

No. 743,860.

PATENTED NOV. 10, 1903.

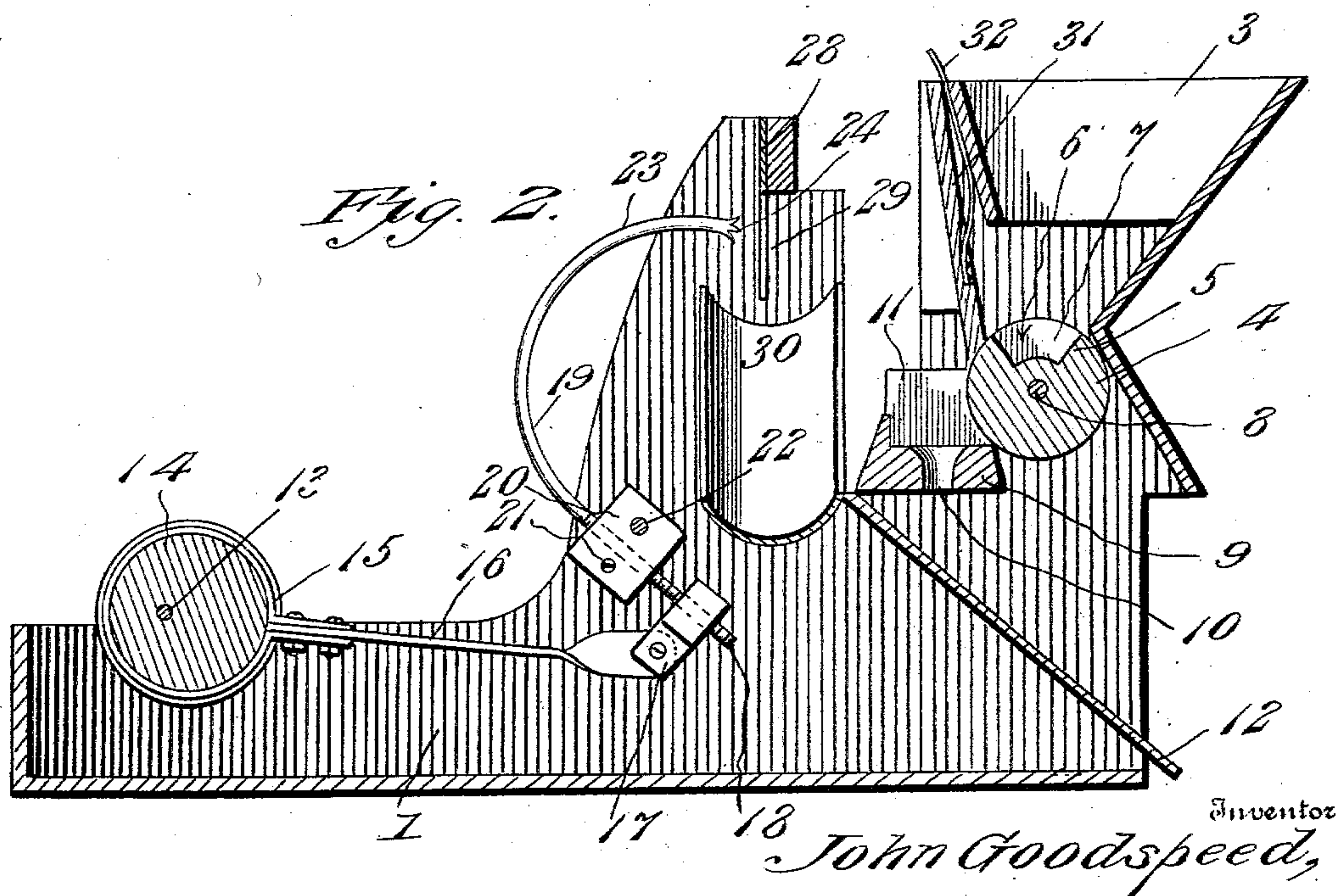
