

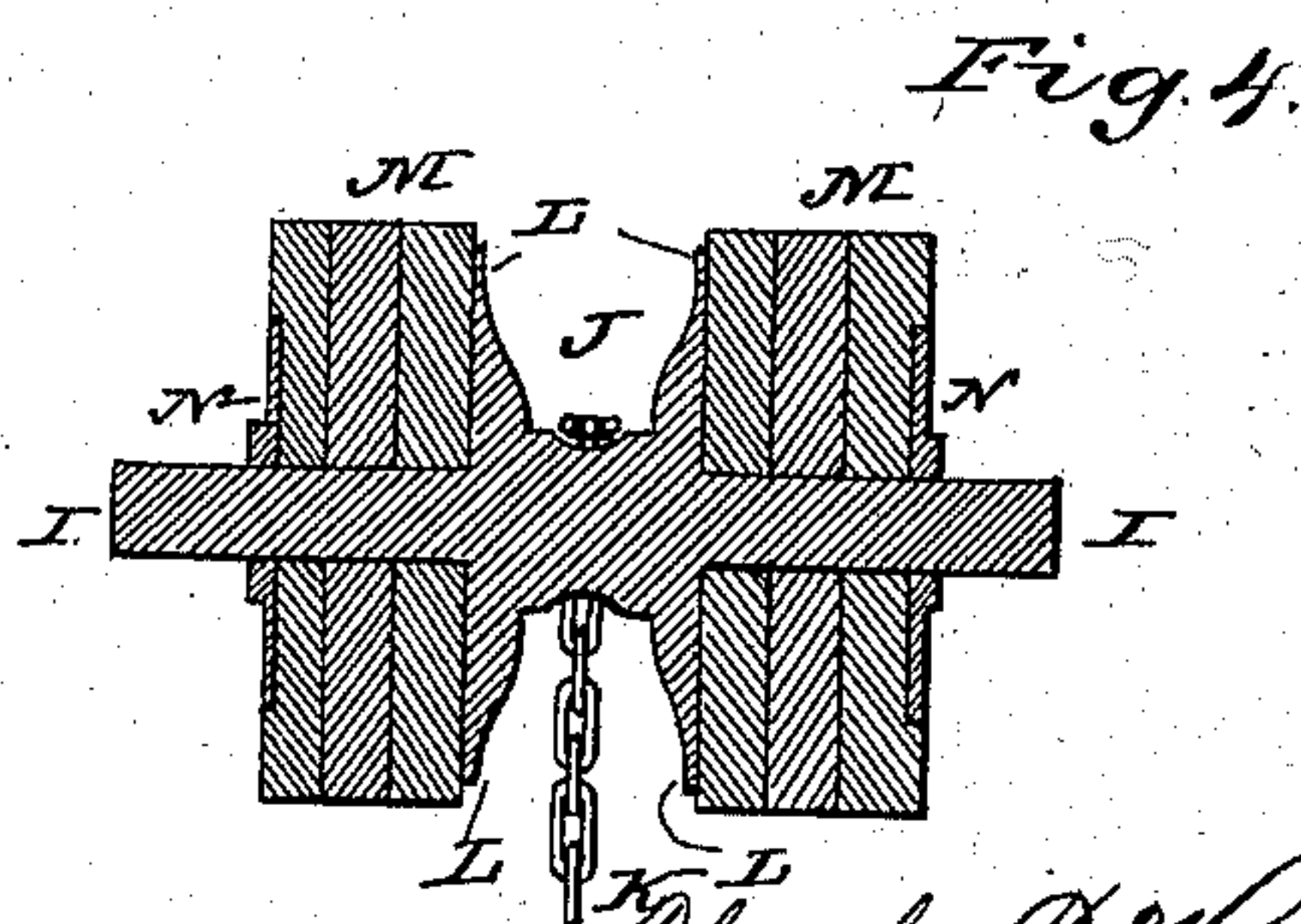
