

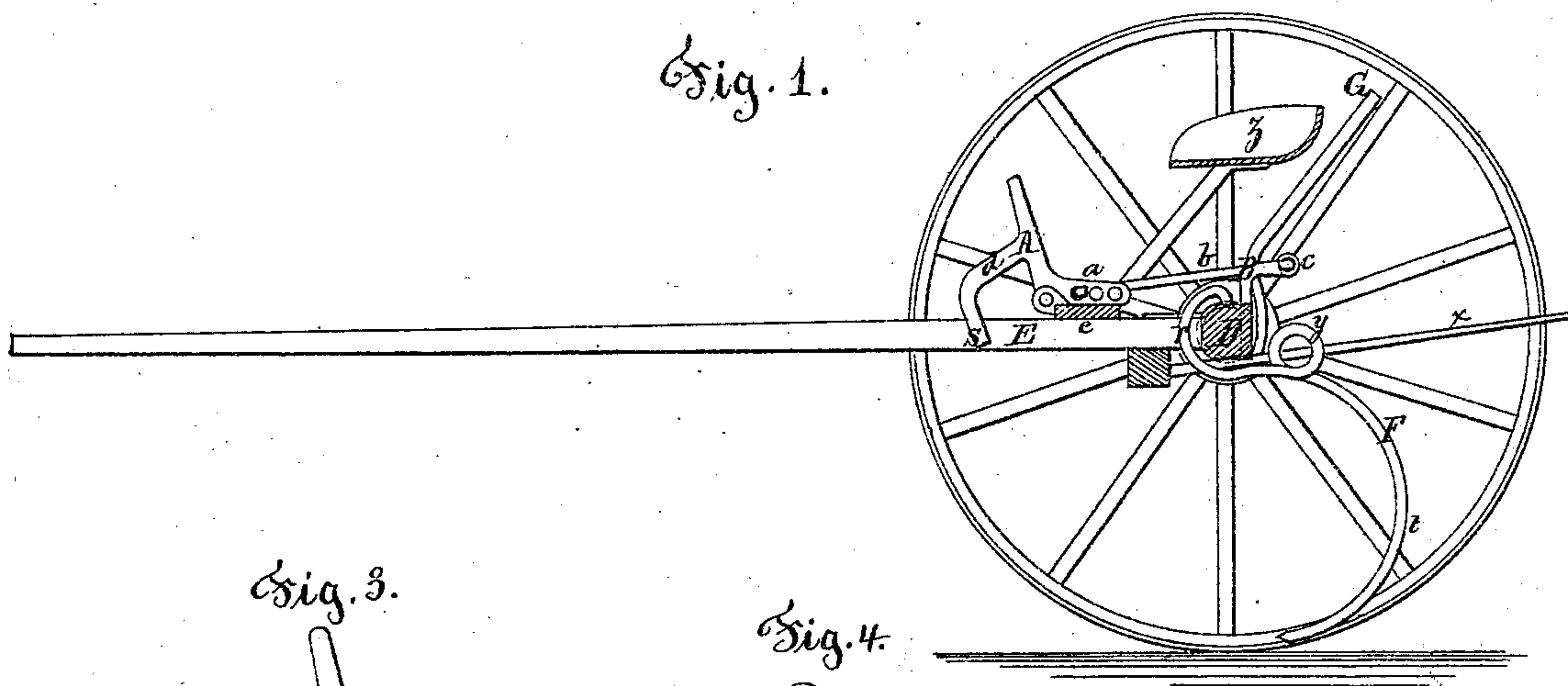
L. A. PADDOCK.

Improvement in Horse Hay Rakes.

No. 123,357.

Patented Feb. 6, 1872.

Fig. 1.



Sig. 3.

