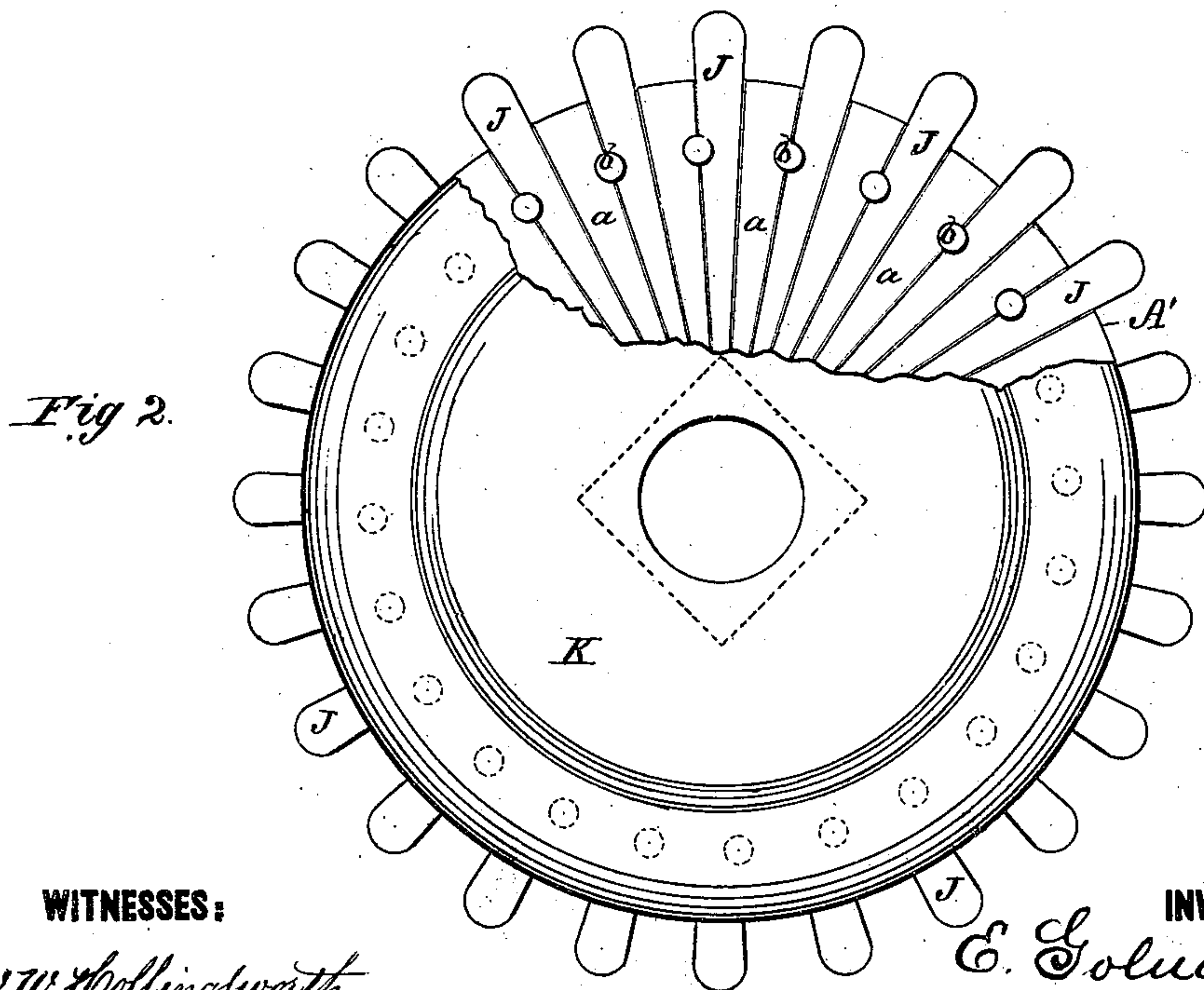
