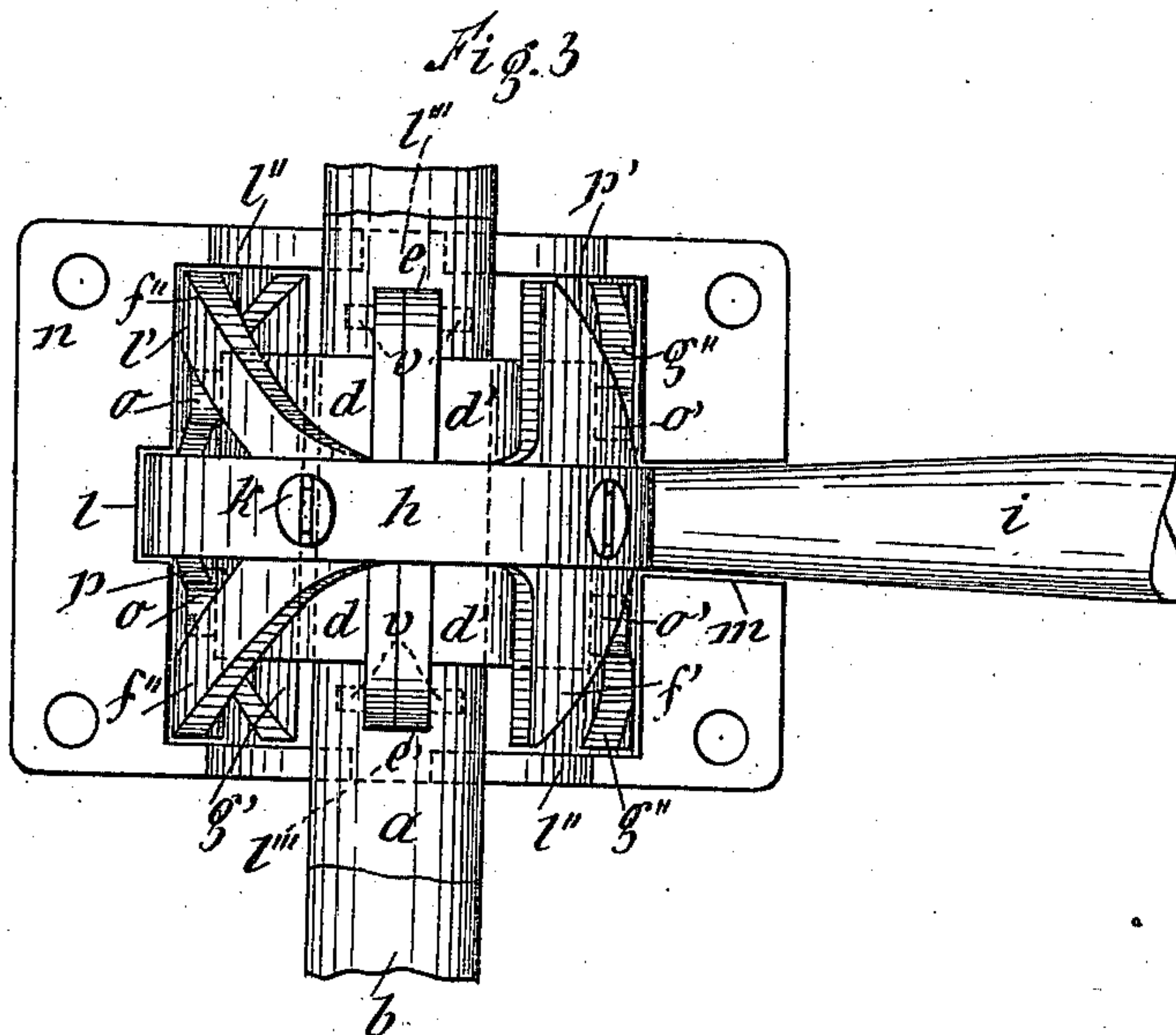
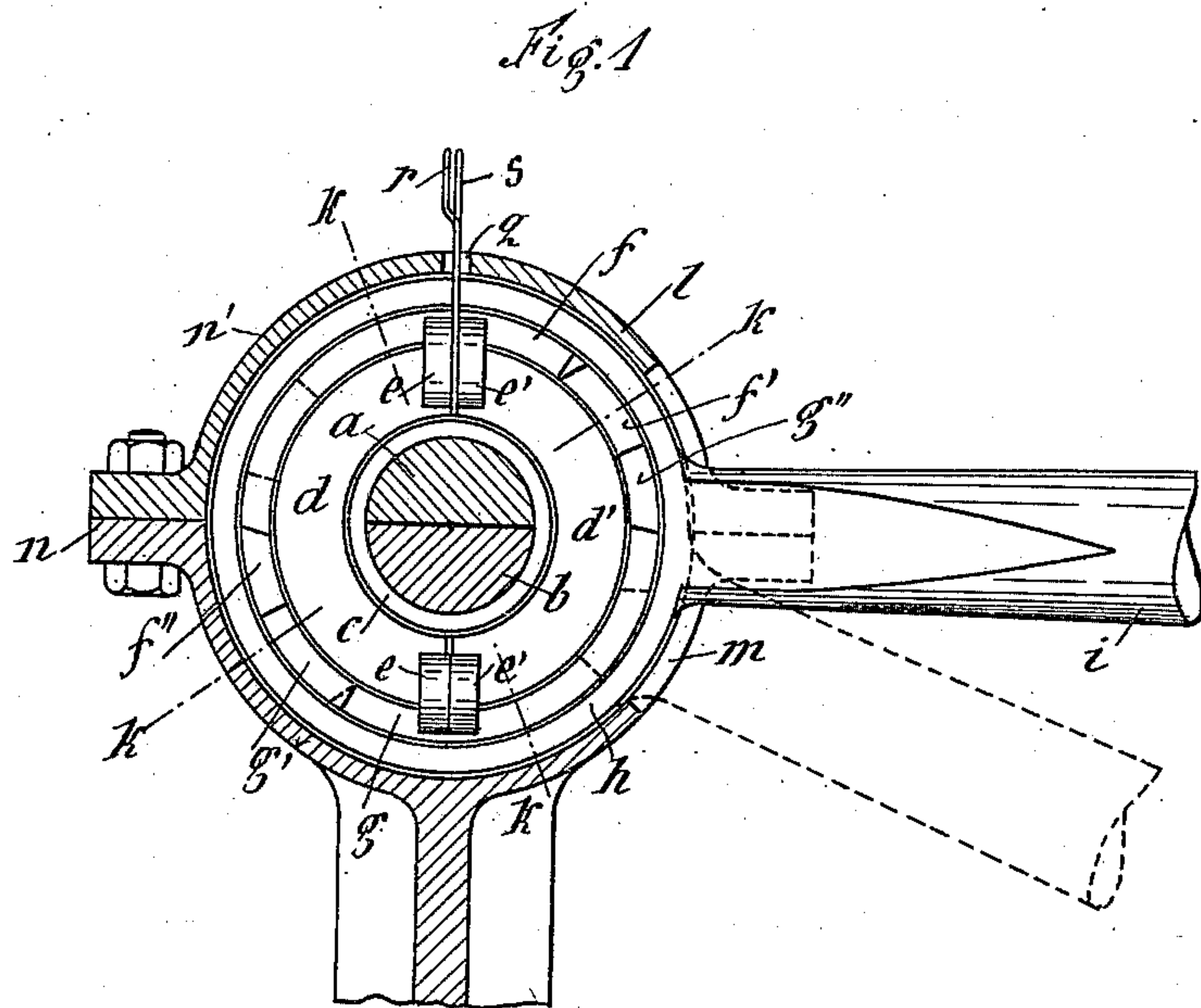


