R. DUTTON.

Mower.

No. 20,050. Patented April 27, 1858.

Fig. 3.

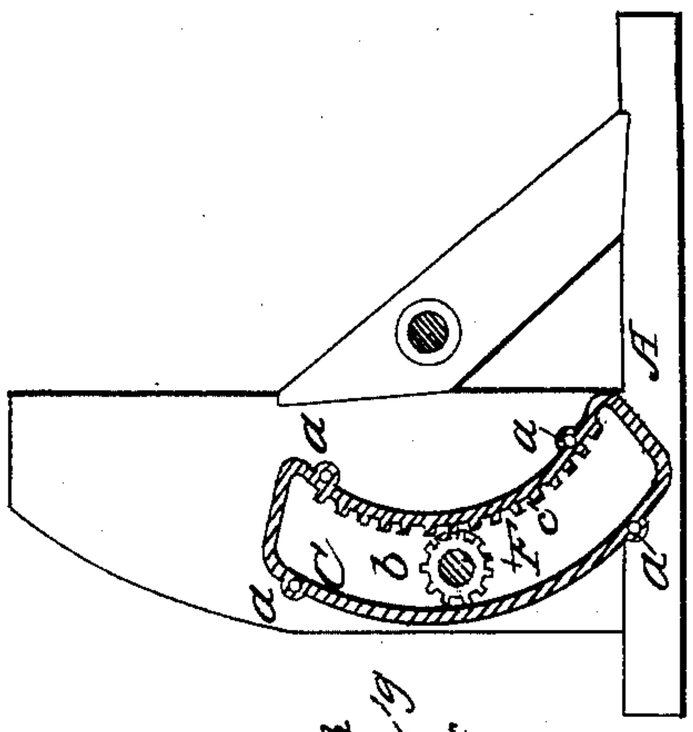


Fig. 2.

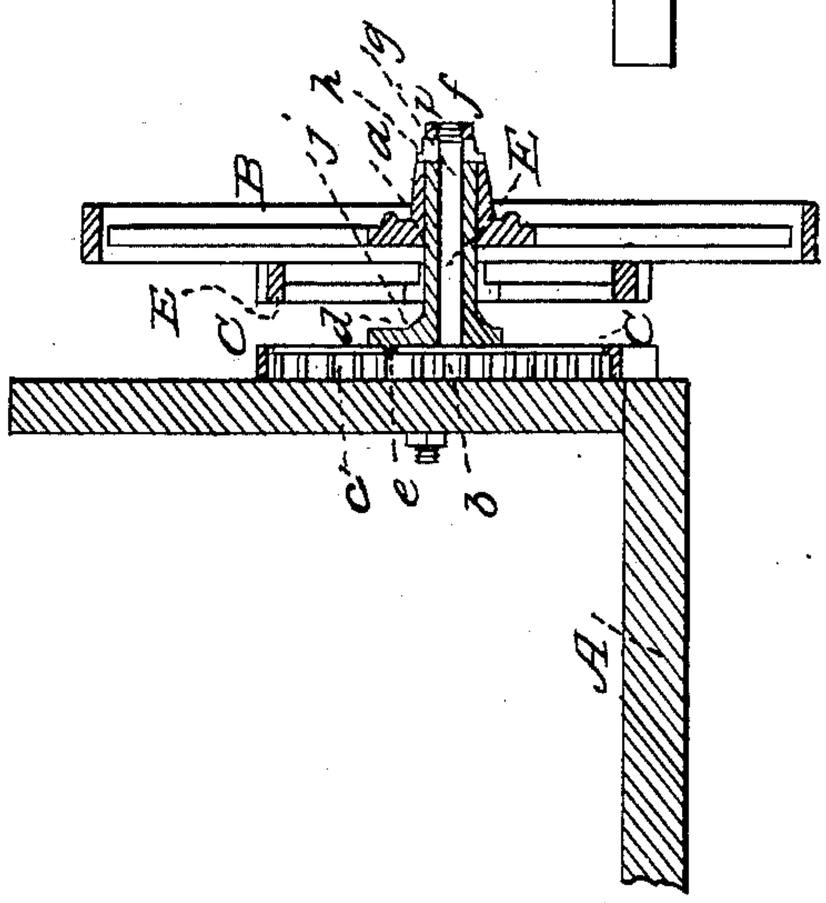
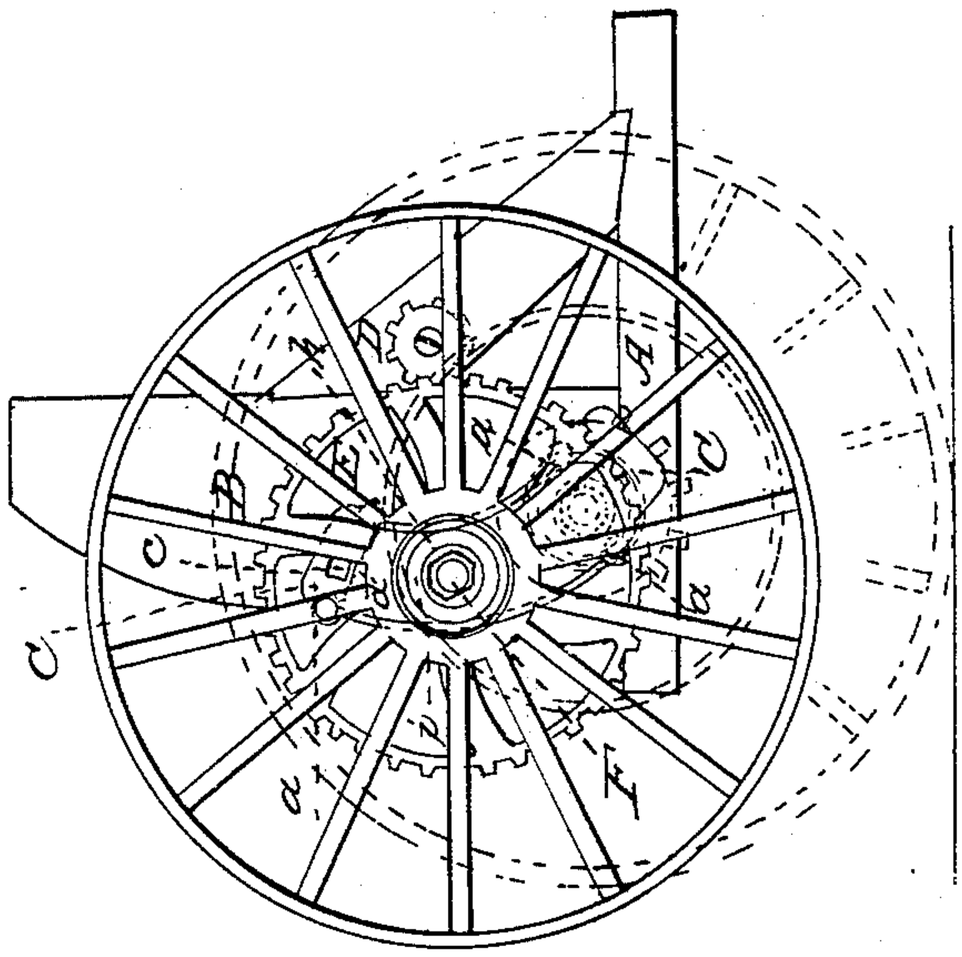