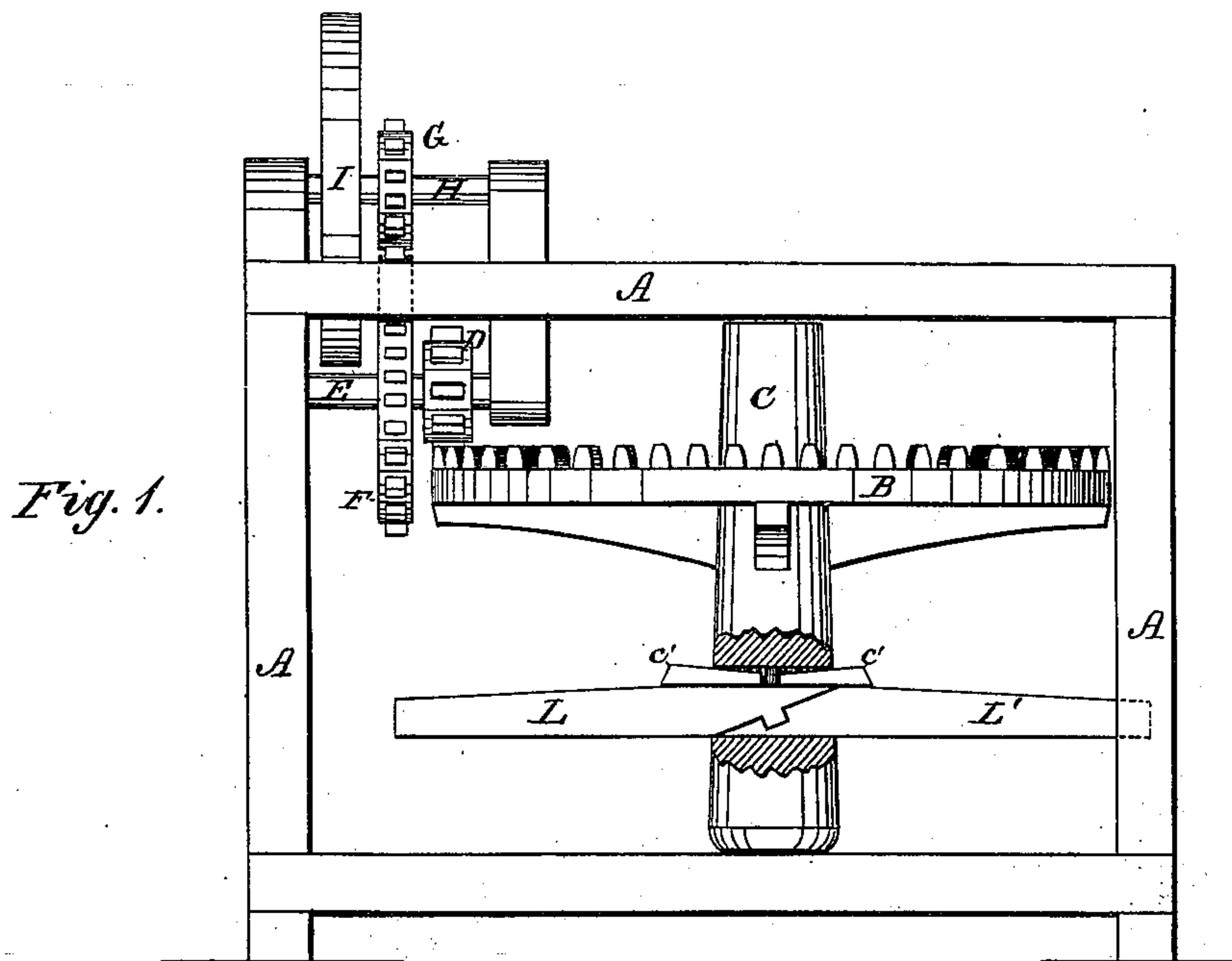