F. MELICHAR.
REGULATING DEVICE FOR SEEDING MACHINES.
APPLICATION FILED SEPT. 16, 1909.

989,918.

Patented Apr. 18, 1911.

2 SHEETS—SHEET 1.



Witnesses.

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2 SHEETS-SHEET 2.

Fig. 2

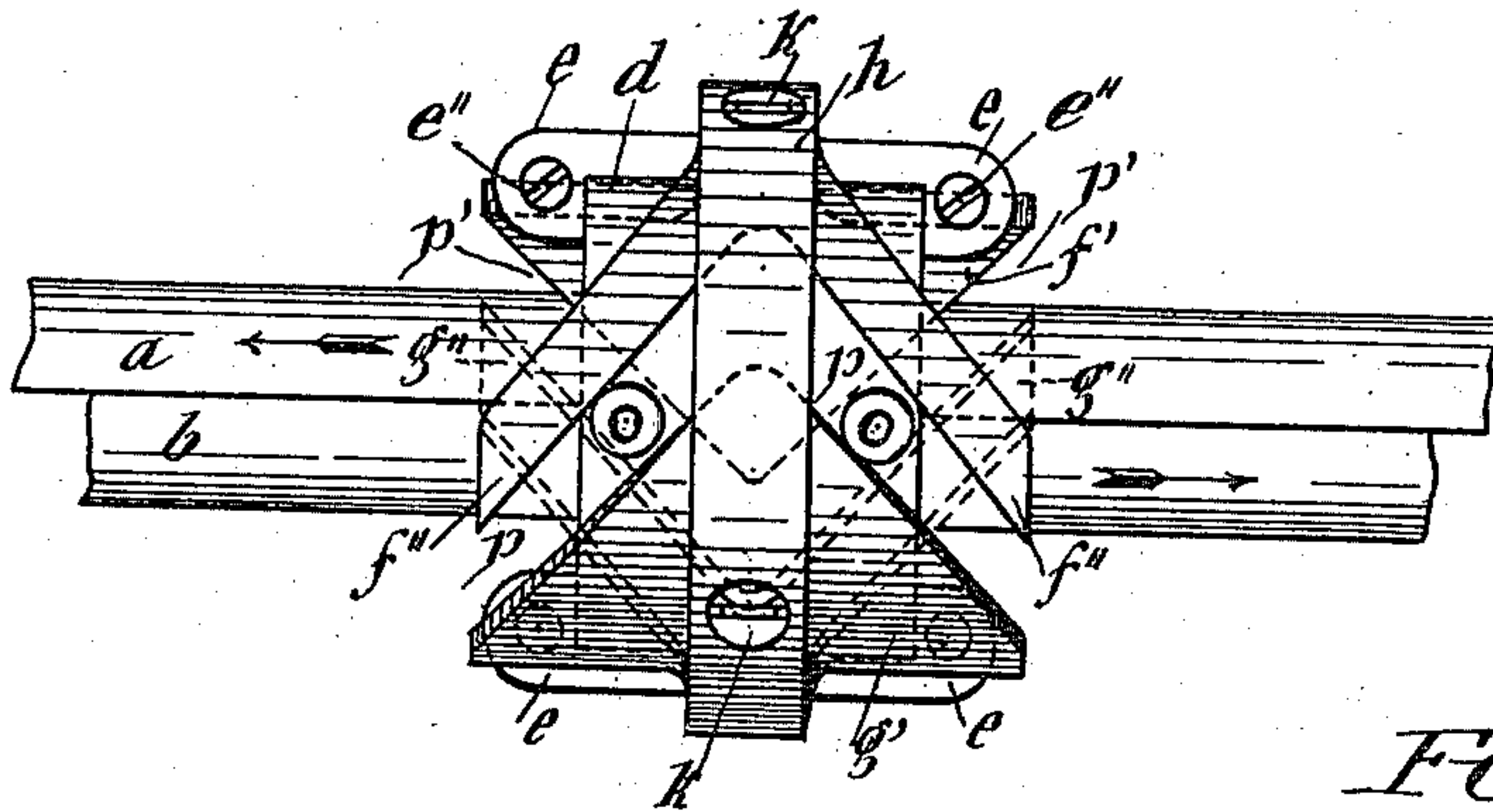


Fig. 5.

