

J. R. CLIFFTON.

Sharpening Benches for Harvester-Cutters.

No. 133,409.

Patented Nov. 26, 1872.

Fig. 1.

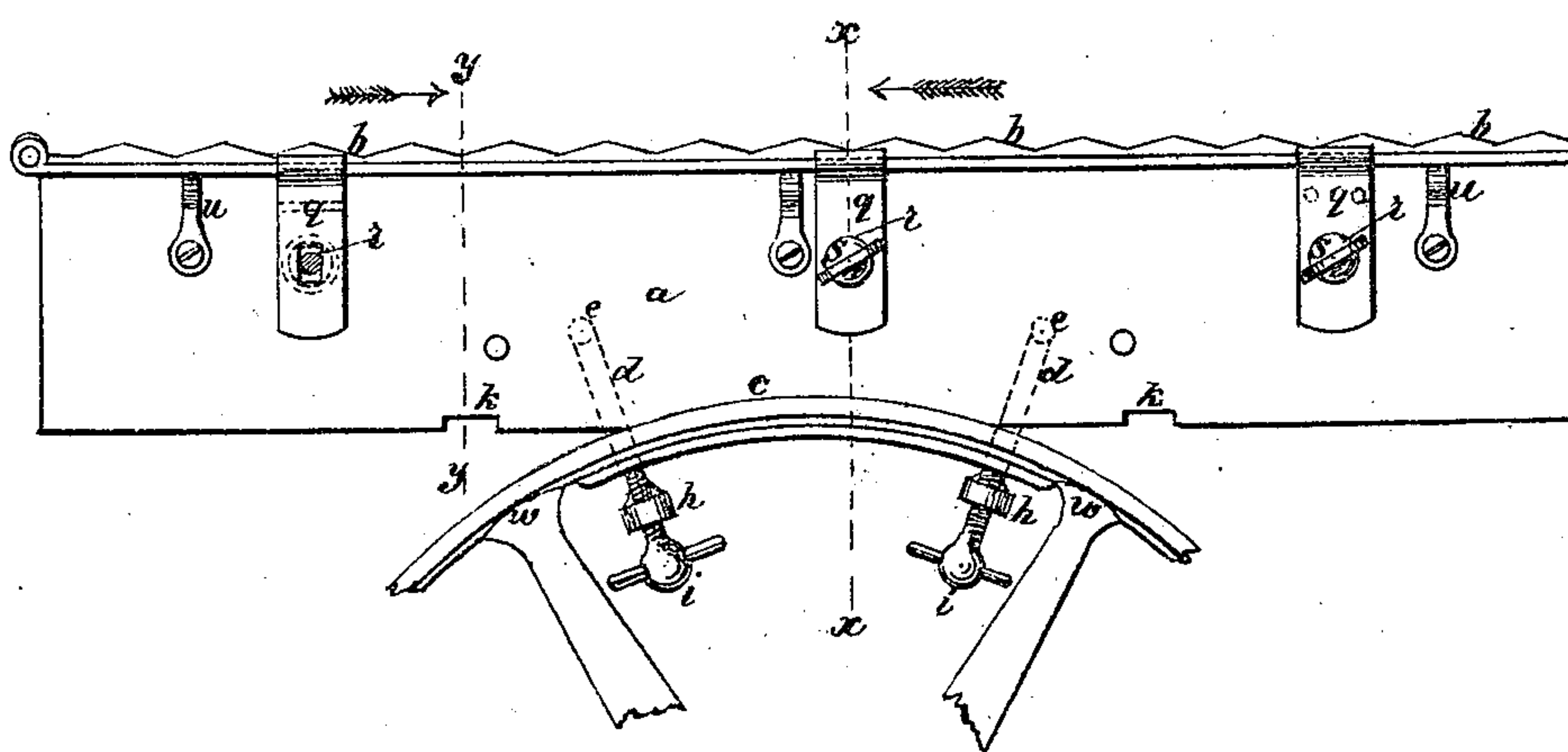


Fig. 2.