E. GOLUCKE.  
Horse-Power.

No. 199,053.

Patented Jan. 8, 1878.



**WITNESSES:**

W. W. Hollingsworth  
Edw. C. W. Byrne

**INVENTOR:**

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E. Golucke

BY

**ATTORNEYS.**

# UNITED STATES PATENT OFFICE.

EDMUND GOLUCKE, OF CRAWFORDVILLE, GEORGIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES BERGSTROM, OF SAME PLACE.

## IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **199,053**, dated January 8, 1878; application filed November 16, 1877.

*To all whom it may concern:*

Be it known that I, EDMUND GOLUCKE, of Crawfordville, in the county of Taliaferro and State of Georgia, have invented a new and Improved Horse-Power; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view of the horse-power, showing the manner of attaching the levers. Fig. 2 is a face view of one of the wheels, with a part of one of the disks broken away, showing the manner of securing the cogs.

My invention has reference to an improved horse-power for ginning cotton, thrashing grain, sawing wood, &c.

The improvement consists, chiefly, in the construction of the gear-wheels, which are made of wood, with the cogs, formed in the shape of tapering plugs, inserted between fixed partitions, and held by pins, which are embedded partly in the tapering plug and partly in the fixed partition, the plugs being held in place laterally by a removable disk or plate.

The improvement also consists in the means of attaching the draft-levers to the post of the king-wheel, as hereinafter described, whereby they are more securely held in place.

In the drawing, A represents the framework of my improved horse-power, which is made of wood, in a substantial manner. B is the horizontally-rotating king-wheel, fixed to a heavy vertical post, C, which latter is held in suitable bearings in the frame. This wheel B is in the nature of a crown-wheel, with teeth upon its upper edge, which engage with a small cog-wheel, D, arranged upon a shaft, E. Upon this same shaft, and beside the cog-wheel D, is arranged a larger cog-wheel, F, which, in turn, engages with a small cog-wheel, G, mounted upon a shaft, H, above, which also carries the band-wheel I.

These wheels G D F are all made alike, in accordance with my invention; and in constructing them a circular disk, A', Fig. 2, is

provided with a number of equidistant partitions, *a*, which are firmly attached to the disk by gluing and nailing. In between these partitions are arranged the tapering plugs J, having their outer ends rounded and projecting from the wheel to form the cogs.

To secure these plugs in place, they are provided, near the middle of their length, with a semicircular transverse groove, which, when the plug is in place, registers with a corresponding transverse groove in the side of the fixed partition to form a round hole at right angles to the plane of the wheel. Into this hole is driven a round pin or key, *b*, which, it will be seen, serves to bind the plugs and the partition rigidly together, and thus holds the cogs firmly in position. Over this side of the wheel is now placed the removable disk K, having holes to receive the ends of the circle of pegs, which disk is secured to the first by means of bolts passing entirely through the two disks of the wheel.

In constructing a small cog-wheel after my invention, disks A' K are employed; but when the wheel is of larger diameter, circular-rim plates take the place of said disks for receiving the cogs, and are connected to the central shaft by suitable spokes.

In arranging the draft-levers L L' in the post of the king-wheel, said post is slotted transversely, and the two levers secured therein with a scarf-joint. In accomplishing this the adjacent ends of the lever are beveled to a corresponding inclination, with a transverse angular groove in one, which receives a corresponding transverse angular tongue formed on the beveled face of the other. The two levers being thus connected in the slot of the king-post, they are firmly held together and secured therein by wedges *c'*.

This manner of securing the levers brings them both upon the same level, and yet holds them securely in place, without danger of being pulled out.

Having thus described my invention, what I claim as new is—

1. The gear-wheel, consisting of a series of tapered plugs, having semicircular transverse



grooves, a disk<sup>1</sup> or its equivalent, having partition *a*, with corresponding transverse grooves, the fastening-pins *b*, and the detachable disk *K* or its equivalent, having holes to receive the ends of the pins, all combined and arranged substantially as shown and described.

2. The combination, with the slotted king-

post, of the draft-levers, united by a scarf-joint, and secured by wedges, substantially as shown and described.

EDMUND GOLUCKE.

Witnesses:

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