

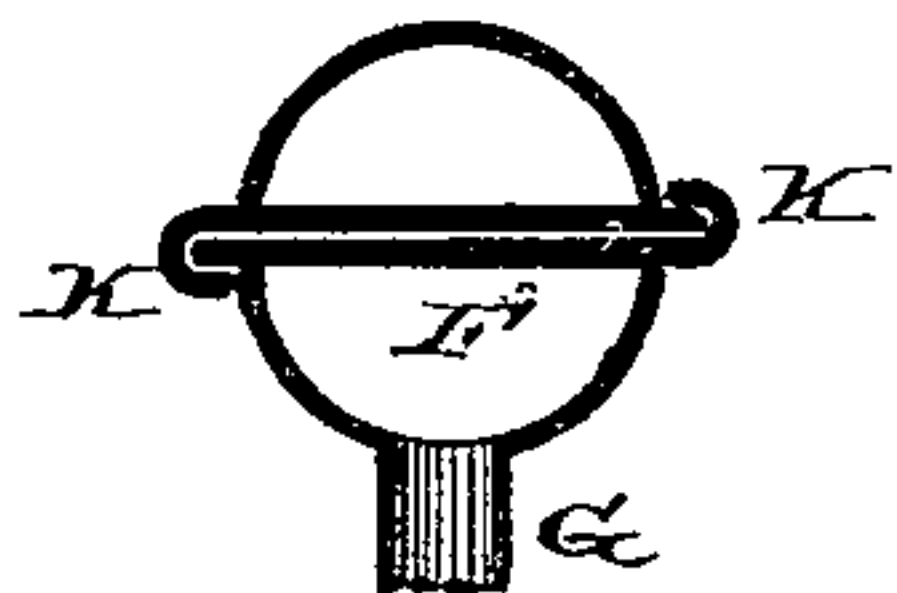
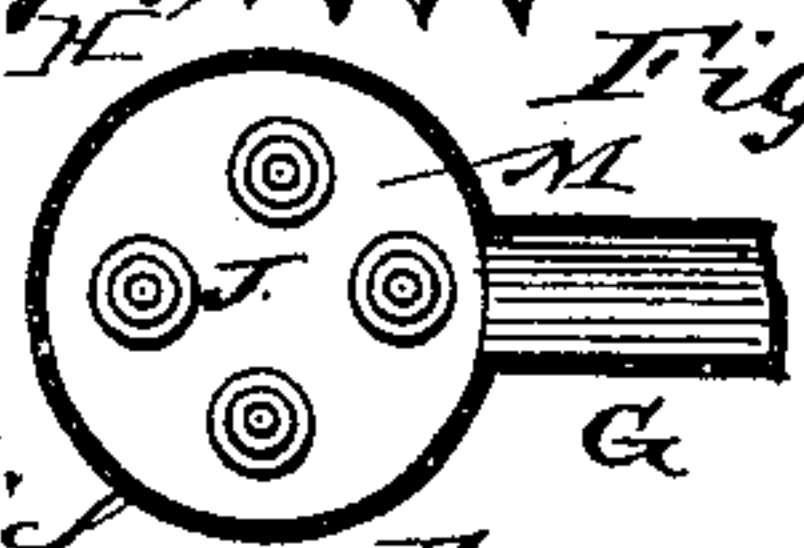