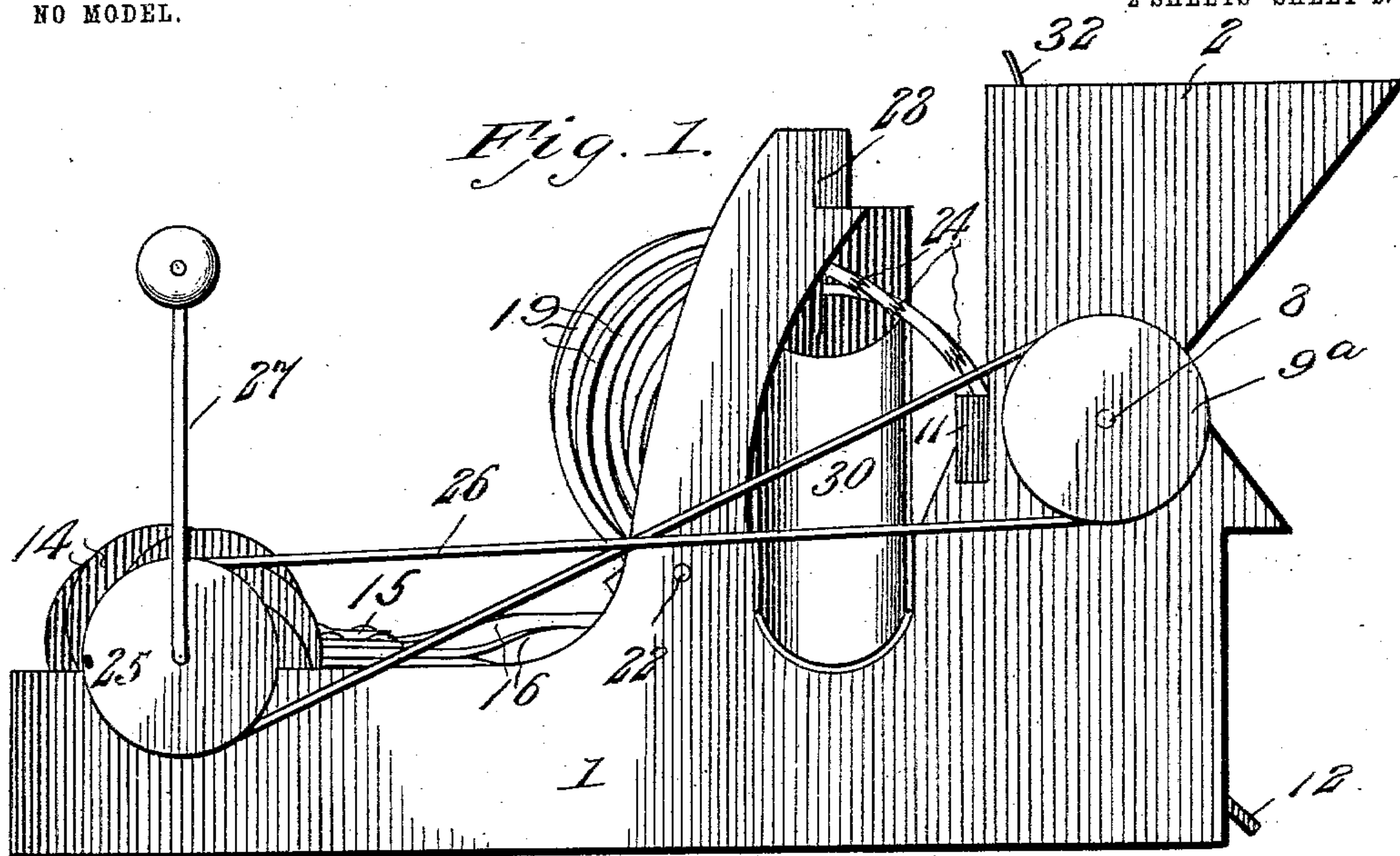
J. GOODSPEED.

