

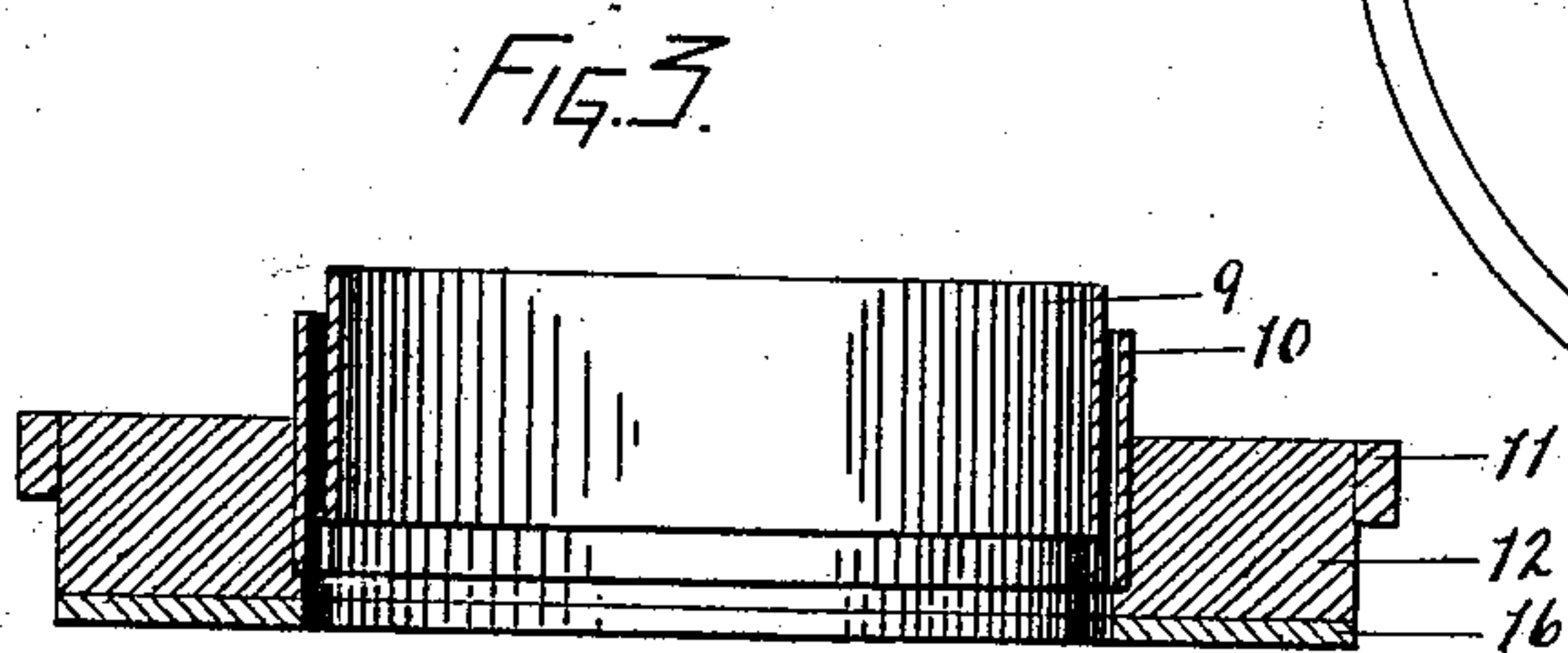
