

Richardson & Glover.

Mower.

N^o 25370

Patented Sep. 6, 1859

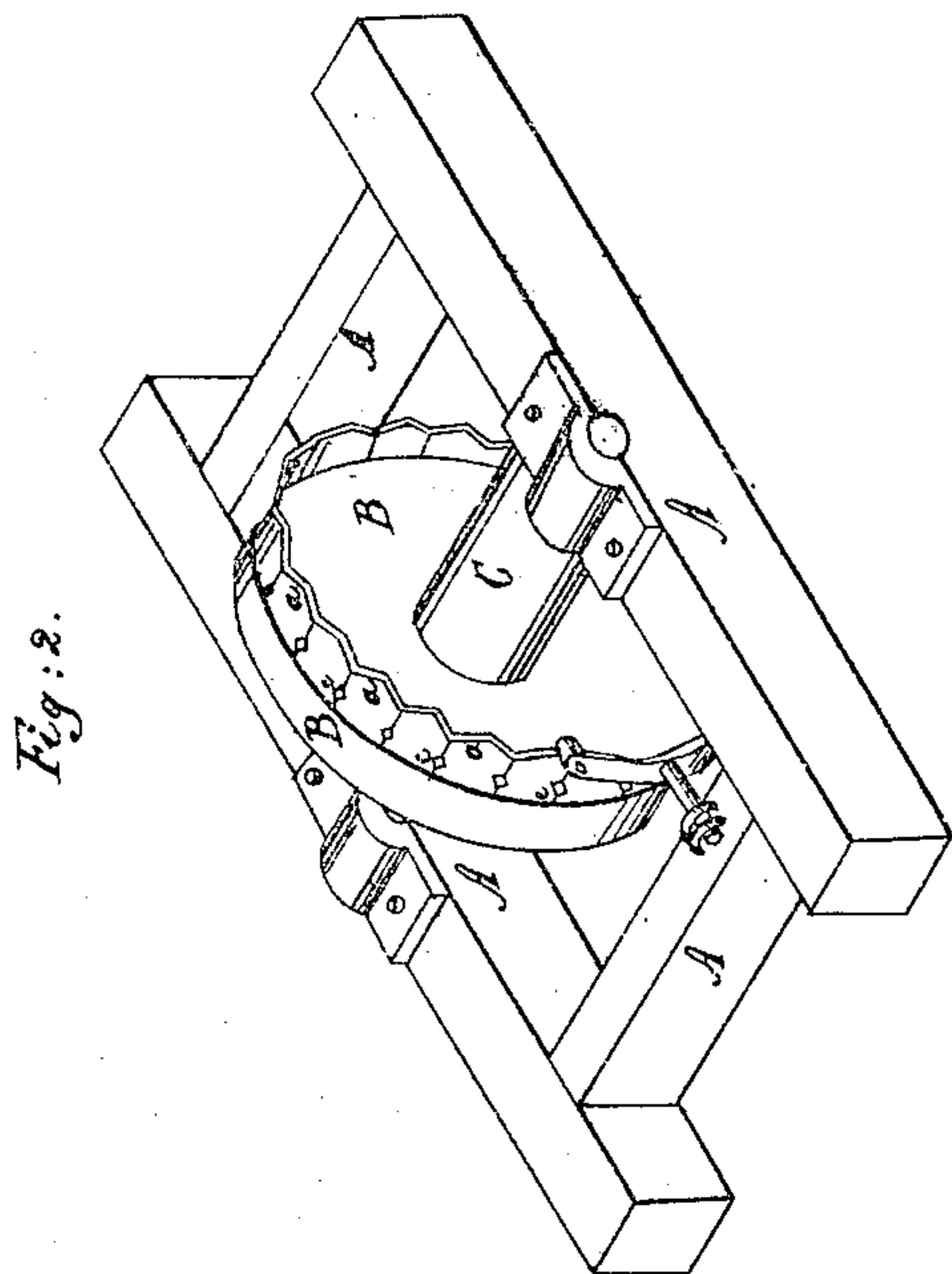


Fig: 2.