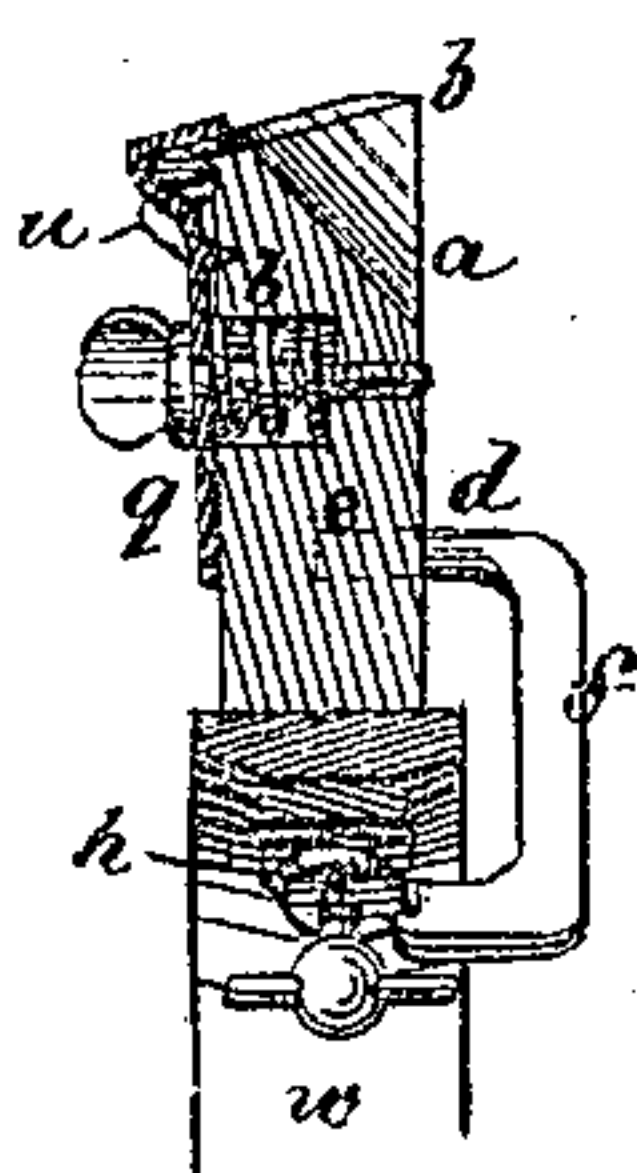
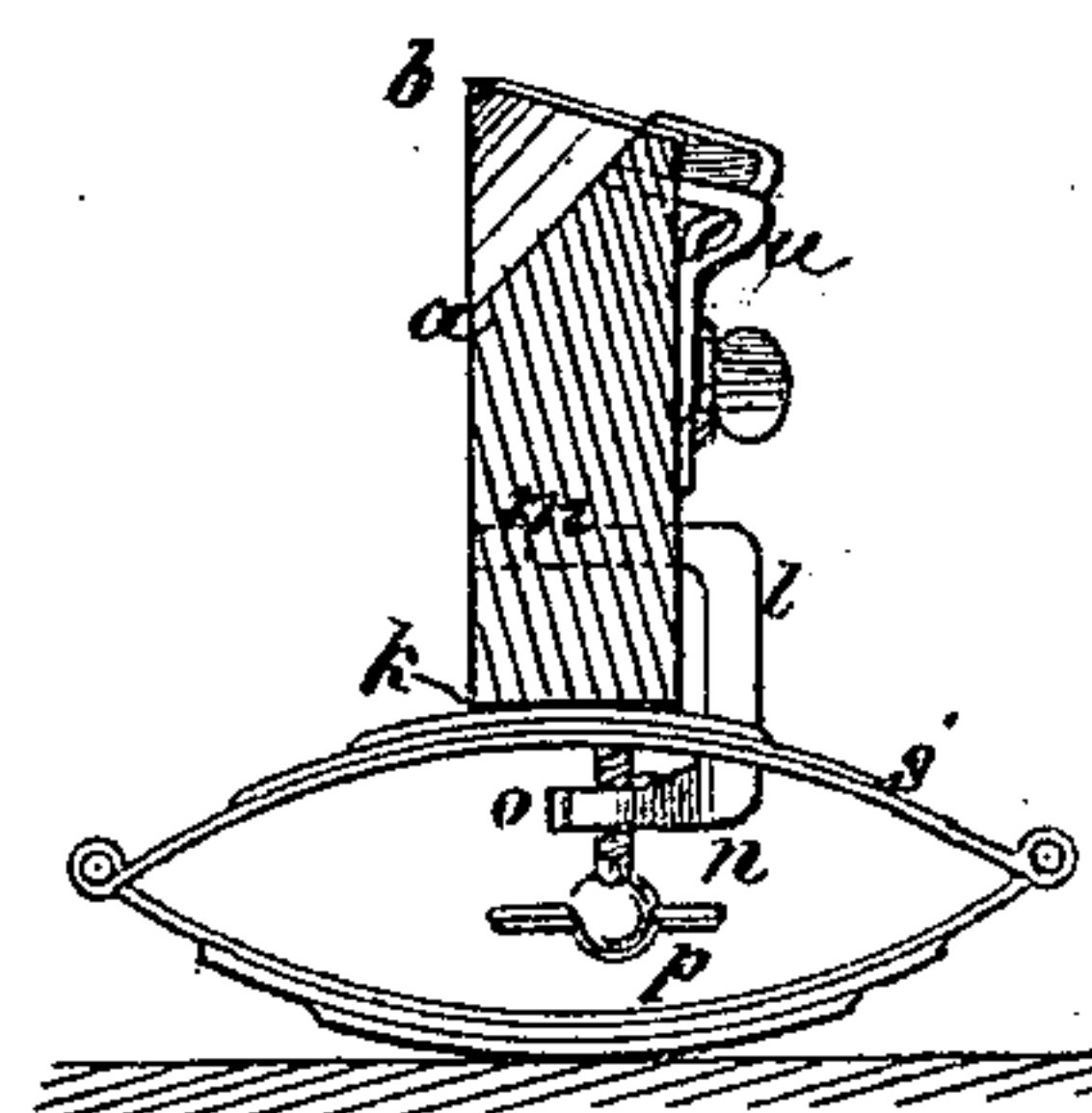


Fig. 3.