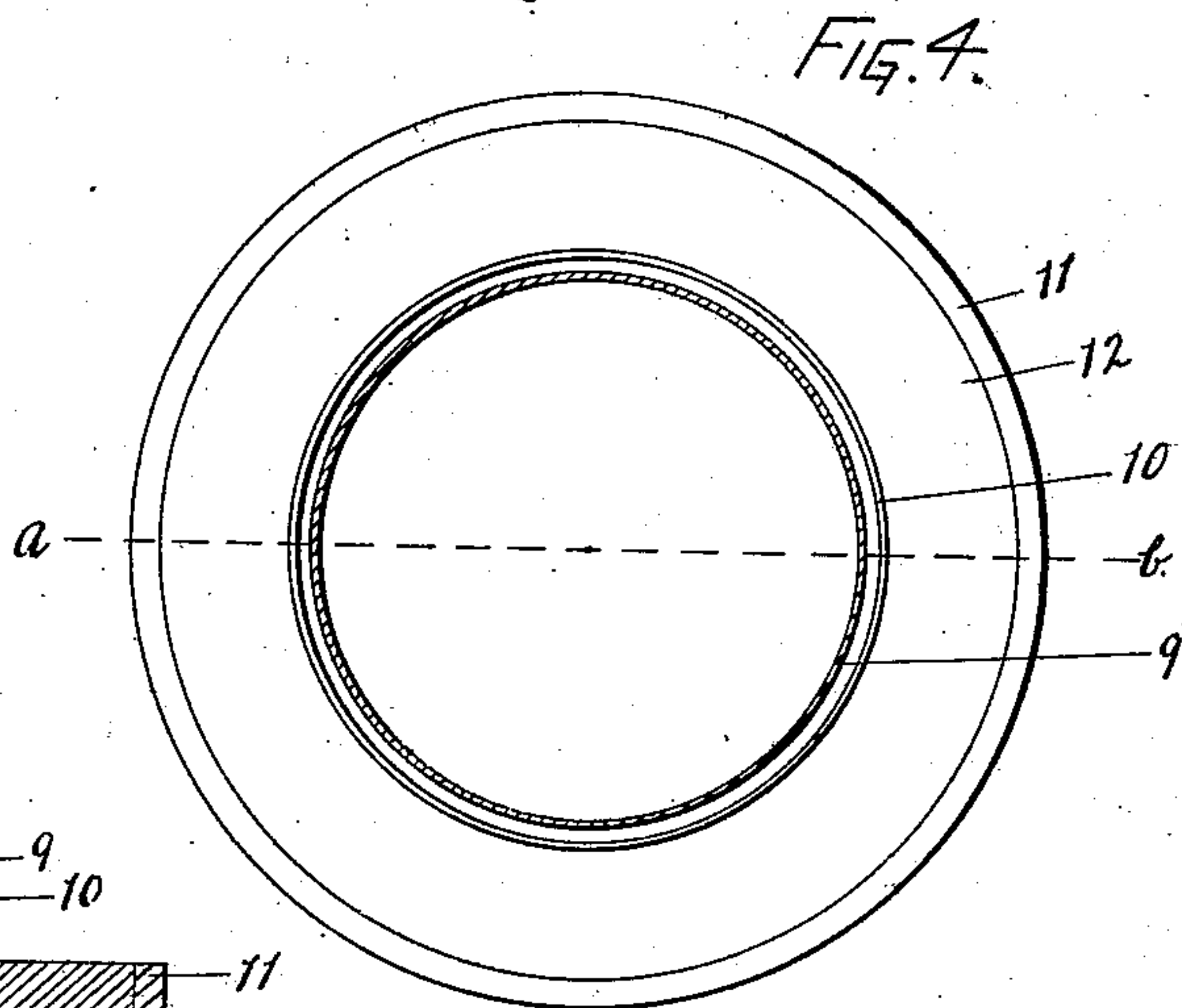
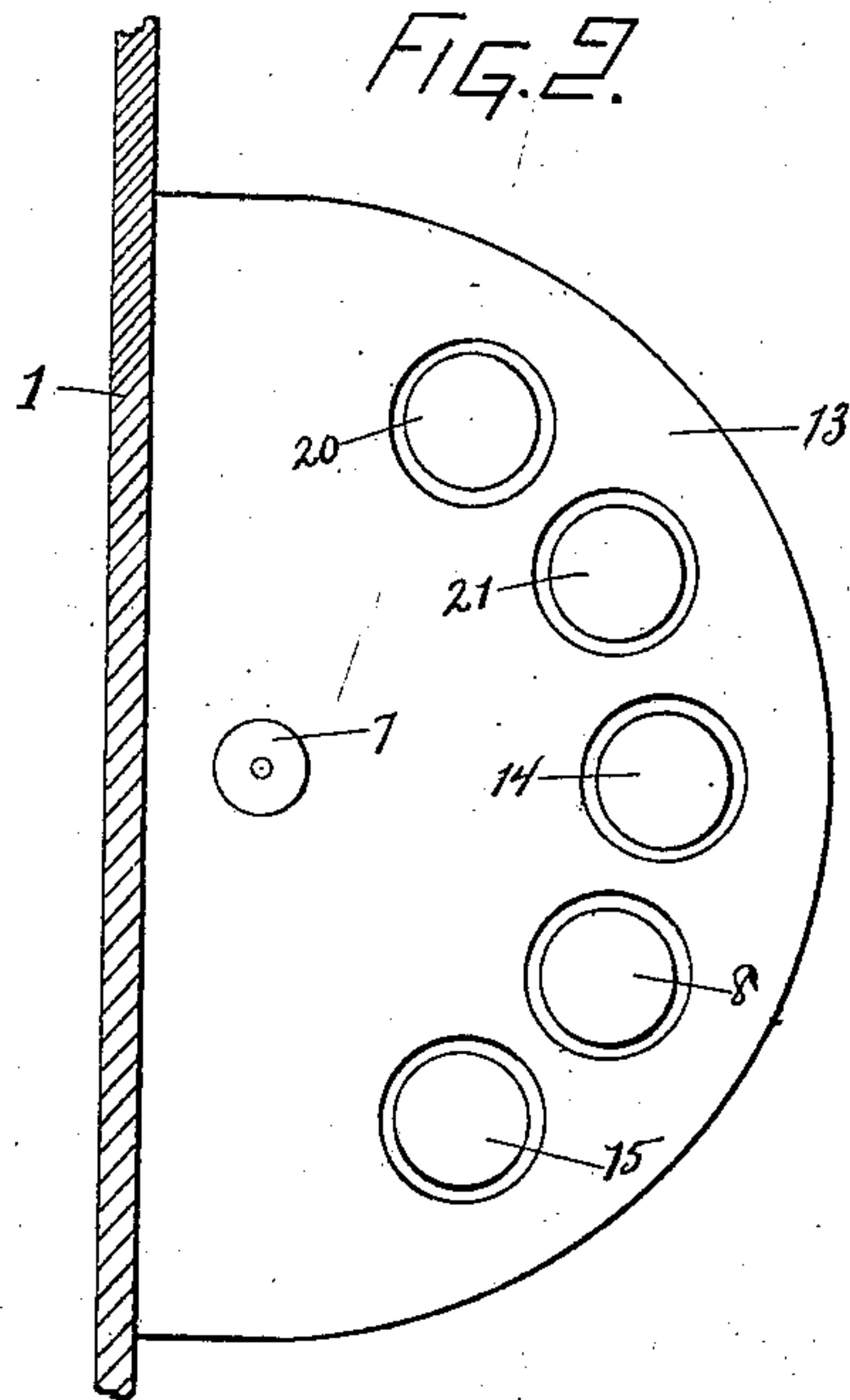
