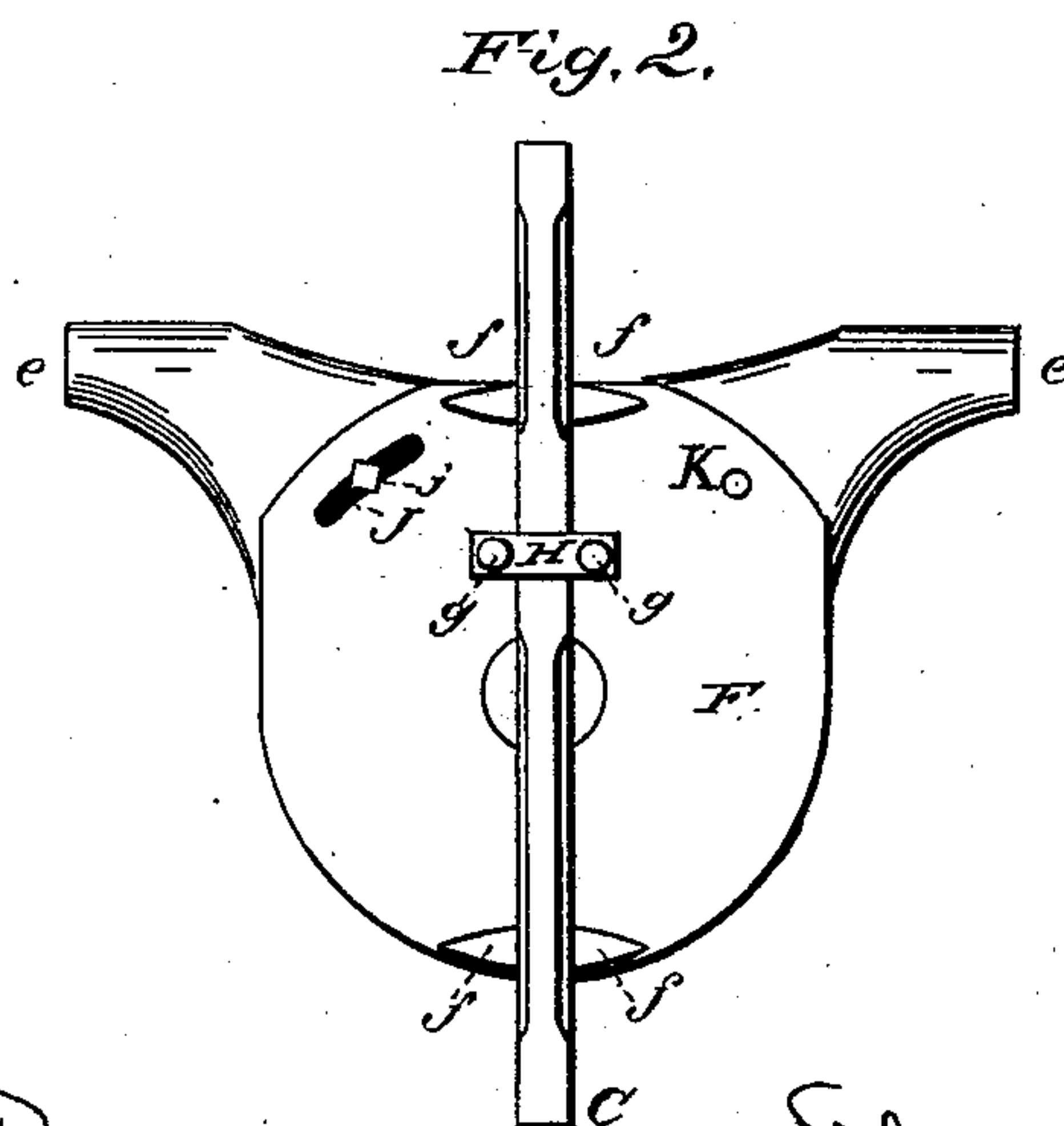