Witnesses.

Walter Allen  
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# UNITED STATES PATENT OFFICE.

JOHN R. CLIFFTON, OF WEST UNITY, OHIO, ASSIGNOR TO HIMSELF AND  
SAMUEL CLIFFTON, OF SAME PLACE.

## IMPROVEMENT IN SHARPENING-BENCHES FOR HARVESTER-CUTTERS.

Specification forming part of Letters Patent No. 133,409, dated November 26, 1872.

*To all whom it may concern:*

Be it known that I, JOHN R. CLIFFTON, of West Unity, in the county of Williams and State of Ohio, have invented a certain Improvement in Sharpening-Benches for Harvester-Cutters, of which the following is a specification:

### *Nature and Objects of the Invention.*

The first part of my invention consists of a bench for sharpening harvester-cutters, notched on its upper face to conform to the shape of the cutters, and to receive and form a rest for the latter, and having an arc and transverse grooves cut from its lower face, the arc fitting over the rim of the wheel, and the transverse grooves adapted to receive the seat-springs of a harvesting-machine, by means of which the bench may be readily fastened by bent clamps and set-screws to the wheel or the seat-springs or the seat itself, thus obviating the employment of legs or equivalent devices for supporting the bench and cutters. The second part of my invention consists of metallic or other rests attached to the bench and supporting the cutter-bar and teeth, in combination with a clamp, by the employment of which a bench of less thickness and having shallow notches may be used.

### *Description of the Drawing.*

Figure 1 is a front view of a sharpening-bench embodying my invention, showing, also, a portion of one of the wheels of a harvesting-machine, to which the bench is attached. Fig. 2 is a transverse section in the line *xx*, Fig. 1. Fig. 3 is a similar section through the line *yy*, showing the bench applied to the springs of the driver's seat.

### *General Description.*

*a* is the bench-sharpener, notched at *b* on its upper face to receive and form a rest for the cutter-bar and cutters. *c* is a circular arc, formed in the lower face of the bench, of the form of the wheel of a harvesting-machine, the bench being placed vertically upon the wheel, so that the arc on the bench will

fit over the top of the rim of the wheel *w* of a harvester. *d d* are clamps, secured to the bench at *e e*, bent at *f*, and provided with eyes *h h* at their lower ends to receive the set-screws *i i*, by means of which construction the bench may readily be fastened to the wheel of the harvester. *k k* are transverse grooves, made in the lower face of the bench, of the same width as the springs of the driver's seat, and adapted to fit over the same. *l l* are clamps, securely fastened to the bench at *m*, bent at *n*, and provided with eyes *o o*, through which set-screws *p p* pass, thus fastening the bench in a vertical position to the seat-springs *s' s'* of the machine. It is obvious that the bench may be attached by the clamps to the seat of the machine, or to other parts of it.

By the employment of the above-described means of attaching the bench to different parts of the machine, I am enabled to dispense with legs or other supports for the bench as ordinarily employed, and I am also enabled, if deemed necessary, to attach the bench to the seat-springs or seat permanently, where it may be transported with the machine, and ready for use in grinding the cutters.

*q q* are clamps embracing the cutter-bar, slotted at *r r*, and attached to the bench by the set-screws *s s*, passing through said slots. *t t* (see Fig. 2) are spiral springs on the set-screws, and between the clamps *q q* and the bench, by means of which the former may be horizontally adjusted, while the slot and set-screw permit a vertical adjustment. *u u* are rests, securely attached to the bench near its upper end, and supporting the cutter-bar and cutters when being ground.

It will be seen that, by the use of the rests *u u*, I am enabled to employ a bench of less thickness to support the cutter-bar and cutters when they are used in conjunction with the clamps *q q*, and at the same time the notches of the bench may be made shallower, as a portion of the cutter-bar will project behind the bench and be supported by the rests, and, cutter-bars and cutters differing in thickness and transverse section being supported



upon the rests, fewer clamps *q q* are requisite for the cutters when the rests *u u*, as described, are employed.

*v v* are spurs or points projecting from the clamps *q* into the wood of the bench, to prevent the clamps shifting laterally while adjusting the cutter-bar.

I claim as new and of my invention—

The sharpening-bench for harvester-cut-

ters, constructed as herein described, and provided with clamps, arranged as specified, to adapt it for attachment to the wheel, seat-springs, or other part of a harvester or other object.

JOHN R. CLIFFTON.

Witnesses:

SAMUEL CLIFFTON,  
WALTER ALLEN.