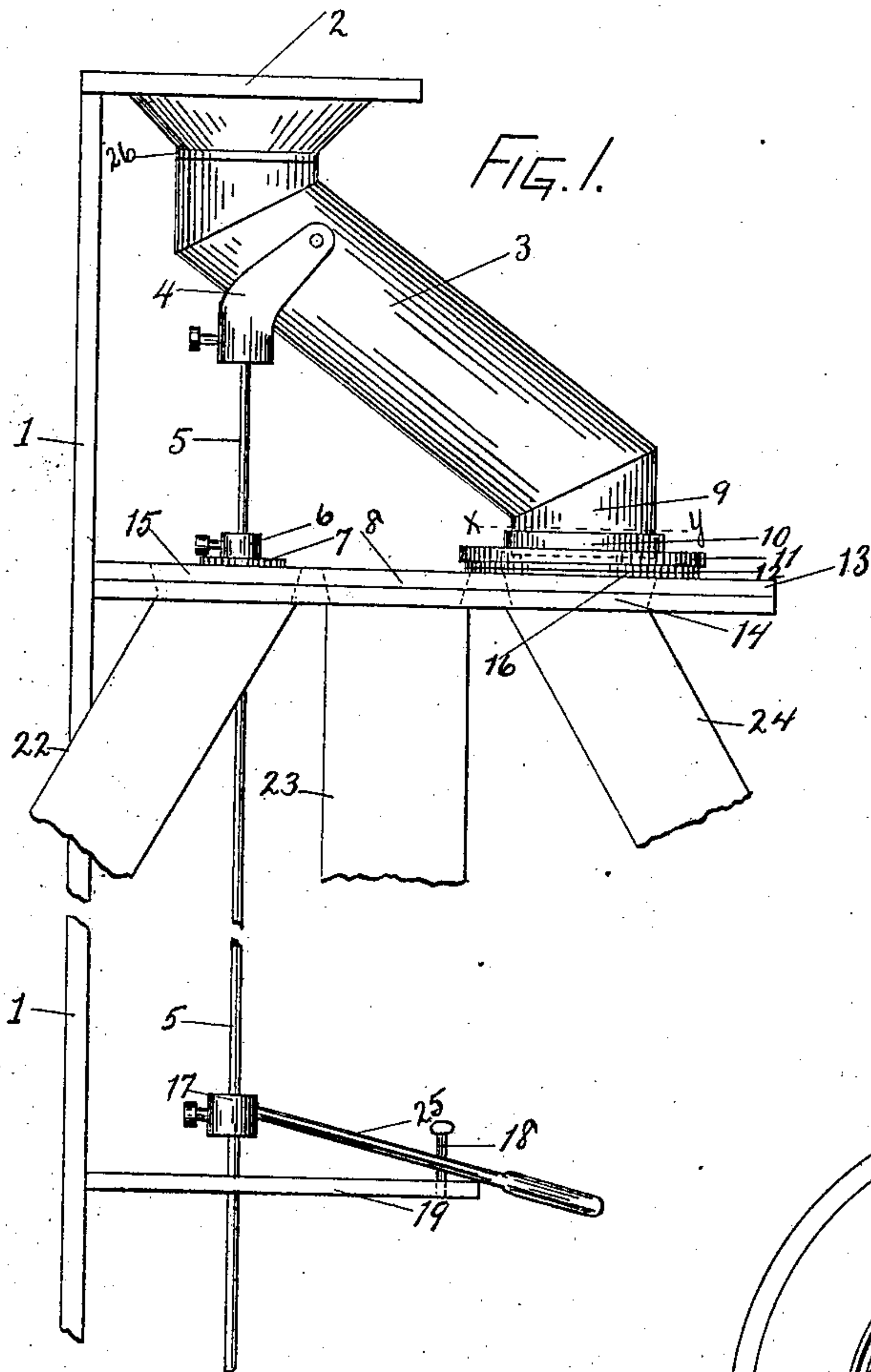
No. 685,354.