Fig: 5.

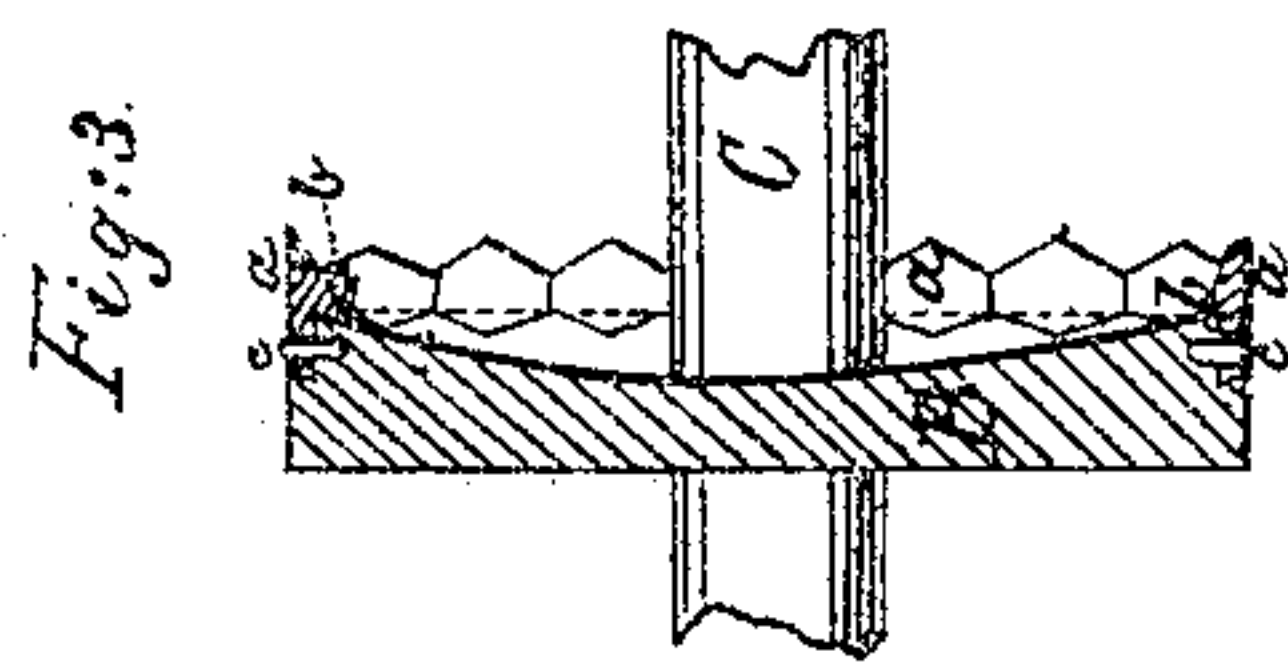


Fig: 3.