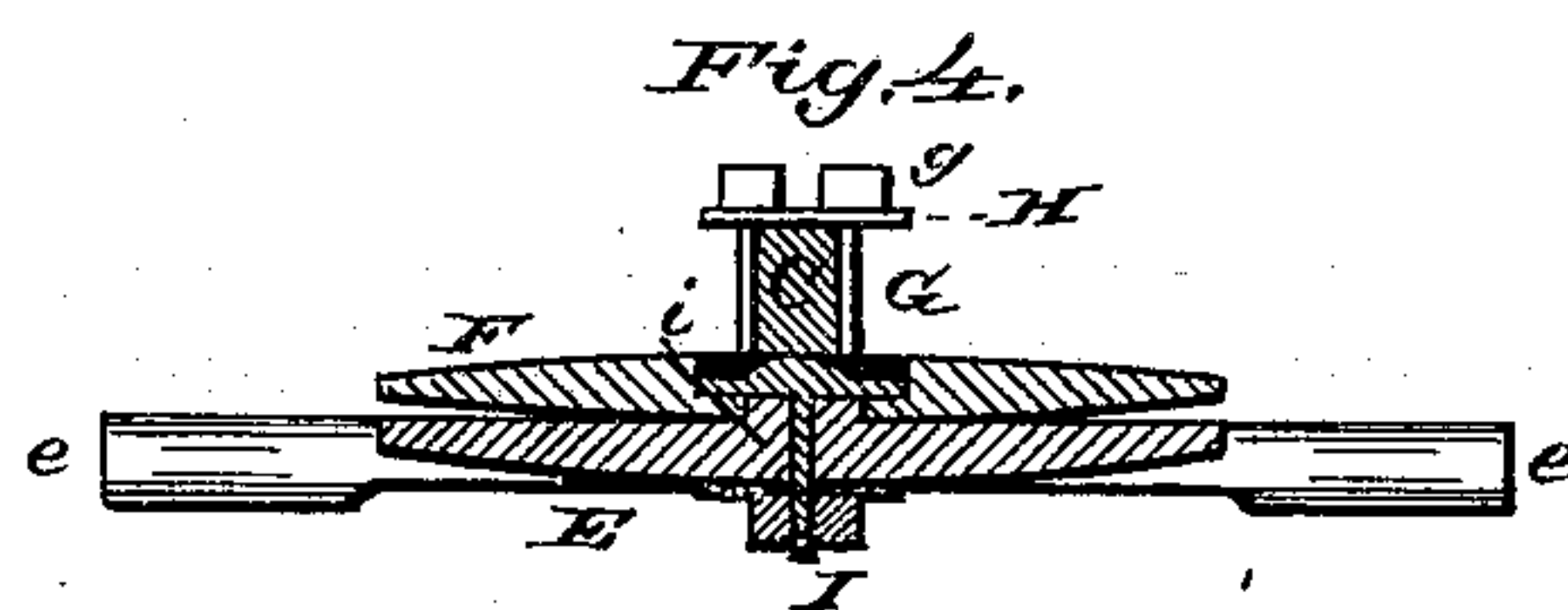
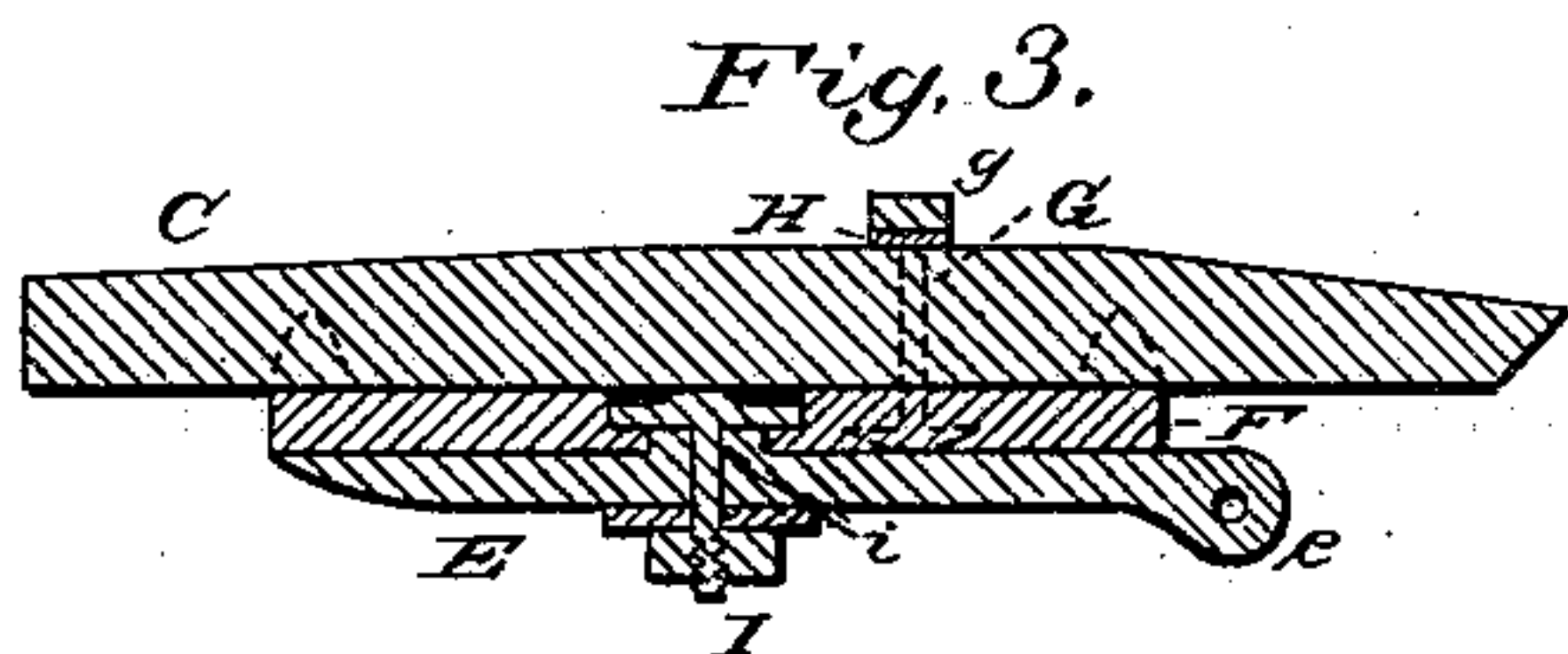