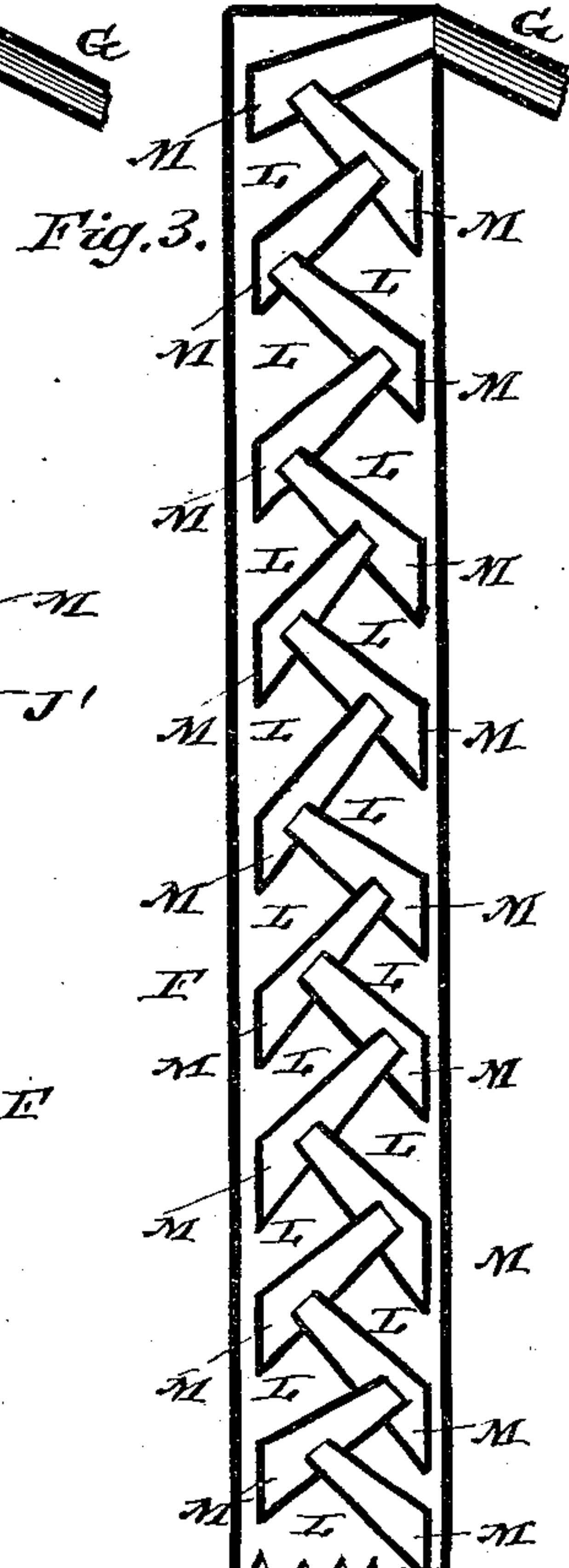