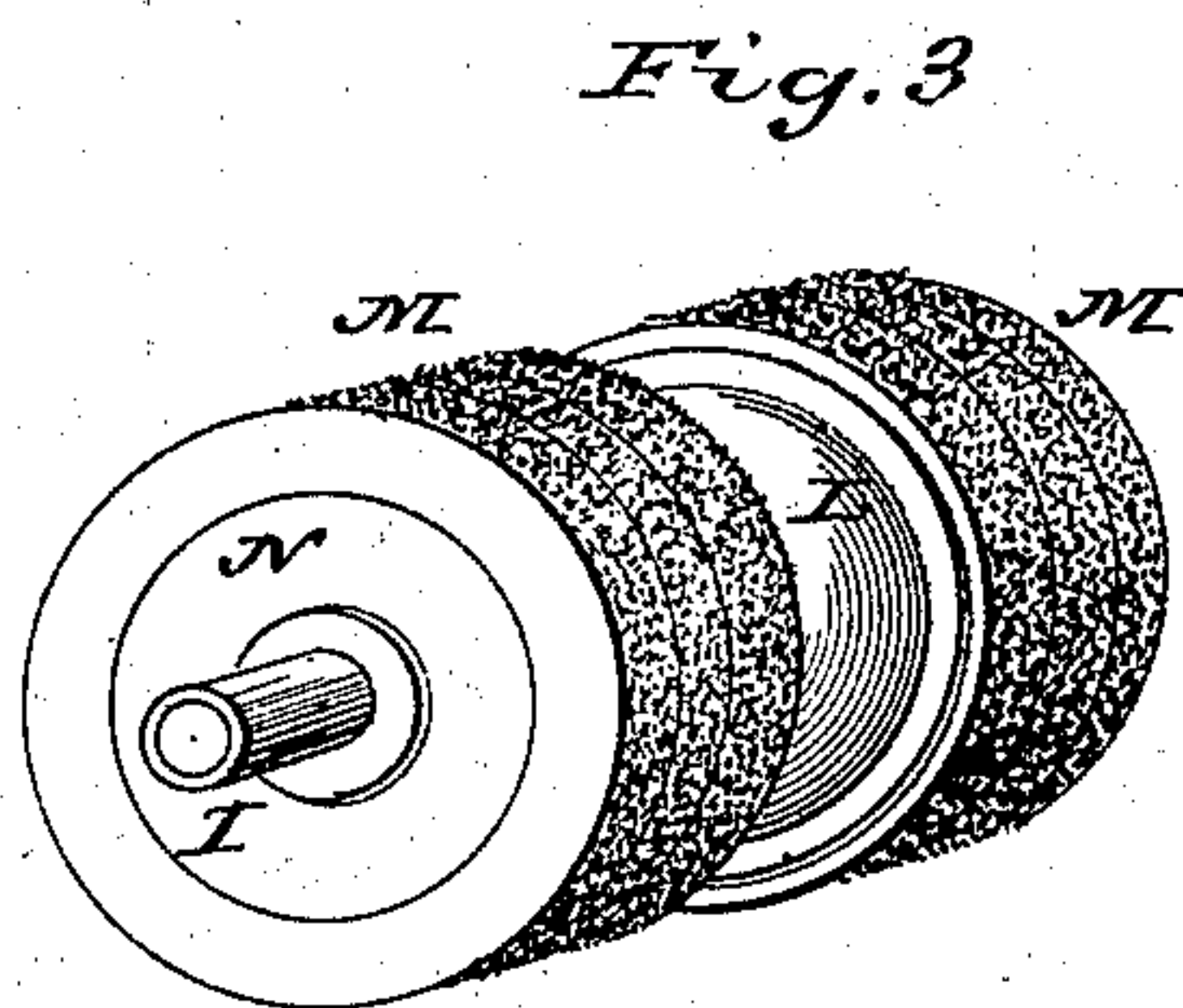