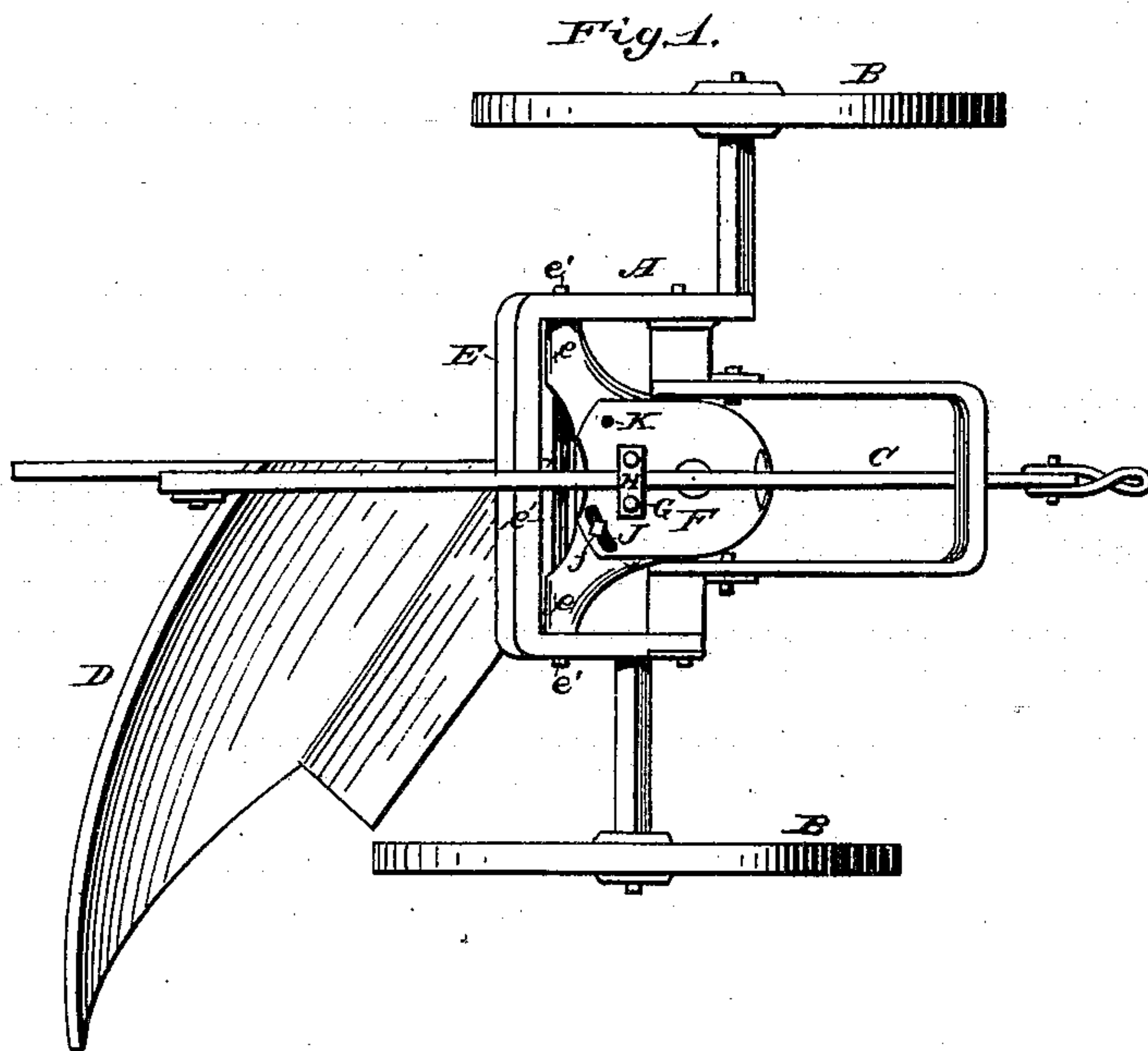