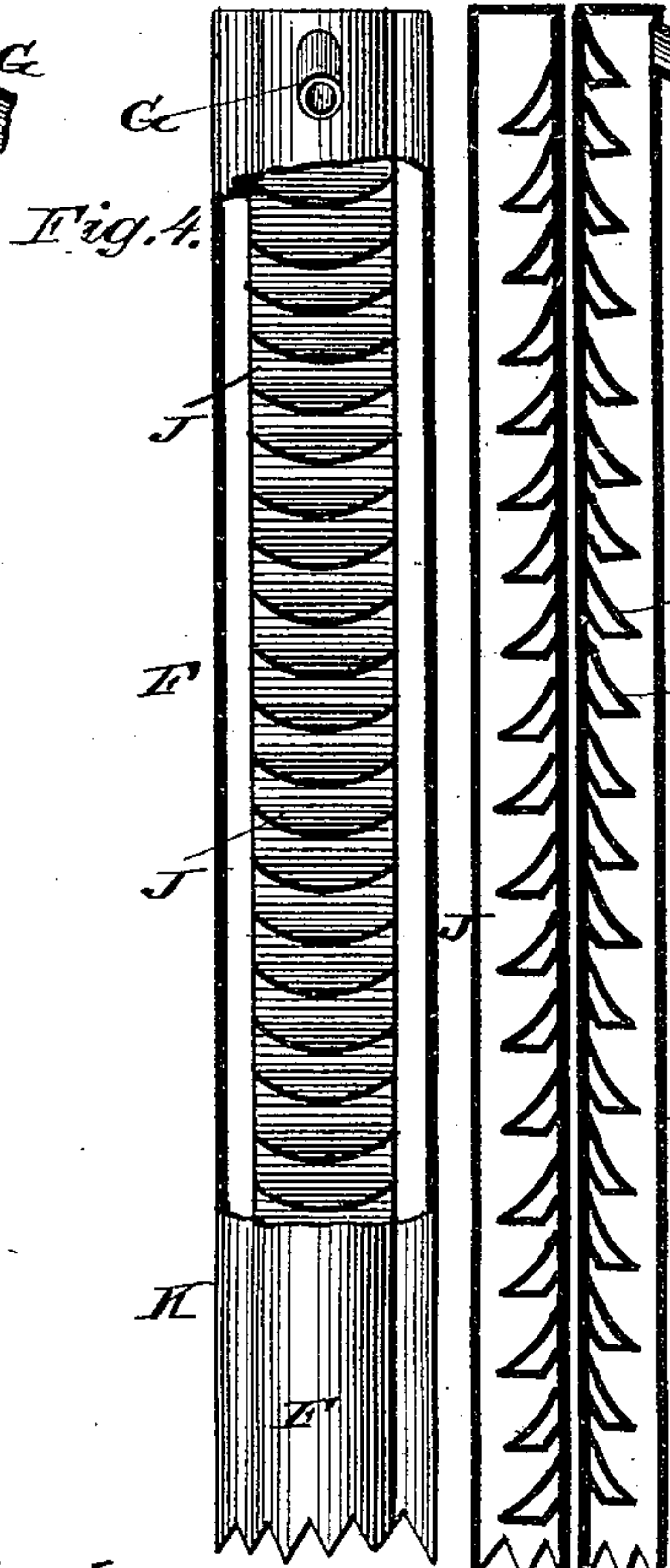
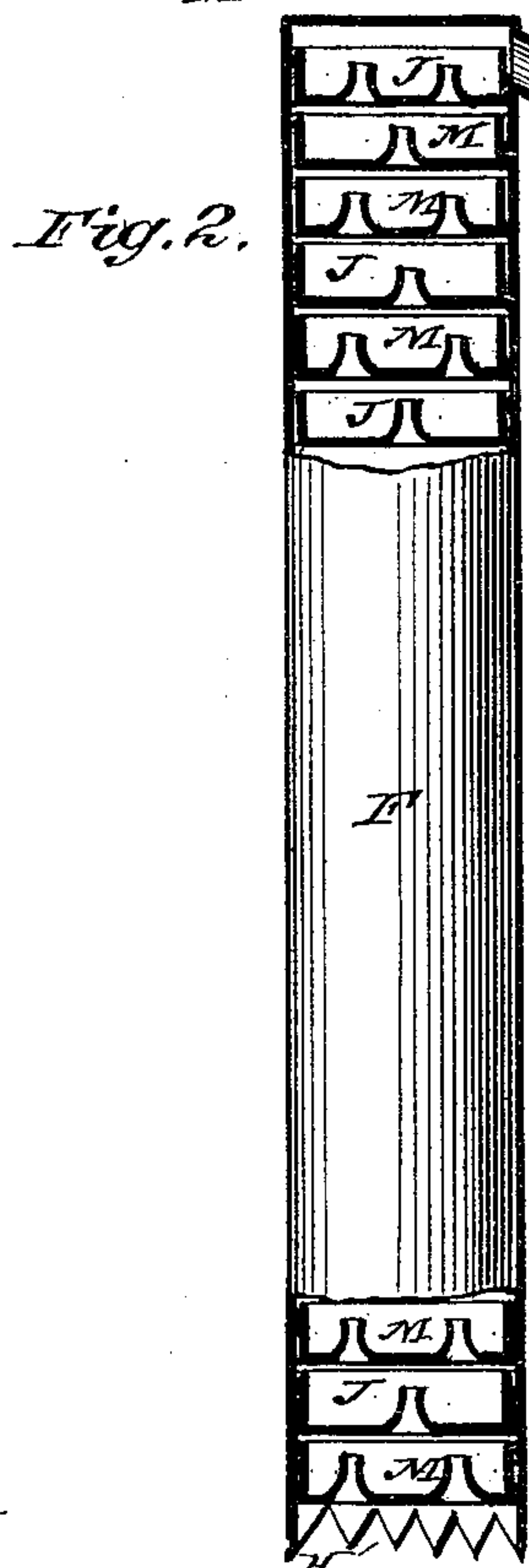