## APPARATUS FOR SEEDING CHERRIES.

APPLICATION FILED MAR. 25, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

Witnesses  
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Herbert D. Lawson

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Attorney

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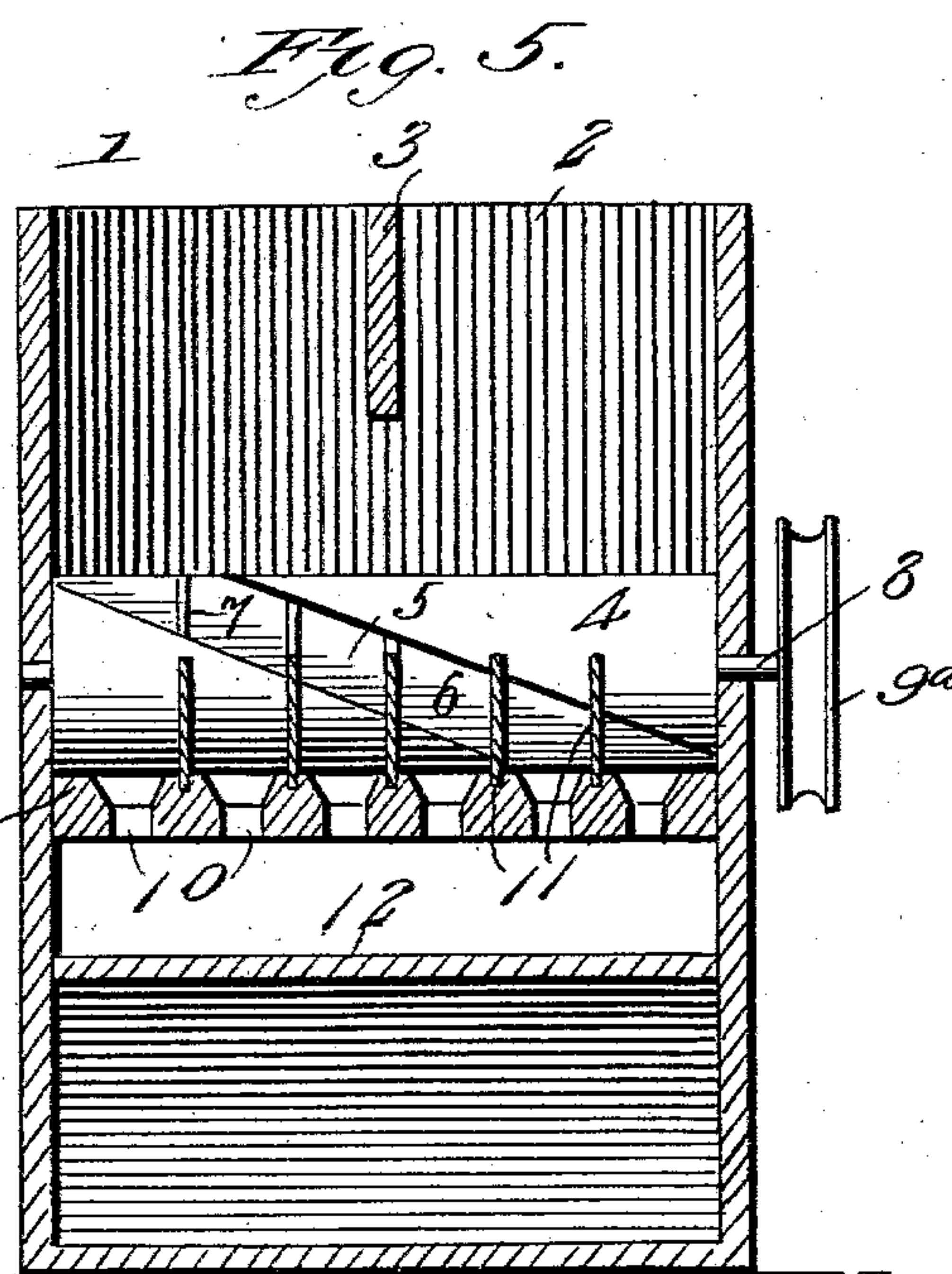
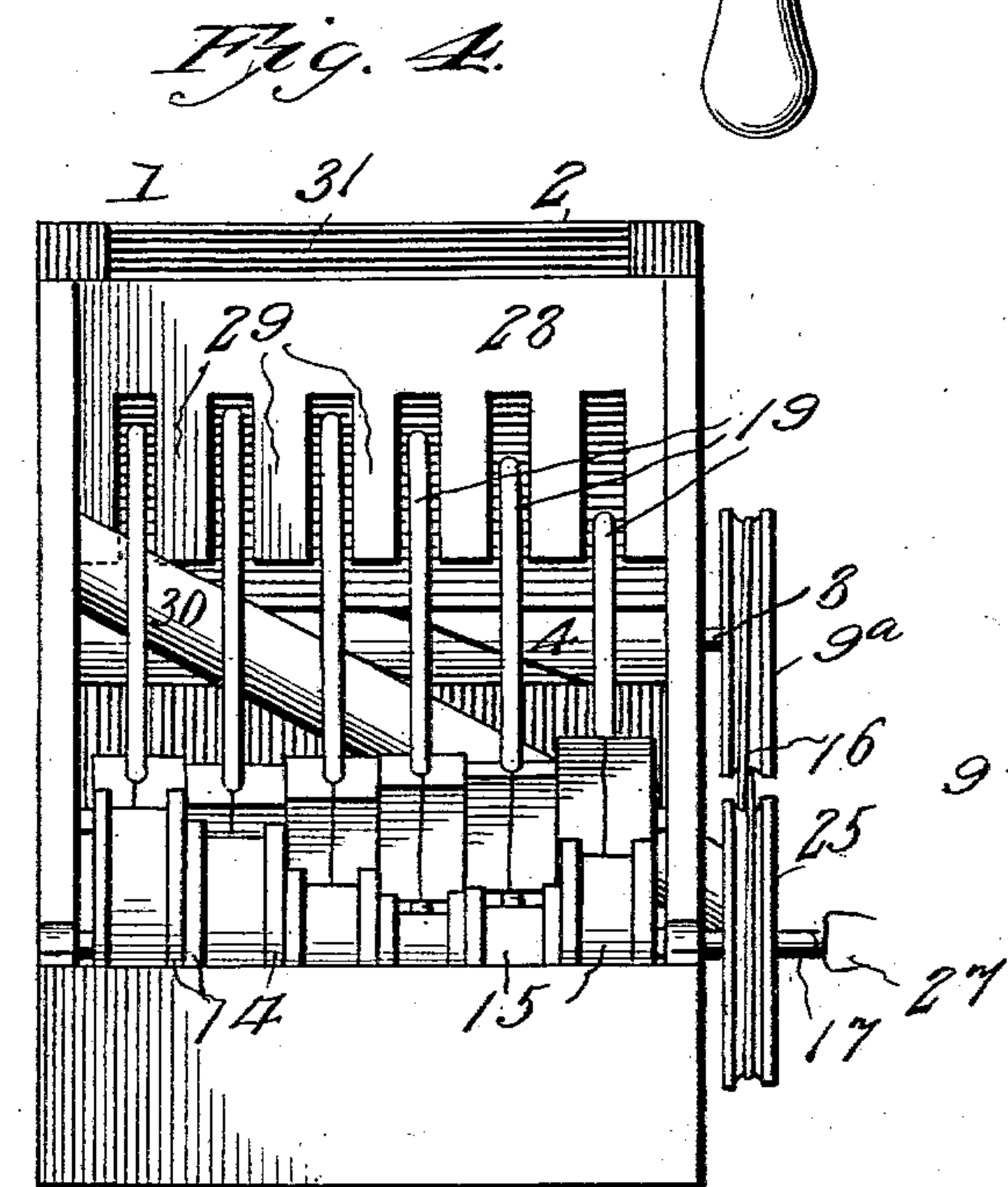
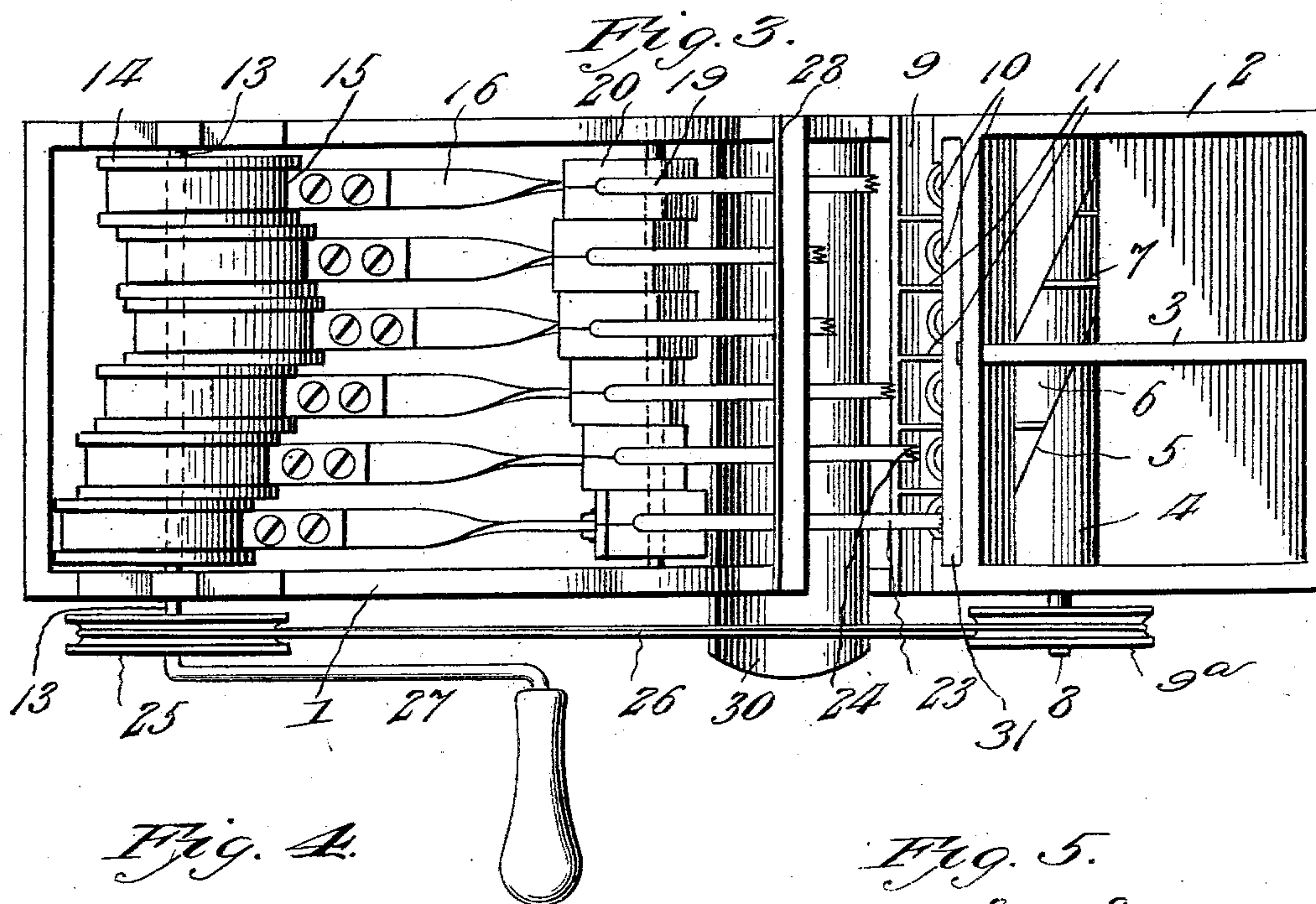
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APPARATUS FOR SEEDING CHERRIES.