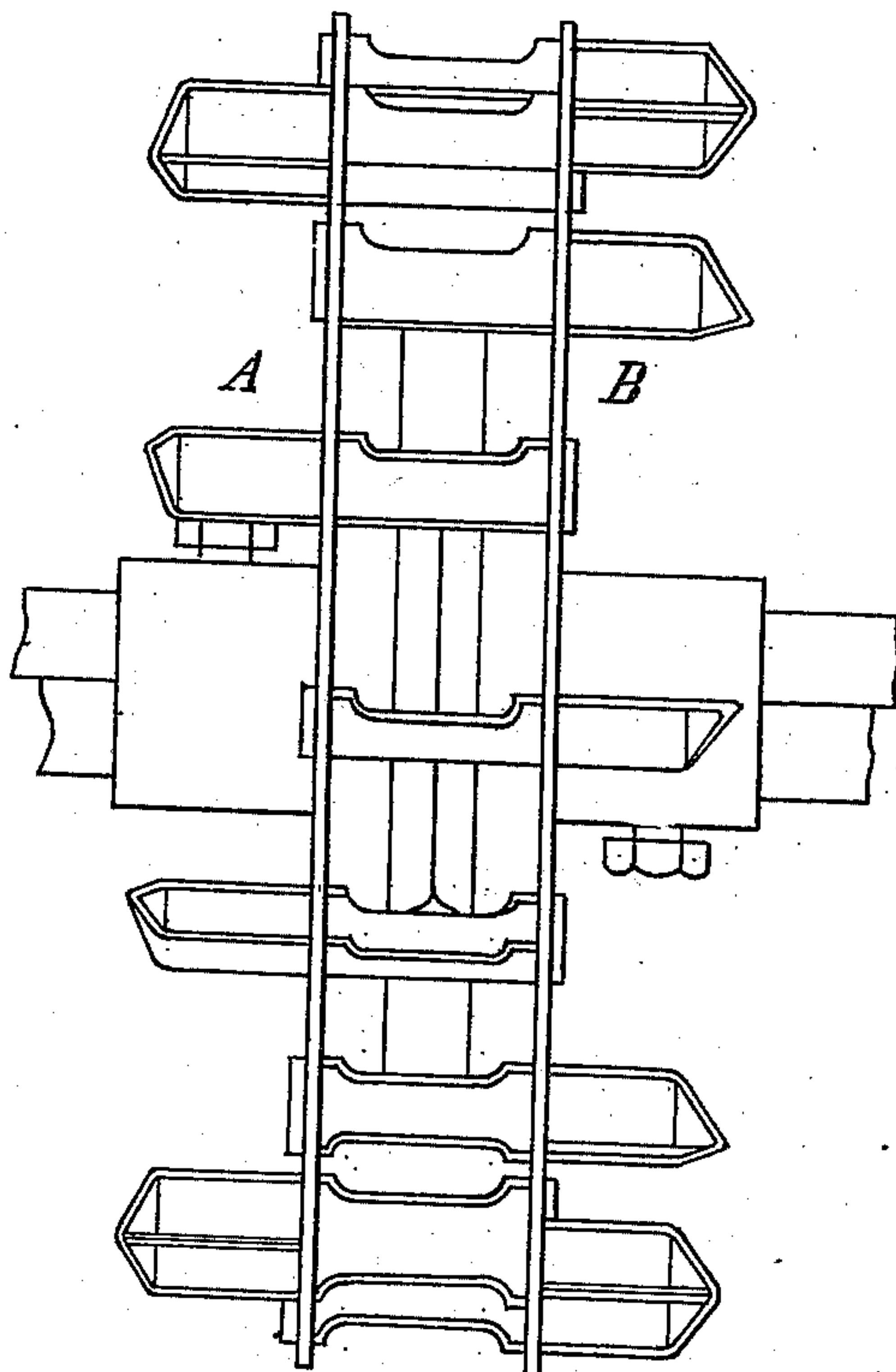