T. B. CHAMBERLIN.
Sulky-Plow.

No. 201,227.

Patented March 12, 1878.



Attest:
D. G. Stuart
C. H. Morgan

Inventor:
Thomas B. Chamberlin
By A. M. Ballum
Atty

UNITED STATES PATENT OFFICE.

THOMAS B. CHAMBERLIN, OF CLARINDA, IOWA.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **201,227**, dated March 12, 1878; application filed July 2, 1877.

To all whom it may concern:

Be it known that I, THOMAS B. CHAMBERLIN, of Clarinda, in the county of Page, and State of Iowa, have invented certain new and useful Improvements in Sulky-Plows; and I do hereby declare that the following is a full, clear, and exact description of my 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, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of agricultural implements known as sulky-plows—plows which are attached to an axle, or to a frame connected with an axle which is supported on wheels and provided with a seat for the driver.

My invention is designed to sustain the plow in proper vertical working position without interfering with any lateral movement or oscillation, which may be necessary to its operation in both level and broken lands.

I accomplish the desired result by means of a device constructed somewhat on the principle of a turn-table, composed of two parts or bearing-plates centrally pivoted together. The plow-beam is secured to the upper bearing-plate, and the lower plate to the sulky-frame or axle.

The device is so constructed that it can be readily attached to any sulky axle or frame. It also has special features of construction, so that the lateral motion of the plow may be limited within certain bounds, and any or all lateral movements may be prevented, when desired, the plow being under all circumstances supported in proper vertical working position.

