.

Application filed February 19, 1890. Serial No. 341,025. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. GESNER, of Hamden, in the county of New Haven and State of Connecticut, have invented new Improvements in Fair-Leaders; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a plan view of one form which a fair-leader embodying my invention may assume; Fig. 2, a view thereof in side elevation; Fig. 3, a view in vertical section; Fig. 4, a detached broken view showing the key employed for securing the rotatable head of the fair-leader to the standard upon which it is mounted.

Heretofore fair-leaders of the class to which my invention relates have been rigidly secured in place and arranged in position with reference to the general direction of the strain imposed upon the rope which they are designed to guide. In some cases they have been made double to provide for guiding the rope in opposite directions; but a stationary fair-leader only operates well when the strain of the rope is directly in line with it, for at other times it detracts from the free operation of the rope and results in the production of considerable friction, wearing the rope and making it more difficult to handle the same.

The object of my invention is to avoid the objections above noted; and it consists in a fair-leader made rotatable, and therefore adapted to swing into line with the direction of the strain imposed at any time upon the rope passing through it, and in certain details of construction, as will be hereinafter described, and pointed out in the claims.

As herein shown my improved fair-leader is composed of a rotatable head and a stationary standard. The said standard is made in one piece, and consists of a sleeve A, which is driven into the deck B, an annular horizontal flange C, preferably let into the deck, so as to be flush therewith, and forming a table for the fair-leader to turn upon, and a retaining-hub D, standing centrally above the said flange and encircled by a groove E. A

passage F, of uniform diameter, extending through the sleeve, the flange, and the retaining-hub, permits the rope to play through the standard.

The rotatable head of the fair-leader is composed of an ordinary grooved lip G, a depending undercut retaining-flange H and a foot D', carrying two friction-rollers J J, which travel upon the flange or table of the stationary standard, the said flange and foot being located opposite each other and both being curved to substantially conform to the curvature of the retaining-hub of the standard. The said flange by being undercut takes into the grooved retaining-hub, to which the head is rotatably secured by means of a key K, mounted in a dovetail L, formed in the center of the foot D, and at its inner end entering the groove in the hub. The said head is also provided with an anti-friction roller M and with an opening N, extending through it and in line with the passage F in the standard. It will be seen that under this construction the head of the fair-leader is entirely free to turn in any direction, so as to automatically conform itself exactly to the direction of the strain imposed upon the rope which it leads, whereby the strain and wear upon the rope is reduced to the minimum to obvious advantage, as it not only saves the rope, but also enables it to be more readily handled by reducing the friction upon it.

It is apparent that in carrying out my invention some changes may be made from the form herein shown and described. I would therefore have it understood that I do not limit myself to such form, but hold myself at liberty to make such alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fair-leader, the combination, with a stationary standard, of a head rotatably mounted thereupon, the standard and head having aligned passages for the cable to pass through, substantially as set forth.

2. In a fair-leader, the combination, with a standard having a flange and a retaining-hub, of a head resting upon the said flange and rotatably attached to the said hub, the said

standard and head having aligned passages for the cable to pass through, substantially as described.

3: In a fair-leader, the combination, with a
5 standard composed of a sleeve, a horizontal flange, and a grooved retaining-hub, of a head rotatably attached to the said hub, the said standard and head having aligned passages for the cable to pass through, substantially
10 as described.

4. In a fair-leader, the combination, with a
standard having a horizontal flange and a
grooved retaining-hub, of a head provided
with an undercut flange for engagement with
15 the said hub and with a foot containing anti-friction rollers which travel upon said flange, the said standard and head having aligned

passages for the cable to pass through, substantially as described.

5. In a fair-leader, the combination, with a
20 standard having a flange and a grooved retaining-hub, of a head having a depending foot and a key mounted in the said foot and entering the groove in the retaining-hub, so as to secure the fair-leader to the standard,
25 with capacity for rotation thereupon, the said standard and head having aligned passages for the cable to pass through, substantially as described.

WILLIAM N. GESNER.

Witnesses:

FRED C. EARLE,

LILLIAN D. KELSEY.