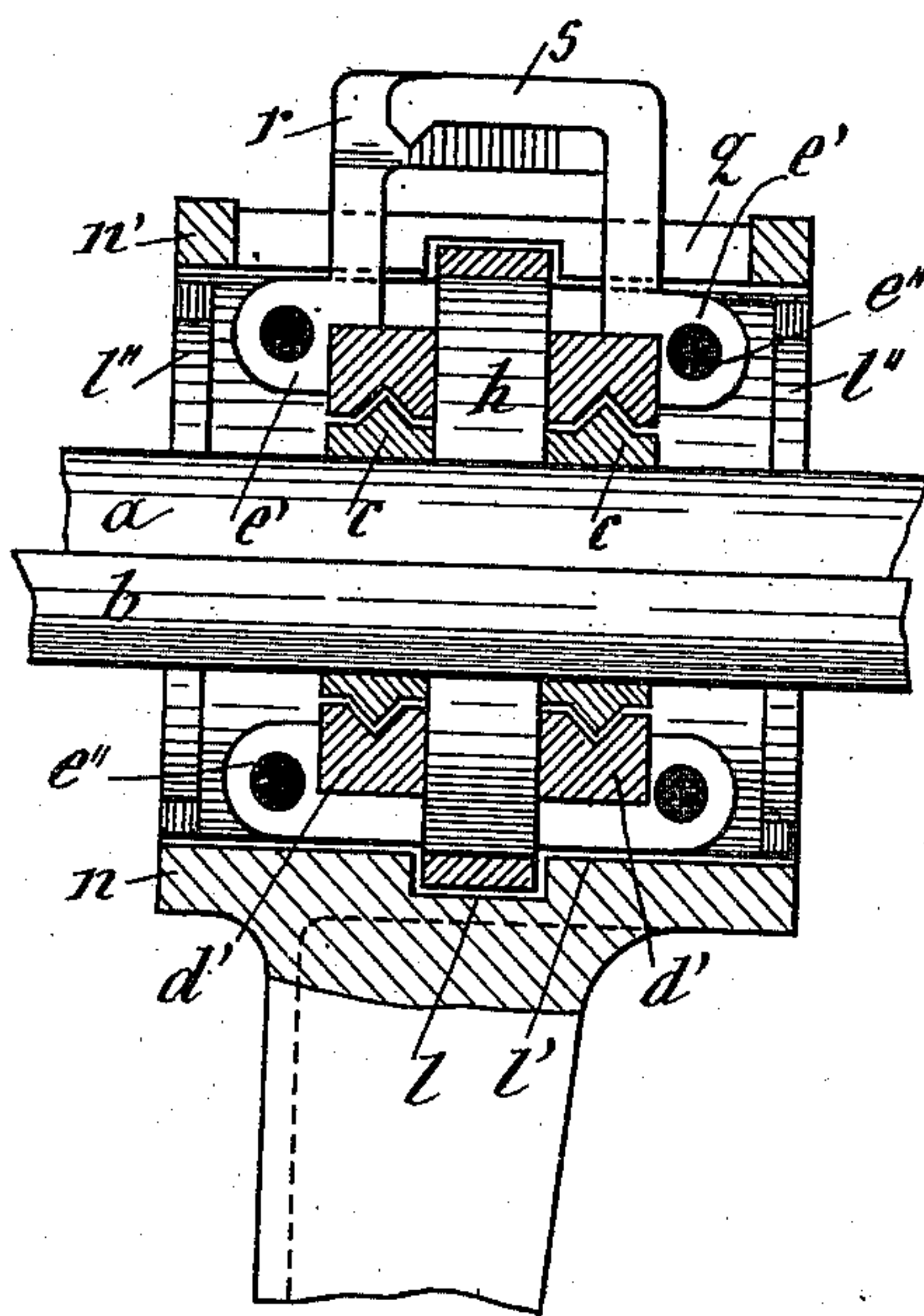