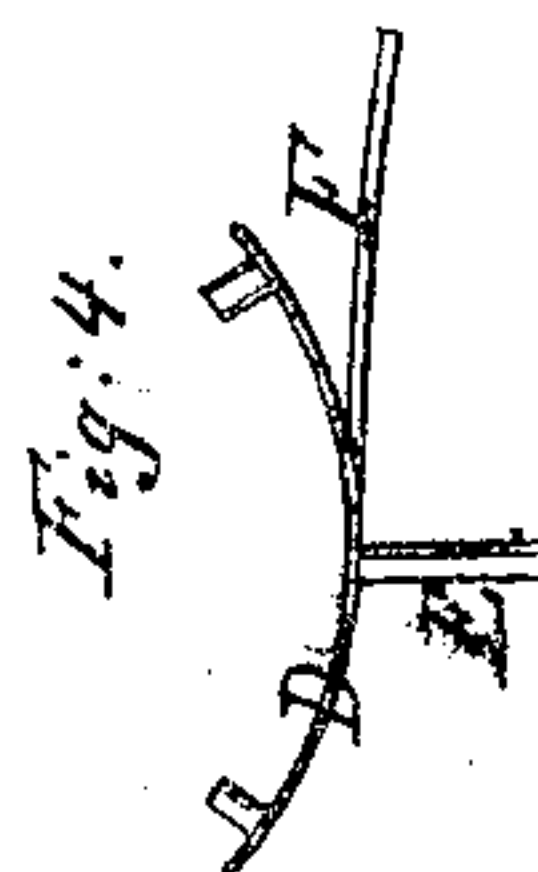


Fig: 4.