The advantage of giving the plow this limited lateral movement is that it obviates all side draft in rough or broken land. It also obviates all that rigidity that is characteristic of all plows which are controlled by the frame and tongue exclusively. While this limited movement leaves the plow and carriage a perfectly free movement, which is not desirable in broken or rough land, it is desirable in level land, and in turning square corners without raising the plow from the ground. With my device a perfectly free movement or a limited

movement can be given to the plow, as desired, and the plow may also be made perfectly rigid or free from any movement laterally, as is sometimes necessary and desirable when finishing up a land, &c.

In the accompanying drawings, Figure 1 is a plan view of the device, shown, attached to a sulky and plow. Fig. 2 is an enlarged plan view of the device; and Fig. 3 is a vertical sectional view of the same. Fig. 4 is a cross-sectional view of the device, showing the convex surface of the plates, which permits of a rocking motion of the sulky.

Referring to the parts by letters, A represents the sulky-frame or axle, and B B the wheels. C is the plow-beam; D, the plow.

E represents the lower bearing-plate of the device. It is provided with projections or lugs *e e*, which are made hollow or perforated, so that by passing a rod, *e'*, through them, and securing its ends to the axle or frame A, the device may be readily attached thereto.

I do not wish to be understood as limiting myself to this particular method of attaching the device to the sulky, as it is obvious that it may be attached and secured in any convenient manner.

F is the upper bearing-plate of the device, to which the plow-beam D is firmly secured by means of a staple or bolts, G, plate H, and nuts *g*, or in any other suitable manner. The under side of the plate F is beveled or made convex in its cross-section, as clearly shown by Fig. 4 of the drawings, and, if desired, the upper side of the plate E may be similarly formed, or the latter may be made convex and the plate F straight—in either case the effect being to permit of a rocking motion laterally between the sulky and the plow, thereby allowing the wheels of the sulky to pass over small obstructions or rough ground without disturbing the position of the plow, which is in a measure thereby made independent of the carriage and wheels.

f represents projections or lugs on the upper side of the plate F, between which the plow-beam is placed, so that the beam cannot move laterally independent of the bearing-plate. These bearing-plates E and F are pivoted together by means of a bolt, I, which is passed centrally through them. This bolt has a broad

or flanged head countersunk within the upper plate F, and the hole through said plate is enlarged, so as to receive a projecting sleeve, *i*, formed on the upper side of the lower plate E. Besides having a rocking motion, the upper plate is free to turn upon the lower one.

J is an arc-shaped slot formed through the upper beam-plate F; and *j* is a screw-bolt which passes through the slot J into the lower plate E.

It will be seen that when this screw *j* is thus inserted, the lateral movement of the plow-beam is limited by the screw coming in contact with the ends of the slot J; but if it is desirable to allow of a perfectly free lateral motion of the beam, all that is necessary is to remove this screw *j*.

A method of locking the plates so as to prevent any lateral motion of the plow may be resorted to; and it consists in simply passing a pin or bolt through a hole in the lower plate E, as indicated at K in the drawings.

The device may be used in connection with all descriptions of wheel-plows used for breaking up land, it being adapted for gang-plows, as well as single sulky-plows.

With a device of this construction applied to sulky-plows, &c., the following advantageous results are obtained: First, I can make the connection between the plow-beam and the carriage-frame perfectly rigid when it is desired to have the plow work in that way; second, a perfectly free lateral movement can be given to the plow when such is desirable;

third, lateral motion to a limited extent, only, may be given to the plow, as hereinbefore set forth; and, lastly, a rock or oscillating motion is established between the plow and the sulky, so that the wheels of the latter may rise and fall in passing over uneven ground without affecting the position of the plow.

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

1. An attachment to sulky-plows for sustaining the plow in proper working position, consisting of two bearing-plates pivoted together, one being secured to the axle or frame, and the other to the plow-beam, substantially as set forth, said plates having the devices, substantially as described, to lock the plow in position or allow its limited or unlimited lateral oscillation.

2. An attachment to wheel-plows consisting of two bearing-plates pivoted together, substantially as described, one or both plates being beveled or made convex, so that the carriage-frame may have a rocking motion, and may oscillate without affecting the position of the plow, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS B. CHAMBERLIN.

Witnesses:

W. M. ALEXANDER,
JAMES L. BROWN.