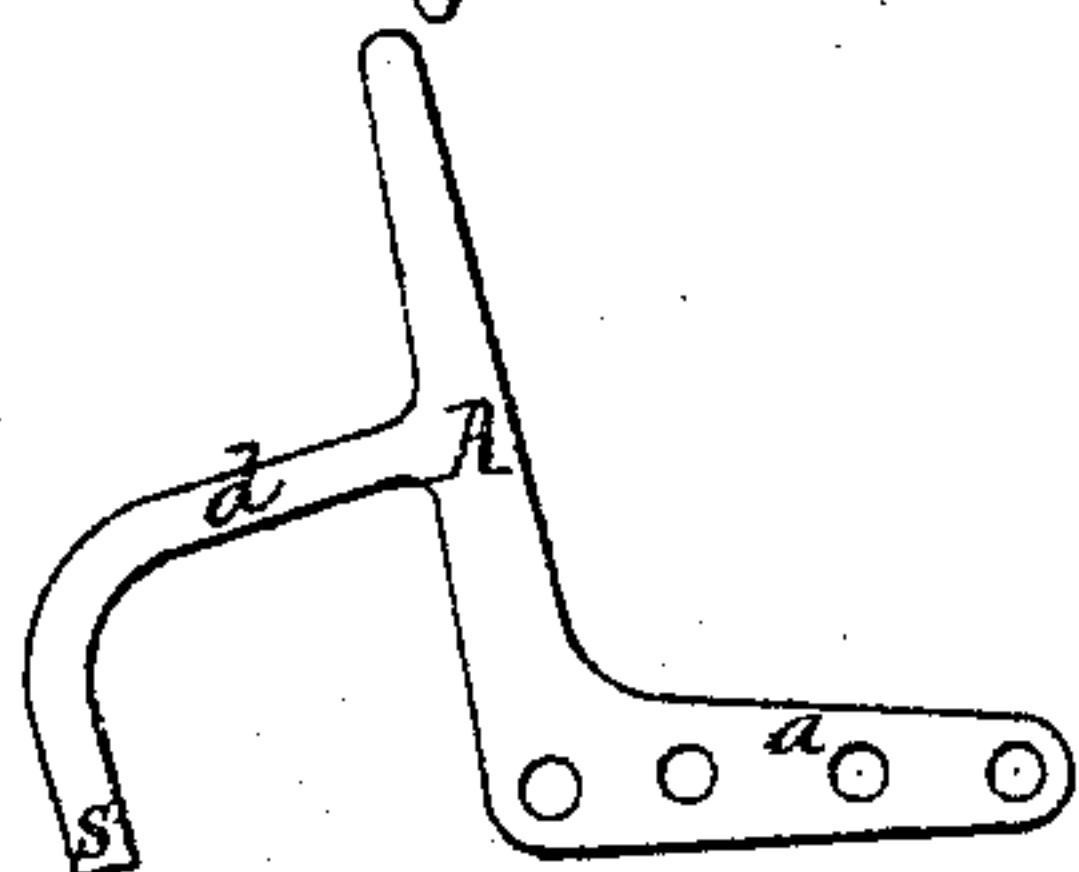


Fig. 4.