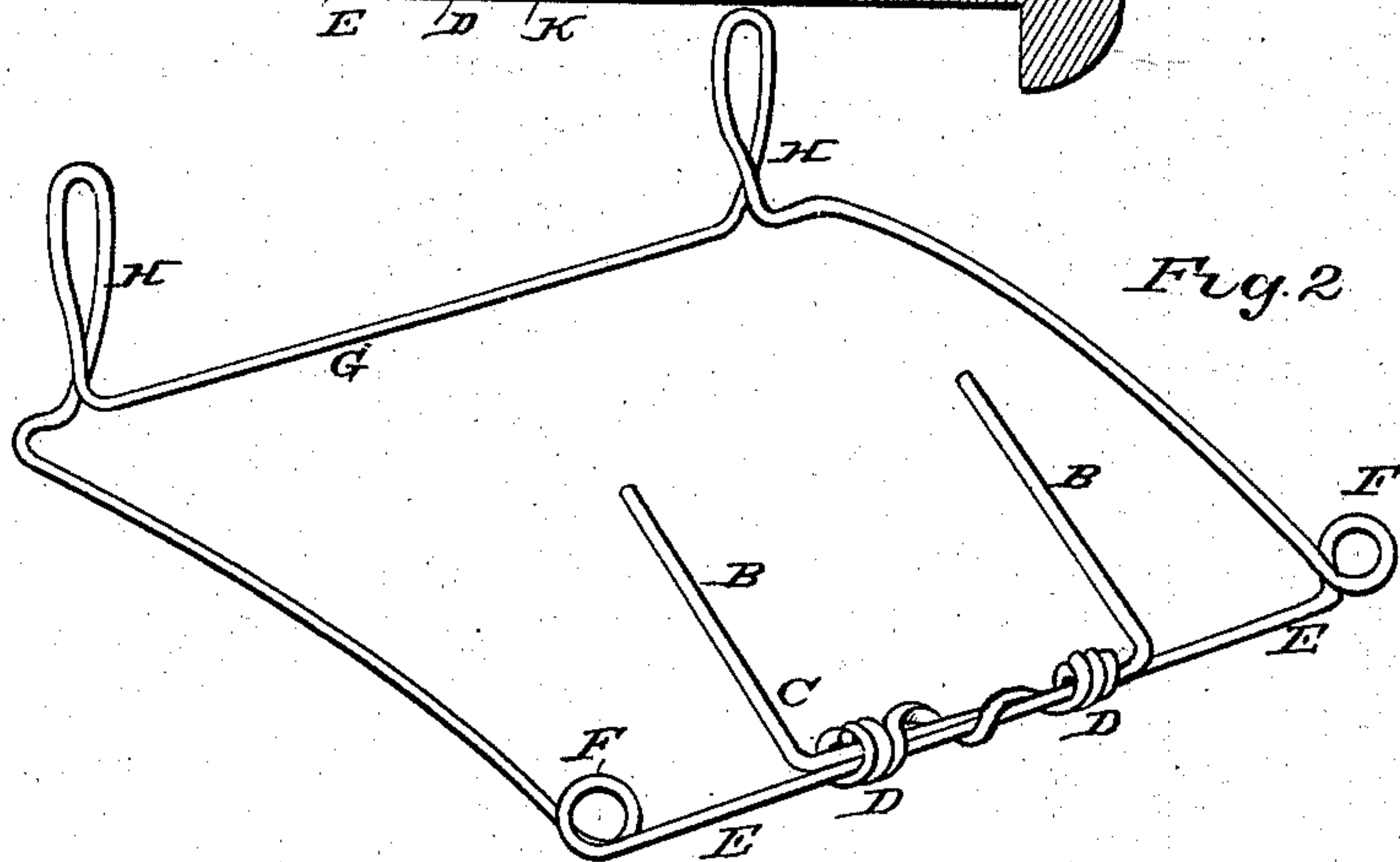