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2 SHEETS—SHEET 2.



Inventor

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Witnesses

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## UNITED STATES PATENT OFFICE.

JOHN GOODSPEED, OF BROOKPARK, MINNESOTA.

## APPARATUS FOR SEEDING CHERRIES.

SPECIFICATION forming part of Letters Patent No. 743,860, dated November 10, 1903.

Application filed March 25, 1903. Serial No. 149,536. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GOODSPEED, a citizen of the United States, residing at Brookpark, in the county of Pine and State of Minnesota, have invented new and useful Improvements in Apparatus for Seeding Cherries, of which the following is a specification.

My invention relates to new and useful improvements in apparatus for seeding cherries; and its object is to provide a device of simple construction by means of which cherries may be automatically fed one at a time to mechanism which is so constructed as to carry the pulp, subsequent to the extraction of the seed, upward to a point above a discharge-trough into which the pulp is automatically discharged.

A further object of the invention is to provide seeding-fingers of novel construction adapted to be operated successively, thereby reducing to the minimum the power required to operate the device.

Another object is to employ novel mechanism for feeding cherries one at a time to the fingers.

With the above and other objects in view the invention consists in providing a hopper within which is arranged a cylinder having a spiral groove in the surface thereof which is divided into a series of similar compartments each of which is of sufficient size to accommodate a cherry. Cups equal in number to the compartments in the cylinder are arranged adjacent thereto, and each is adapted to receive a cherry from its corresponding compartment. A series of curved fingers are pivotally mounted adjacent to the cup and are operated successively by a series of eccentrics mounted upon an operating-shaft. These fingers are brought successively into position within the cups and first press the seeds from the cherries into outlets formed in the bottom of the cup and then engage the pulp and carry it upward to releasing-arms which serve to force the pulp from the fingers and deposit it within a discharge-trough.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation of the device. Fig. 2 is a longitudinal section therethrough. Fig. 3 is a plan view. Fig. 4 is an end elevation, and Fig. 5 is a vertical section through the front portion of the hopper and through the cups adjacent thereto.

Referring to the figures by numerals of reference, 1 is a frame of any suitable form, having a hopper 2 thereon at one end, and preferably divided into two compartments by means of a partition 3. Within the bottom of this hopper is arranged a rotary cylinder 4, having a spiral groove 5 formed therein and divided into a series of compartments 6 by means of partitions 7. Each of these compartments is of sufficient size to receive a single cherry. The shaft 8 of cylinder 4 is provided at one end with a pulley 9.