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE

FRANZ MELICHAR, OF BRANDEIS-ON-THE-ELBE, AUSTRIA-HUNGARY.

REGULATING DEVICE FOR SEEDING-MACHINES.

989,918.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed September 16, 1909. Serial No. 517,967.

To all whom it may concern:

Be it known that I, FRANZ MELICHAR, manufacturer, subject of the Emperor of Austria-Hungary, residing at Brandeis-on-the-Elbe, Kingdom of Bohemia, Empire of Austria-Hungary, have invented new and useful Improvements in Regulating Devices for Seeding-Machines, of which the following is a specification.

10 The present invention relates to seeding machines of that kind, in which the seeding is effected by scoop-disks, and has for its object to provide means for varying the size of the scoops in order to regulate the quantity of seeds according to need. For this purpose means are provided to move the disks toward or away from each other in order to enlarge or diminish the capacity of the scoops for taking up the seeds. In order to attain the object in view the scoops are secured to the disks in such a manner that the scoops secured to each disk extend through openings of the opposite disk. Now, if the disks are moved away from one another the effective capacity of the scoops will be diminished, while by moving the disks toward each other the capacity of the scoops will be enlarged.

30 In the accompanying drawing I have shown my invention.

Figure 1 is a sectional front elevation of the adjusting device; Fig. 2 a side view thereof; Fig. 3 a plan thereof; Fig. 4 a cross sectional elevation on a plane passing through the shaft; and Fig. 5 is an elevation of the divided shaft with the scoop-disks thereon, showing the scoops carried by said disks.

40 a, b is a divided shaft, consisting of two halves semi-circular in section and longitudinally movable against each other.

A, B are disks carrying the scoops, A being attached to one part a of the shaft and B to the other part b .

45 c, c are rings, one mounted on a and the other on b .