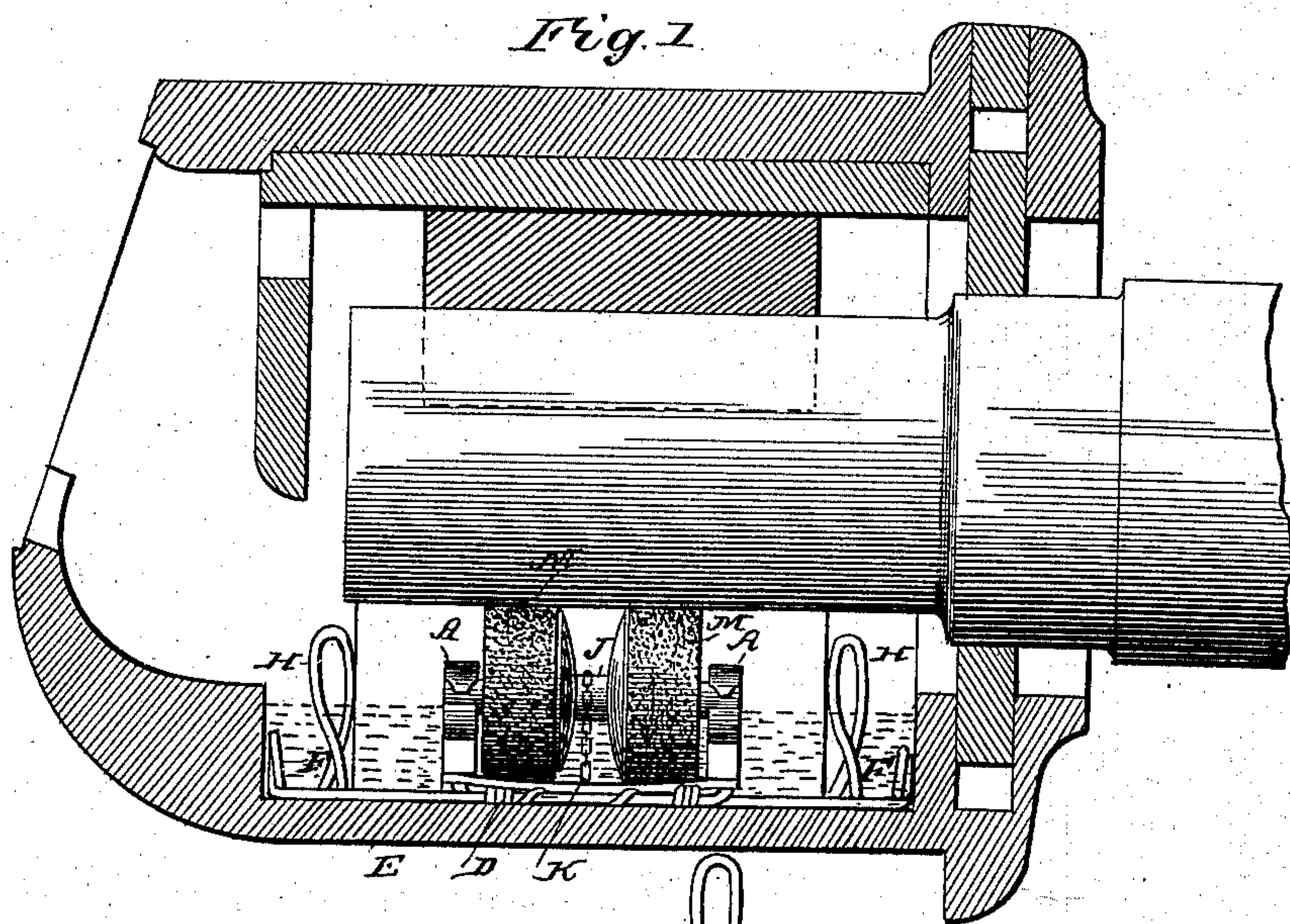
(No Model.)

