

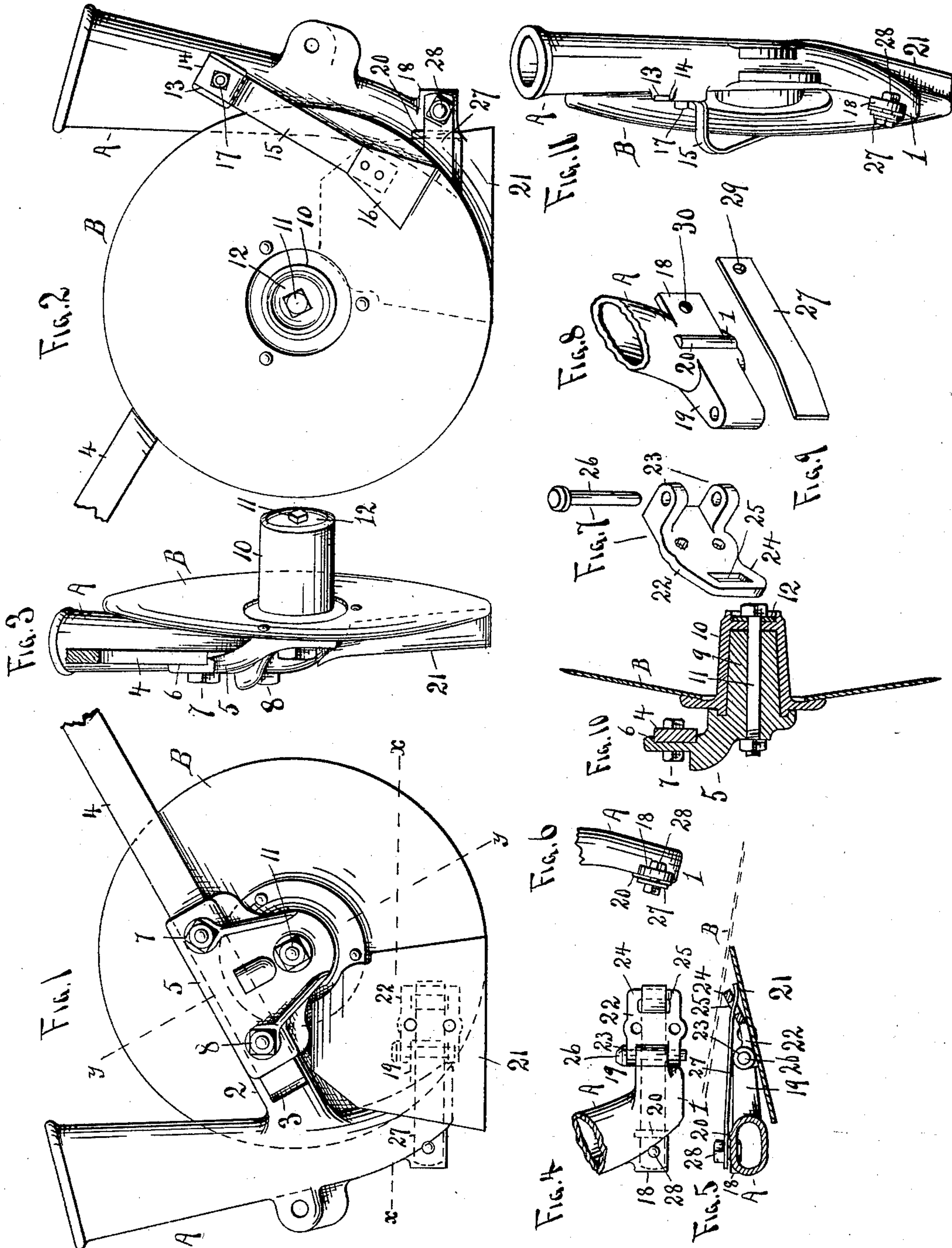
No. 707,958.

Patented Aug. 26, 1902.

G. W. COMPTON.
GRAIN DRILL.

(Application filed Dec. 4, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. COMPTON, OF EAST MOLINE, ILLINOIS, ASSIGNOR TO THE
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GRAIN-DRILL.

SPECIFICATION forming part of Letters Patent No. 707,958, dated August 26, 1902.

Application filed December 4, 1901. Serial No. 84,674. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. COMPTON, a citizen of the United States, residing at East Moline, in the county of Rock Island and State of Illinois, have invented a new and useful Grain-Drill, of which the following is a specification.

My invention relates to an improvement in grain-drills, particularly with reference to the seed-spout, the disk-bearing, and scrapers for the disk; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

One object of my invention is to effect improvements in the construction of the seed-spout, whereby the lower end of the latter is adapted to discharge seeds directly in rear of the obliquely-disposed opening-disk.

A further object of my invention is to provide an improved scraper for the concave side of the disk and to effect improvements in the construction of the spout, whereby the spring-supporting arm of said scraper may be readily attached to one side of the spout.

A further object of my invention is to effect improvements in the construction of the scraper for the convex side of the disk and in the means for attaching the same to the seed-spout.

A further object of my invention is to effect improvements in the construction of the bearing for the disk and in the means for attaching the same to the seed-spout.