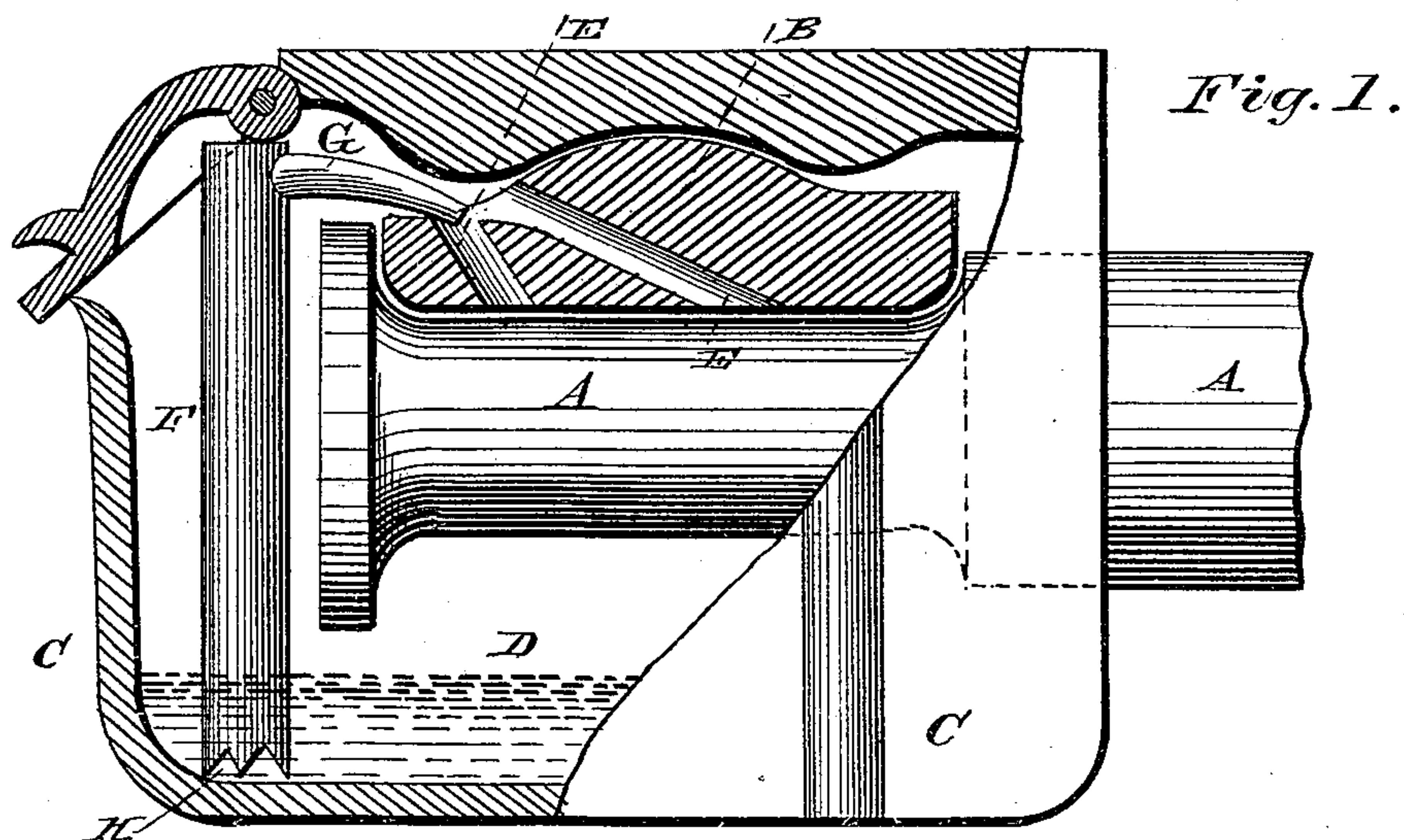
(No Model.)