C. P. HOLMES & N. M. GEORGE.

CAR AXLE LUBRICATOR.

No. 322,292.

Patented July 14, 1885.



WITNESSES:

Wm. L. Dietrich
Wm. Lecher

Charles P. Holmes.
Nathan M. George.
INVENTOR.

Louis Bagger & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES P. HOLMES, OF GOUVERNEUR, NEW YORK, AND NATHAN M. GEORGE, OF DANBURY, CONNECTICUT.

CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 322,292, dated July 14 1885.

Application filed January 12, 1885. (No model.)

To all whom it may concern:

Be it known that we, CHARLES P. HOLMES, of Gouverneur, in the county of St. Lawrence and State of New York, and NATHAN M. GEORGE, of Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Lubricators; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical sectional view of a car-axle journal-box, showing the journal and our improved lubricator in side view. Fig. 2 is a perspective view of the frame supporting the roller bearing yoke; and Figs. 3 and 4 are respectively a perspective and an axial sectional view of the preferred form of roller for the lubricator.

Similar letters of reference indicate corresponding parts in all the figures.

Our invention has relation to that class of lubricators for car-axle journal-boxes in which the lubricant contained in the bottom of the box is transferred to the journal by means of a roller journaled in a spring-support; and it contemplates certain improvements upon the lubricator for which application for Letters Patent, Serial No. 148,596, was made on the 22d day of November, 1884, by Nathan M. George, one of the present applicants, and upon the roller which is shown and described in the patent of Charles P. Holmes, the other applicant, dated March 13, 1883; and it consists, to that end, in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the yoke or saddle in which the roller is journaled, and which yoke is of the same construction as the one described in the aforementioned application, and the yoke is secured in the ends of the upwardly-projecting portions B B of the spring-frame C in the same manner as shown and described in the said application.

The parallel portions C C of the side of the

frame are held together by means of the sleeve D, which is similar to the sleeve of the former application, being formed by a wire wrapped around the portions; but the upwardly-projecting ends of the former sleeve are dispensed with in this case.

The upwardly-curved end pieces, E, of the spring frame are formed into coils F at the ends, where they pass into the side having the parallel portions, and the said coils not only assist in making the curved end pieces more yielding, but serve also to make the roller-support more yielding, the torsion of the parallel portions being aided by the spring in the coils.

The side piece, G, opposite to the side piece having the parallel portions, is formed with two (more or less) upwardly-projecting twisted loops, H, which will bear against the side of the journal-box and keep the device in position, preventing it from tilting, taking the place of the upright ends of the wire sleeve in the former application.

The preferred form of roller is shown in Figs. 3 and 4; and it consists of the axle portion I, the enlarged middle portion, J, which serves to receive the lubricant-carrying chain K, and at both ends of this middle portion are formed flanges L of nearly the same diameter as the disks M, (of felt, fiber, or similar material,) which form the portion of the roller bearing against the journal, and which disks are fitted upon the axle and retained by means of washers N or similar means.

It will be seen that the flanges L, extending nearly to the edges of the disks M, will support and stiffen the said disks, and at the same time the flanges will bear against the journal when the disks are worn away to the same diameter as the flanges, the flanges being integral with the axle, and consequently of metal, so that the roller will continue to revolve without being affected by the wearing of the softer disks M, the metal of course wearing less easily than the soft disks.

It will thus be seen that by the construction of the supporting-frame with the coils at the ends of the end pieces, the said end pieces will be yielding, so as to give to any inequalities in the revolutions of the journal; also the roller-supporting arms will be sufficiently

yielding to allow the roller to bear perfectly true against the face of the journal; and it will also be seen that the flanges in the roller will stiffen the softer disks of the roller, as well as
5 continue to bear against the journal when the softer disks become worn, so as to keep the roller revolving with the journal regardless of the wear upon the disks.

We are aware that rollers for lubricators
10 have been made composed of a number of disks of fibrous material, and do not wish to make any broad claims; neither do we wish to make any claims for the broad construction of the roller or frame; but

15 We claim—

1. The roller-supporting frame having the curved end pieces formed with the coils F at one end, as and for the purpose shown and set forth.

20 2. In a lubricator of the described construction, the rectangular frame having one side piece opposite to the side piece having the roller-supporting arms provided with upwardly-projecting twisted loops integral with the
25 side piece, as and for the purpose shown and set forth.

3. In a lubricator of the described class, the

rectangular frame having one side formed by two parallel portions bent upward at an angle to form the roller-supporting arms, and connected by a wire sleeve, as described, having
30 end pieces curved upward and formed with coils at the ends nearest to the side piece having the parallel portions, and having the opposite side piece formed into upright twisted
35 loops, as and for the purpose shown and set forth.

4. In a lubricator of the described class, the rectangular frame having one side piece formed by two parallel portions, connected by means
40 of a wire sleeve twisted around them, and having their ends bent to form the roller-supporting arms, and having the upwardly-curved end pieces formed with coils at the ends near the aforesaid side piece, as and for the purpose shown and set forth.
45

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

CHARLES P. HOLMES.

NATHAN M. GEORGE.

Witnesses:

HERBERT R. ASTEN,
WM. SECHER.