In the accompanying drawings, Figure 1 is a side elevation of a seed-spout disk bearing and scraper constructed in accordance with my invention and showing the convex side of the scraper. Fig. 2 is a similar view of the same, showing the concave side of the disk. Fig. 3 is a front elevation of the same. Figs. 4, 5, 6, 7, 8, and 9 are detail views. Fig. 10 is a sectional view taken on a plane indicated by the line *y y* of Fig. 1. Fig. 11 is a rear elevation.

The seed-spout A is preferably made of cast metal, and the lower discharge end thereof is inclined to one side, as at 1, and thereby the seed-spout is adapted to discharge the seeds directly in rear of the obliquely-disposed concavo-convex disk B, which opens the drill. On the front side of the seed-spout

and formed integrally therewith is an upwardly-inclined arm 2, which is provided on its outer side with a rabbet 3, that is longitudinal thereof and in which rabbet fits the rear lower portion of the draw-bar 4. The bearing-bracket 5, which carries the disk B, has a rabbet 6 on its inner side to receive the rear portion of the draw-bar 4. The said bracket-bearing is secured to the said draw-bar by a bolt 7, which passes through the same and through the draw-bar. A bolt 8 passes through an opening in the rear portion of the said bearing-bracket and through openings in the draw-bar and in the arm 2 of seed-spout A, and thereby secures the bearing-bracket, draw-bar, and seed-spout together. The openings in the draw-bar through which the bolts 7 8 extend may be elongated to form slots which admit of the adjustment of the seed-spout and bearing-bracket on the said draw-bar. The bearing-bracket 5 is provided on one side with a journal 9, on which is fitted the sleeve or box of the disk. A bolt 11 passes through the said journal and carries at its outer end a washer 12, which bears against the outer ends of said journal and sleeve or box.

On one side of the seed-spout, which I will term the "inner" side, is formed a seat 13, having a rabbet 14, in which is fitted the upper end of a spring-arm 15, that carries a scraper 16, which operates on the concave side of the disk near the periphery thereof. The said spring-arm 15 is secured to the seat 13 by a bolt 17.

At the heel of the seed-spout on the rear side thereof is formed a short rearward-extending arm 18. The seed-spout is formed at its lower end on its front side with a forward-extending arm 19, and between said arms 18 19 on the inner side of the seed-spout is formed a bearing-rib 20. A scraper-plate 21, which is of the form shown in Fig. 1, bears on the convex side of the disk. The said scraper-plate is bolted or riveted to a support 22, which is of the form shown in Fig. 7 and is provided on its inner side at its rear end with lugs 23 and on its front end with an arm or extension 24, which has an opening 25. The lugs 23 bear on the upper and lower sides of the forward-extended arm 19 of the seed-

spout. A bolt or pin 26 is fitted in alined openings in said lugs 23 and said arm 19 and serves to pivotally attach the support 22 to the seed-spout, and thereby the scraper-plate 21 is provided with a hinged connection to the seed-spout. The front edge of the scraper-plate 21 bears against the convex side of the disk B. The rear portion of said scraper-plate is disposed on the outer side of the seed-spout. A flat strap-spring 27, which is of the form shown in Fig. 9, has its front end engaged in the opening 25 of support 22. Said strap-spring bears against the bearing-rib 20, and an adjusting-screw 28, which passes through an opening 29 in the rear end of said strap-spring, engages a threaded opening 30 in the arm 18. By means of this adjusting-screw the tension of the strap-spring may be increased or diminished at will. Said strap-spring, as will be understood, serves to keep the front edge of the scraper-plate 21 in contact with the convex side of the disk.

I do not desire to limit myself to the precise construction and combination of devices herein shown and described, as it is evident that modifications may be made therein without departing from the spirit of my invention.

Having thus described my invention, I claim—

1. In combination with a seed-spout having a forwardly-extending arm at its lower end, a disk mounted to rotate in advance of said spout, a support pivotally connected to said arm the pivotal axis of said support being vertical, a scraper on the outer side of and carried by said support and bearing against one side of the disk, and a spring connected to said spout and to said support at a point in advance of the pivot of the latter on the inner side thereof, substantially as described.

2. In combination with a seed-spout having its lower end laterally inclined and provided with a forwardly-extending arm, a disk, a

support pivotally connected to said arm, the pivotal axis of said support being vertical, a scraper on the outer side of and carried by said support and bearing against the convex side of the disk, and a spring connected to said spout and to said support, at a point in advance of the pivot of the latter, on the inner side thereof, substantially as described.

3. In combination with a seed-spout, having a forwardly-extending arm at its lower end, a concavo-convex revoluble disk, a spring-pressed scraper bearing on the concave side of the disk and attached to one side of the spout and a spring-pressed scraper pivotally connected to said arm and bearing on the convex side of the disk, substantially as described.

4. A seed-spout having the rearward-extending arm 18 and the forward-extending arm 19 at its lower end, in combination with a disk a scraper-plate, a support therefor pivotally connected to said arm 19, a spring connected to said support and bearing against said scraper-plate, and a screw connecting the rear end of said spring to said arm 18, substantially as described.

5. A seed-spout having the rearward-extending arm 18, the forward-extending arm 19 and the bearing-rib 20 between said arms, in combination with a disk, a scraper-plate, a support therefor pivotally connected to said arm 19, a spring connected to said support and bearing on said bearing-rib and against said scraper-plate, and an adjusting-screw connecting the rear end of said spring to said arm 18, substantially as described.

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

GEORGE W. COMPTON.

Witnesses:

G. L. WALKER,
E. H. FULLER.