S. L. WIEGAND.

LUBRICATOR FOR CAR JOURNALS.

No. 282,594.

Patented Aug. 7, 1883.



Witnesses:

Phil. Dietrich  
W.R. Keyworth

Inventor:

Lloyd Wiegand



# UNITED STATES PATENT OFFICE.

S. LLOYD WIEGAND, OF PHILADELPHIA, PENNSYLVANIA.

## LUBRICATOR FOR CAR-JOURNALS.

SPECIFICATION forming part of Letters Patent No. 282,594, dated August 7, 1883.

Application filed December 8, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, S. LLOYD WIEGAND, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Lubricating Apparatus for Railway and other Vehicle Journals; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable others skilled in the art to make and use the said invention.

This invention has for its object the continuous raising of oil from the lower part of the pedestal or box and pouring it into the journal-box or on the journal; and it consists in a series of tubes or cavities communicating with each other, which, by the vibration or jolting incident to travel, raise the oil from a cavity or basin in the lower part of the pedestal and deliver it upon the journal or into the journal-box. The form of the tube or connected chambers is such that by a jolting motion oil is readily raised from the lower to the higher level, but can only descend slowly, if at all.

I will now proceed to particularly describe the mode of making and using this invention, referring in so doing to the drawings annexed and the letters of reference marked thereon.

Figure 1 shows a journal-box with the side broken away, so as to show the interior and illustrate the mode of applying this invention; Fig. 2, a section of one form of this invention, and the remaining figures show other forms of the invention.

A represents the journal of the axle; B, the box resting upon the journal; C, the pedestal or external shell inclosing the box B and journal A; D, a cavity at the bottom of the pedestal C, into which oil flows after falling from the journal A and box B. E E are oil-holes in the box B. F are oil-lifting tubes, having spouts G to deliver oil into the holes E. The lower ends, H, of the tubes F are open, and are placed in the cavity D, so as to receive oil.

Inside of the tube F are shelves, steps, or partitions J, inclined upward, so that whenever the tube is jolted the oil upon one shelf,

J, is jolted upon the shelf J' above it, and so on from one to another until the oil reaches the spout G and pours on the journal and lubricates it. The inclined surface L of the shelf or step J permits the oil to pass easily upon it, and the upright surface M retards the descent of the oil during the jolting motion of the pedestal, due to inequalities in the road.

In the form shown in Fig. 2 the shelves J are circular, and the oil, by reason of the inclined converging surfaces, passes readily up through holes into the next shelf, and cannot so easily return because of the smallness of the aperture and the convex form of parts surrounding the upper side. In the form shown in Fig. 3 the shelves are straight and the delivery of oil is laterally, as indicated by the arrows. In the form shown in Fig. 4 the shelves are made of the same piece of metal as the tube by stamping them into it, and two such pieces of metal being placed together and held by locking the edges K, as shown in Fig. 5 in cross-section, produces a tube which is very cheaply made, and can be readily opened by sliding the two pieces apart, for the purpose of cleaning it.

I am aware that it is not new to lubricate journals by collecting the oil and returning the same by pumps to the lubricated surfaces, and this I do not claim; but

What I do claim is—

1. The method of returning lubricating fluids by raising them upon inclined surfaces so formed as to facilitate the rise of fluid thereon by a jolting motion and to retard the descent of such fluid, substantially in the manner set forth.

2. As an article of manufacture, tubes having shelves, steps, or cells formed with inclinations and stops adapted to lift lubricating fluids by a vertical or oblique motion or jolting thereof, substantially as and for the purpose set forth.

S. LLOYD WIEGAND.

Witnesses:

LINN WHEELER,  
J. DANIEL EBY.