Patented Oct. 29, 1901.

C. E. SMEAD.
SWIVELED ELEVATOR SPOUT.

(Application filed Jan. 28, 1901.)

(No Model.)



WITNESSES:

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CHARLES E. SMEAD, OF HORTON, MICHIGAN.

SWIVELED ELEVATOR-SPOUT.

SPECIFICATION forming part of Letters Patent No. 685,354, dated October 29, 1901.

Application filed January 28, 1901. Serial No. 45,173. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SMEAD, a citizen of the United States, residing at Horton, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Swiveled Elevator-Spouts; and I do declare the following to be a full, clear, and exact description of the said invention, such as 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to elevator-spouts, and particularly to spouts for distributing grain and seeds from a single elevator or other common originating source to any one of several different bins. In the usual construction of such spouts the spout is swiveled to the under side of a hopper and is adapted to be moved to discharge into any one of several openings in the platform immediately below the mouth of said spout, said openings being connected with the different bins. To accomplish this result, it is necessary that the mouth of the spout be elevated some distance above the platform to enable it to swing clear thereof when moved from one position to another, and the grain strikes upon the platform and the edges of the opening and spatters out between the end of the spout and the platform, either lodging upon the platform or falling into some of the other openings, thereby passing to the wrong bin and becoming mixed with some other grain. Especially is the grain spattered, as aforesaid, whenever the spout does not register exactly over the center of the opening into which it is intended that the grain shall be discharged.

The special object of my invention is to provide a loose end for said spout which shall form a continuous extension from the said spout to the said platform, and hence to the opening therein, and leave no opening or crevice through which the grain may spatter or pass to any other opening than the one into which it is intended that it shall be discharged, further objects and advantages being evident from the following description.

In the drawings forming a part of this specification, and in which like numerals of

reference indicate similar parts, Figure 1 is a view of an elevator-spout having my improvement in place upon the end thereof. 55 Fig. 2 is a plan view of a platform, showing five different openings therein, each of said openings leading to a bin. Fig. 3 is a section view of the spout on the line *a b* of Fig. 4, showing my improvement upon the end thereof. Fig. 4 is a section view of the end of the spout and my improvement on the line *x y* of Fig. 1. 60