50 d', d' are divided rings, inclosing the rings c, c in such a manner that if the rings d', d' are axially moved, such movement will be imparted to the said rings c, c . Now, as one ring c is mounted on the shaft part a and the other on b , the shaft parts will axially be moved against each other as soon as the rings d', d' , engaging projections of the rings c, c are axially moved.

e', e' are projections attached to the divided rings d', d' and connected by screws e'', e'' . n, n' is a bearing and l an annular groove in the same. h is another ring, guided in the said annular groove and provided with a handle i extending to the outside through a slot m in the said bearing. f, g are curved arrow-like pieces, which by means of screws h are screwed to the inner-side of the said ring h . There are two such arrow-like pieces and each of the same possesses a triangular head f' and g' respectively and a dovetailed end f'' and g'' respectively. They are arranged in a cylindrical plane (Figs. 2 and 3) and are guided in a recess l' of the bearing n, n' . In order to prevent the said arrow-like pieces from lateral shifting, the recesses l' are provided at their outer ends with ribs l'' , which possess in their central part grooves l''' .

75 v are small stops arranged on the projections e, e' . The said stops v engage the grooves l''' and thus guide the projections e, e' of the rings d', d' , preventing the latter from rotation.

80 The arrow-like pieces f and g are cylindrically arranged around the interior of the ring h in such a manner that the triangular heads are always opposite the dovetailed ends, thus forming parallel slanting slots p, p' (Fig. 2).

90 o, o' are studs mounted on the rings d', d' and the rings d', d' are so arranged that their studs o, o' are directly opposite each other and engage the said slots p, p' .

The mode of operation of the device is as follows:—If the handle i is moved into the position shown in Fig. 1 in dotted lines, the ring h is also moved and also the arrow-like pieces f and g . Now, as the studs o, o' of the divided rings d', d' engage the slots p, p' formed by the arrow-like pieces, the said divided rings will also be moved and in turn the rings c, c , which are fast on the shaft-parts a and b respectively. As all these parts are moved in opposite directions, also the shaft parts will be moved in opposite directions so that consequently the scoop-disks fast on the same will be moved toward or away from each other.

110 In order to show to what extent the scoop-disks have been moved in either direction and what space is open of the scoops there is provided an indicating device, connected with the rings d', d' . The same consists

of two bars r , s , movable one over the other and extending from slots in the bearing n' . The bar r is provided with a scale, while the end of the other bar s has a pointed end which moves over the scale, as shown in Fig. 4. The divisions on the scale correspond to the width of the scoops.

Means may further be provided to arrest the said handle in any desired position of its stroke.

I claim as my invention:—

1. In seeding machines having scoop-disks, scoops passing therethrough and supported thereby, and means for moving the disks toward or away from each other, for diminishing or enlarging the capacity of the scoops, substantially as described.

2. In a seeding machine, a shaft, scoop-disks supported thereon, scoops secured to each disk and extending through openings in the other disk, and means for moving said disks toward or away from one another to vary the effective capacity of the scoops.

3. In a seeding machine, a divided shaft having two parts axially movable with reference to one another, a scoop-disk supported on each shaft part, scoops secured to each disk and extending through openings in the other disk, and means for moving the shaft parts axially with reference to one another to move said disks and thereby vary the effective capacity of the scoops.

4. In seeding machines the arrangement of a divided shaft, means for moving the two shaft parts axially with reference to each other, scoop-disks arranged upon the said shaft-parts, one disk being mounted on the one shaft part and the other disk on the other part, a series of scoops, secured to one disk, another series of scoops secured to the

other disk, the scoops alternately projecting through openings of the opposite disk, substantially as described.

5. In seeding machines the combination of a divided shaft, means for moving the two shaft parts axially with reference to each other, a disk mounted on one shaft part, another disk mounted on the other shaft part, a series of scoops secured to one disk and extending through openings in the opposite disk, another series of scoops secured to the second disk and extending through openings in the first disk, and means for indicating the capacity of the scoops, substantially as described.

6. In seeding machines having scoop-disks the combination of a divided-shaft a , b , ribbed rings c , c mounted on either part of the divided shaft, movable grooved rings d' , d' engaging the said rings c , c and capable of moving the same in a lateral direction toward or away from each other, a ring h and arrow like pieces f , g , mounted underneath the said ring h and above the said rings d' , d' , stops o , o on the said rings d' , d' engaging the slots formed according to the arrangement of the arrow like pieces f , g , means for turning the ring h a certain distance and for fixing it in a certain position, means for preventing the rings d' , d' from rotation and means for indicating the capacity of the scoops, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANZ MELICHAR.

Witnesses:

FERD. FIALA,
ADOLPH FISCHER.