Extending partly under the inner face of cylinder 4 is a strip 9, having a series of apertures 10 therein equal in number to the compartments 6. Partitions 11 are arranged between apertures 10 and in alinement with the partitions 7 in groove 5. The apertures 10 are of such size as to permit a cherry-seed of ordinary size to pass therethrough; but said aperture is smaller than an ordinary cherry. An inclined board 12 is arranged within the frame 1 at a point below strip 9 and is adapted to direct outward any seeds which may be deposited thereon.

Within the opposite end of frame 1 is journaled a shaft 13, upon which is arranged a series of eccentrics 14, each of which is inclosed by a ring 15, having a forwardly-extending arm 16. Each arm is pivoted to a block 17, adjustably mounted upon the screw-threaded end 18 of a rod 19. This rod is clamped between blocks 20, which are secured together by a screw 21 or any other suitable means, and all of the blocks 20 are loosely mounted upon a shaft 22, which extends transversely of frame 1. Rods 19 are curved forward to form fingers 23, the ends of which are forked, as shown at 24, and these fingers are of such size that when thrown forward the ends thereof will be brought into position directly above their respective apertures 10. It will of course be understood that the fingers 23 are equal in number to the apertures 10. The eccentrics 14 are so mounted upon the shaft 14 that the fingers will be brought



successively into position above the apertures 10. A pulley 25 is arranged at one end of shaft 13 and is adapted to transmit motion to pulley 9<sup>a</sup> through a belt 26, preferably crossed, as shown at Fig. 1. Shaft 13 may be revolved by means of a crank 27 or in any other suitable manner. A cross-strip 28 extends transversely of the frame at a point above fingers 23 and has depending arms 29 connected therewith and projecting between the paths of the fingers. An inclined trough 30 is secured within the frame at a point under the strips 29, and the outlet thereof is arranged at a point to one side of the frame.

15 In operation cherries are placed within hopper 2, and shaft 13 is then revolved by means of crank 27. This will impart rotary motion to cylinder 4, and the cherries will be seated one at a time within the compartments 6 and 20 conveyed to a point above the aperture 10, adjacent to the compartment within which it is located. Immediately subsequent to the discharge of the cherry above aperture 10 the finger 23 in the path of which the cherry is 25 located will be brought into contact with said cherry and force the seed downward through aperture 10 and upon the inclined board 12. The finger will then be promptly retracted, and the forked end 24 thereof will engage 30 the pulp and carry it upward into contact with the strips 29. These strips will scrape the pulp from the finger and deposit it upon trough 30, which will guide it to the outside of the machine. It will be understood that 35 the cherries are fed into position above the apertures 10 separately, and the fingers 23 arrive successively into position thereabove. It is therefore obvious that but one cherry is operated upon at a time, and therefore 40 the power required to work the machine is reduced to a minimum. In order to regulate the passage of the cherries from the hopper to their positions above apertures 10, I preferably provide a slide 31 within the front 45 of the hopper, said slide being adapted to be held in adjusted position by means of a spring 32. By means of this slide the passage or outlet from the hopper may be regulated to accommodate cherries of different sizes.

50 In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any

of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a device of the character described, the combination with a hopper, and a strip adjacent thereto having a series of apertures; of a cylinder revolubly mounted within the hopper, a spiral groove within the cylinder, partitions within said groove forming com- 65  
partments, whereby articles may be conducted successively to points above the apertures in the strip.

2. In a device of the character described, the combination with a hopper, and a strip adjacent thereto having a series of apertures; of a cylinder revolubly mounted within the hopper and having a spiral groove therein, partitions within the groove forming com- 75  
partments, whereby articles may be deposited successively at points above the apertures, and means acting conjointly with the cylinder for regulating the discharge of articles from the hopper.

3. In a device of the character described, the combination with a hopper; of a strip adjacent thereto and having apertures, partitions interposed between the apertures, a cylinder revolubly mounted within the hopper and having a spiral groove therein, and 85  
partitions within the groove and in alinement with the first-mentioned partitions, whereby articles may be deposited successively at points above the apertures.

4. In a device of the character described, the combination with a frame having a revoluble shaft therein; of a stationary shaft, fingers mounted upon the stationary shaft, forks at the ends of the fingers, means connecting the fingers and the rotary shafts, whereby the 95  
same are adapted to be successively operated, and strips having a series of apertures therein in the paths of the fingers, means for feeding articles successively to points above the apertures, a trough, and depending strips 100  
above the trough and between the paths of the fingers.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN GOODSPEED.

Witnesses:

F. A. KALLAM,  
S. P. MARLETTE.