Referring now to the said drawings, 1 is the side of the elevator-frame. 65

13 is the platform, in which are the openings leading to the different bins, and 19 is the index-table. The spout 3 is mounted on the bracket 4 at the upper end of the rod 5, forming a swiveled joint with the under side of the hopper at 26. A collar 6 is fastened to the rod immediately above the platform and rests upon the plate 7, thereby holding the said rod and spout in position in swiveled connection with the hopper 2. At 17 another collar is fastened to said rod 5, and a lever 25 is joined thereto by a hinge-joint of ordinary construction, (not shown,) which permits the lever to be raised until the pin 18 is clear from the index-table. By this means the lever may be raised and turned with the rod and spout to any desired position, and the lever may then be lowered to engage the pin 18 with a proper hole to lock the lever and spout in said desired position. The said index-table has the same number of holes as there are openings in the said platform, and when the pin is in any one of them the spout registers over the corresponding opening on the platform. 70 75 80 85 90

In the surface of the platform are the openings 8 14 15 20 21, through which the grain passes and is then conducted by the spouts below 22 23 24 to the respective bins.

My improvement consists of a collar of metal or other suitable material fitted loosely over the end of the spout 9. This collar is of sufficient size to permit it to slide up and down upon the end of the spout whenever required on account of any unevenness of the platform. It should also fit closely enough that no grain may be able to spatter through the space between them and should be of a sufficient length that it will be impossible for 95 100

the grain to work up through between it and the spout and to also give a sufficient bearing against the spout so that when the spout is moved from one position to another it will push the said collar and the parts attached thereto with it. At the lower end of this collar and on the outside thereof I have fastened the disk 12, made of wood or other suitable material, having upon its lower side the piece of sheepskin 16 and the band of metal 11 about it. The said metal band is used to increase the weight of said piece, and thereby hold the lower portion thereof more closely in contact with the platform and also to prevent the said disk from checking or splitting, thus making it more durable. The sheepskin upon the lower surface of said disk is adapted by reason of its yielding consistency to form a very close contact with the platform under the pressure of said parts and to close any openings or crevices that might be caused by reason of the unevenness of the said platform, making a contact-joint through which it is not possible for grain to spatter or work out. It is also adapted to sweep all of the grain that might have lodged upon the platform inside of said disk into the proper opening whenever the spout is moved from one position to another, thus keeping the platform clean and free from grain. By this construction whenever grain or seed is delivered to the hopper at 2 it runs through the spout 3 9 and the connection 10 11 12 16 into the opening 14 and from there is conducted through the spout 24 to the proper bin without any of said grain being lost by spattering and without permitting said grain to mix with the grain in any other bin and also prevents grain accumulating upon the platform.

The device is practically automatic in its action, as it is moved by the end of the spout to whatever position the spout is moved and by the same means that are now used to move said spout from place to place without requiring any additional machinery or apparatus to be especially moved, may be put upon any of the spouts now in use at a small expense, cannot get out of order, and requires no additional space.

What I claim, and desire to secure by Letters Patent, is as follows:

1. The combination with a platform having openings therein; of a hopper disposed thereabove; a spout swiveled to the hopper; and an extension mounted on the spout adapted to contact with the platform and carrying yielding material on its contacting surface. 55

2. The combination with a platform having openings therein; of a hopper disposed thereabove; a spout swiveled to the hopper; and an extension mounted on the spout adapted to contact with the platform and comprising a collar, disk and band, the disk carrying yielding material on its contacting surface. 60

3. The combination with a platform having openings therein; of a hopper disposed thereabove; a spout swiveled to the hopper; and an extension mounted on the spout adapted to contact with the platform and carrying sheepskin on its contacting surface. 65 70

4. The combination with a platform having openings therein; of a hopper disposed thereabove; a spout swiveled to the hopper; and an extension mounted on the spout adapted to contact with the platform and comprising a collar, disk and band, the disk carrying sheepskin on its contacting surface. 75

5. An elevator-spout provided with an extension comprising a collar, disk, and band, the disk carrying yielding material. 80

6. An elevator-spout provided with an extension, the latter carrying yielding material on its contacting surface.

7. An elevator-spout provided with an extension, the latter carrying sheepskin on its contact-surface. 85

8. An elevator-spout provided with an extension loosely mounted thereon comprising a collar and disk, the latter carrying yielding material. 90

9. An elevator-spout provided with an extension loosely mounted thereon comprising a collar, disk and band, the disk having sheepskin secured thereto.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses. 95

CHARLES E. SMEAD.

Witnesses:

CHESTER W. BROWN,
C. E. BROWN.