Fig. 1.



UNITED STATES PATENT OFFICE.

R. DUTTON, OF DAYTON, OHIO.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **20,050,** dated April 27, 1858.

To all whom it may concern:

Be it known that I, R. DUTTON, of Dayton, in the county of Montgomery and State of Ohio, have invented a new and useful Improvement in Adjusting the Platforms of Reaping and Mowing Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of a harvester with my improvement applied to it. Fig. 2 is a transverse section of the same. Fig. 3 is a side elevation of the same.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists in the employment of the loose hollow sliding sleeve between the hub of the driving-wheel and the short axle, in combination with the slotted segment provided on one of its inner sides with the cogs and adjustable axle having a pinion on its inner and screw-thread and adjusting jam-nuts on its outer end, the several parts being arranged to operate in the manner hereinafter specified.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the platform. It is of usual construction.

B is the driving and propelling wheel; C, the slotted segment-plate attached fast to the side board of the platform by screws, as at *a a a a;* D E, gears for transmitting motion from propelling-wheel to mechanism which actuates the cutter-bar or other device. The inner end of the axle F of the wheel B is inserted through the curved slot C′ of the segment-plate C, and is provided with a pinion, *b*, which gears with the teeth *c*, formed on one portion of the inner circumference of said slotted segment, as shown clearly in Fig. 3. The outer end of the axle passes through a hollow loose sleeve or box, G, which is fitted loosely in the hub of the wheel B. This sleeve has a broad flange, *d*, on its inner end. Said flange has a guide-stop, *e*, formed on the center of its inner face. The flange *d* bears against the outer face of the segment-plate, and serves as a steady-plate, and, in connection with the cog-pinion *b*, as a clamp, as presently described, while the stop *e* fits in the slot and serves as guide and steady pin. On the extreme outer end of the axle a screw-thread, *f*, is cut, and intermediate between this screw-thread and the ends of the hub and loose sleeve the axle is made square, as shown at *g*. A plain jam-nut, *h*, fits the square *g*, and a screw-tapped nut, *i*, fits the screw end *f*, as shown.

From the above description of parts it may be evident, if it is desired to raise the platform from the position shown in red in Fig. 1 to the position shown in black, that by loosening the screw-nut *i* with a wrench, and then applying another wrench to the jam-nut, the axle, with wheel B attached, can be easily run up to the desired position in the slot C′ through the aid of the cog-pinion *b* and cog-rack *c*, and after being properly adjusted can be locked in this position without jamming the wheel B by turning the wrench of nut *i* in an opposite direction to that in which *h* was turned and ceasing to turn the wrench of nut *h*, the locking being effected by reason of the inner face of the pinion jamming against the inner surface of the segment and the flange *d* up against the outer surface of segment, as may be evident from the drawings. The pinion has an independent longitudinal movement of the sleeve and flange, and therefore it is that it, as well as the flange, jams, said movement being imparted to the pinion by the nut *i* and the movement of the sleeve and flange by the nut *h*. It will be observed that a sufficient space, *j*, exists between the driving-wheel and the flange to allow of these movements without liability of the motion of said wheel being cramped. With this simple arrangement the adjustment of the platform or cutter-bar of reapers or mowers to any extent required can be effected with great ease, facility, and convenience.

What I claim as my invention, and desire to secure by Letters Patent, is—

The employment of the loose hollow sliding sleeve G between the hub of the driving-wheel and the short axle F, in combination with the slotted segment C on the side of the platform and the adjustable axle F, when the slotted segment is provided on one of its inner sides with the cogs *c* and the axle with pinion *b* on its inner and screw-thread *f* and adjusting jam-nuts *h i* on its outer end, the several parts being arranged to operate substantially as and for the purpose set forth.

R. DUTTON.

Witnesses:

ROBT. TORRENCE,

J. A. GROSVENOR.