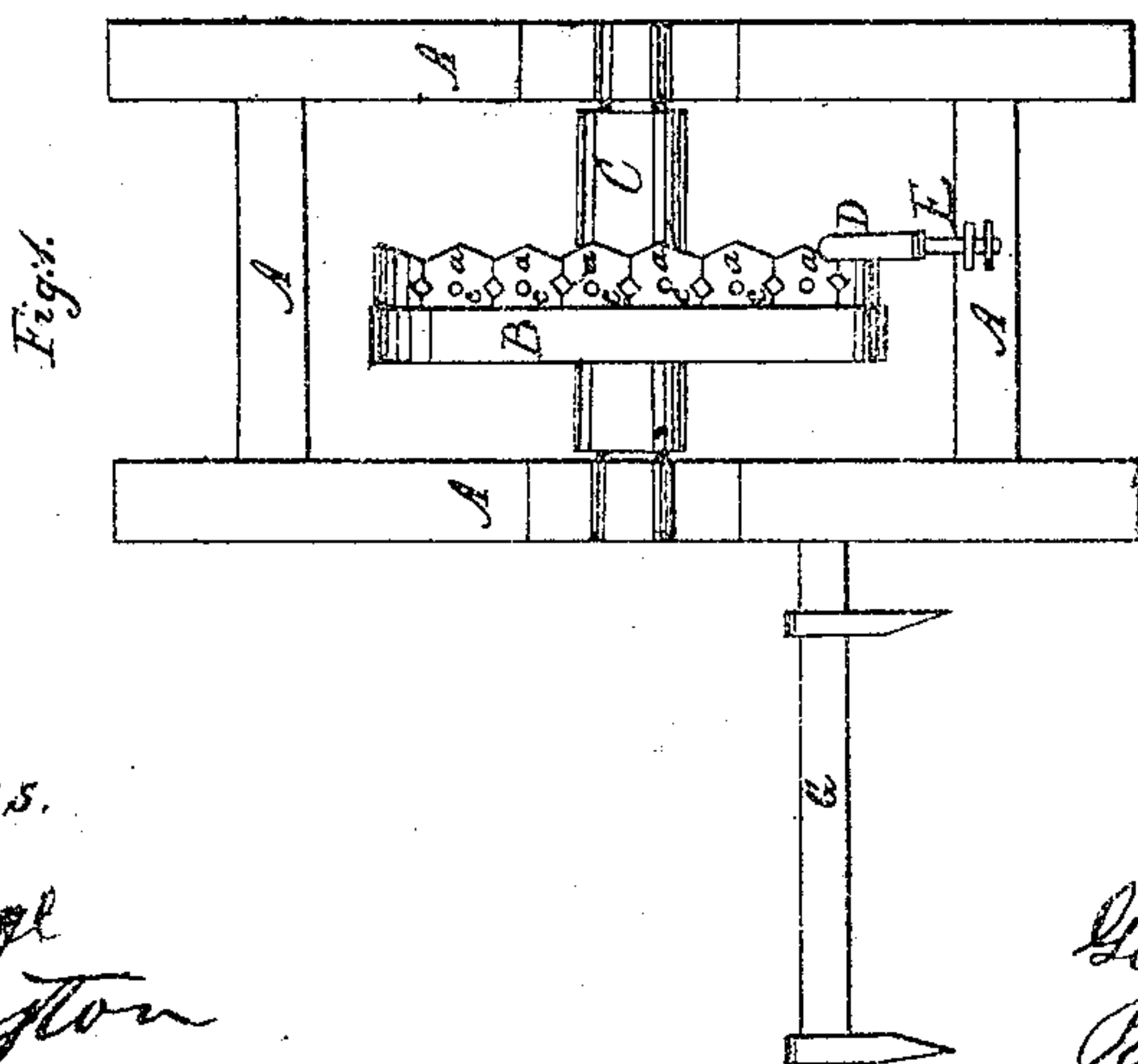


Fig: 1.

Witnesses.

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UNITED STATES PATENT OFFICE.

G. W. RICHARDSON AND R. GLOVER, OF GRAYVILLE, ILL., ASSIGNORS TO
THEMSELVES AND J. B. WILLIAMS AND W. A. HORREL, OF SAME PLACE.

IMPROVEMENT IN HARVESTING-MACHINES.

Specification forming part of Letters Patent No. **25,370**, dated September 6, 1859.

To all whom it may concern:

Be it known that we, G. W. RICHARDSON and ROBERT GLOVER, of Grayville, in the county of White and State of Illinois, have invented a new and useful Improvement in Harvesting-Machines; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon and forming part of this specification.

Our invention relates to that class of harvesting-machines which operate the sickle by means of cams upon the main driving-wheel; and it consists in the provision of detachable cams of peculiar form, having an acute angular bearing to fit a corresponding projection upon the side of the wheel-rim and within the tire or band under which the cam is inserted. We attach the cams to the driving-wheel by means of suitable bolts and nuts, and they are readily detachable and removable therefrom, so that when any one of the cams which impart the reciprocating motion to the cutters becomes injured or broken it may be easily and speedily removed and replaced by a new one, substantially as hereinafter described.

To enable others skilled in the art to make and use our invention, we will proceed to describe it.

In the accompanying drawings, Figure 1 is a plan or top view of the frame-work and driving-wheel of a harvester with our improvement applied thereto. Fig. 2 is a perspective view of the same. Fig. 3 is a section through the driving-wheel, showing the application of our improvement; and Figs. 4 and 5 represent detached portions, hereinafter referred to.

Similar letters of reference refer to the same parts in each of the several figures.

A represents the main frame of a harvesting-machine; B, the driving-wheel; C, the axle of the driving-wheel; D, the rocking arm;

E, the rock-shaft, to which the cam D is attached; F, a supplemental arm, to the lower end of which is attached one end of the connecting-rod or pitman which imparts the reciprocating motion to the cutters. The above parts, being constructed and operated in the usual form, do not require further description.

a a are the cams which impart the necessary rocking motion to the arms D and F. These cams may be cast or wrought in sections of one or more and applied to the periphery of the driving-wheel, to which they are secured by means of the bolts or screws *c c*. Additional screws or bolts may be passed through the center of each of the cams. The cams are further steadied in position by the flange or shoulder *b*, (see Figs. 3 and 5,) bearing against angular projections on the side of the rim of the wheel, as shown in the drawings. These cams may be made a part of the extra furniture of the machine, being thus made an article of manufacture, convenient of transportation, and effecting a great saving of time and expense in the event of the breaking of any one of said cams, it being but the work of a minute to remove such broken cam and replace it with a new one.

It is obvious that our invention may be applied to both sides of the wheel where the double cam is used.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The cams *a*, cast in sections of one or more and secured to the driving-wheel by means of the bolt or screw C and flange *b*, in the manner described, for the purpose specified.

GEORGE W. RICHARDSON.
ROBERT GLOVER.

Witnesses:

S. J. ORANGE,
C. P. CLAYTON.