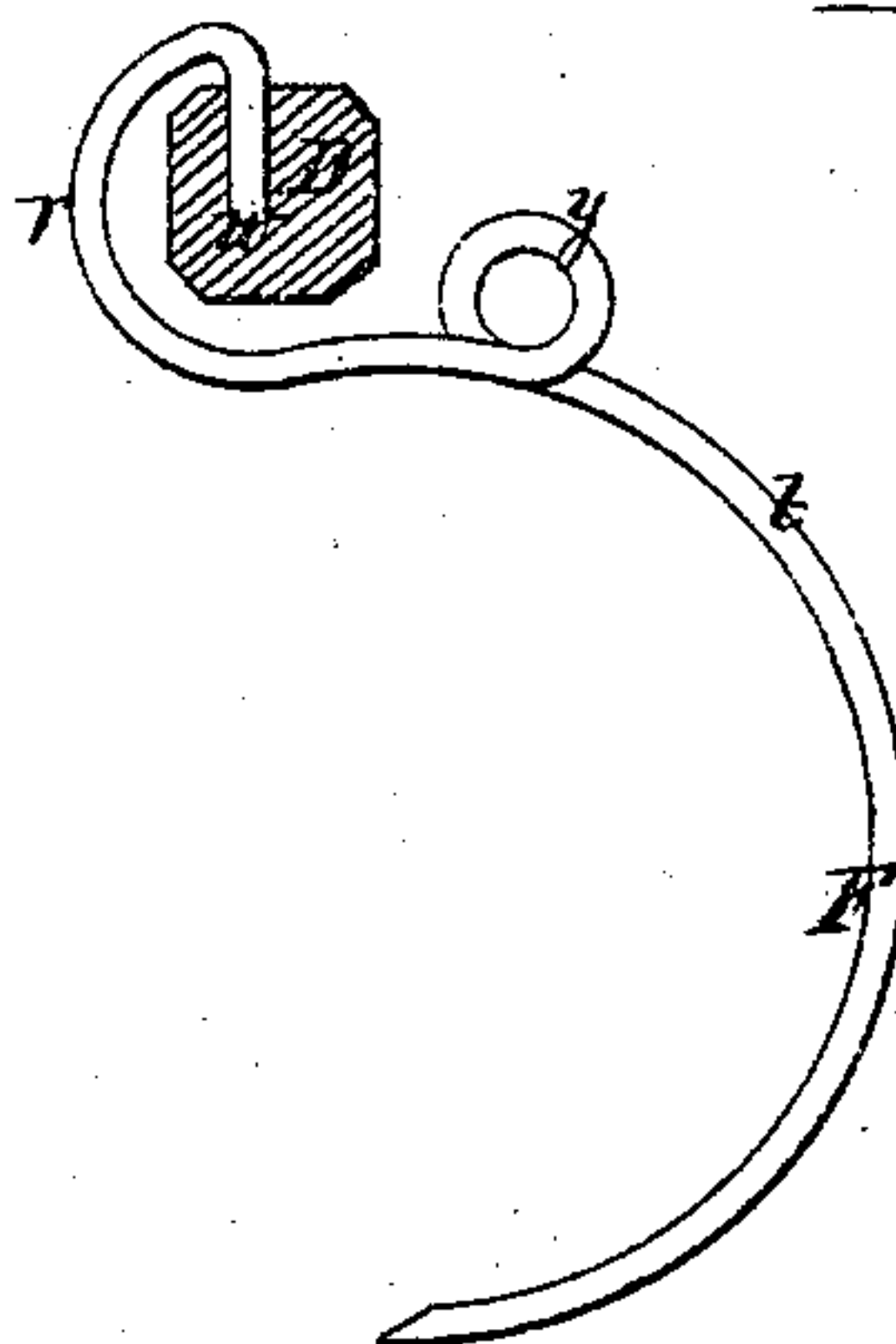
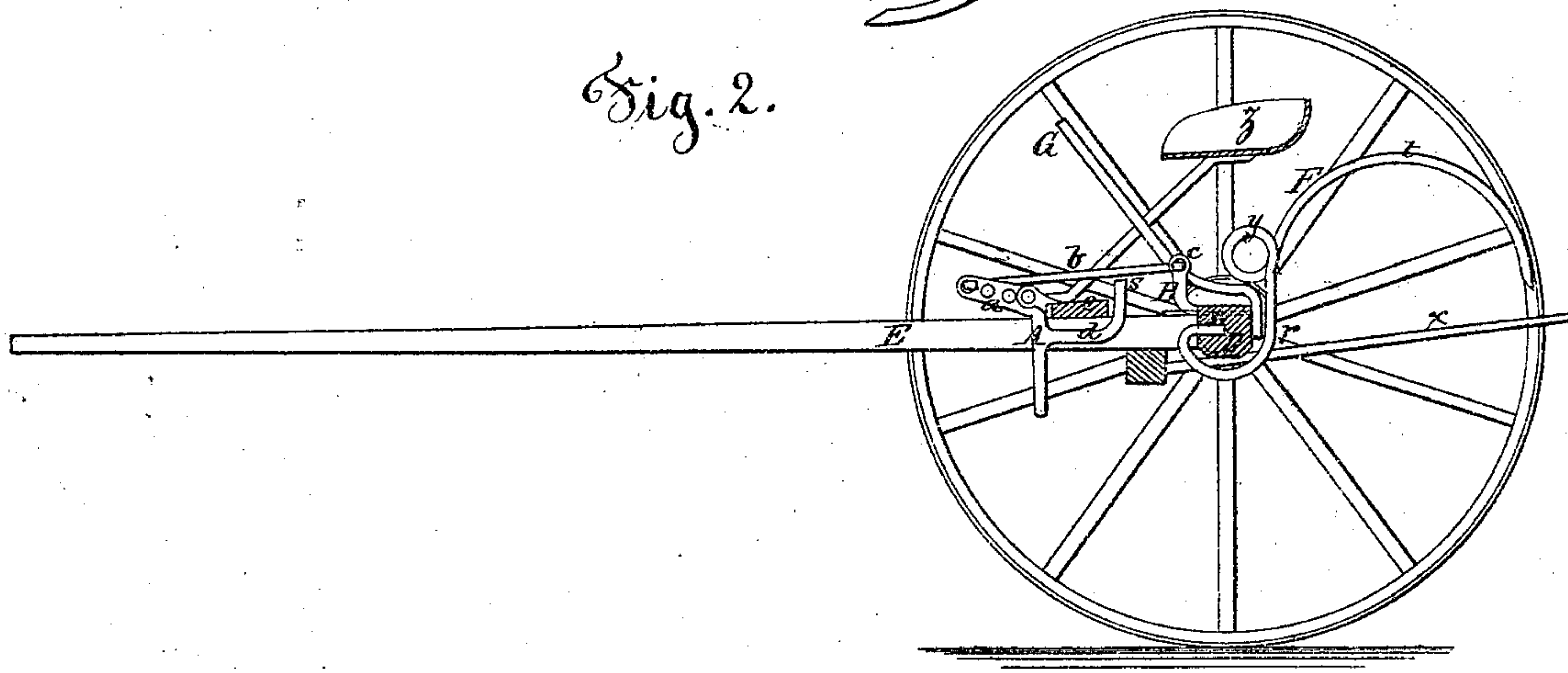


Fig. 2.



Witnesses.

A. Campbell.
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UNITED STATES PATENT OFFICE.

LINUS A. PADDOCK, OF PECATONICA, ILLINOIS.

IMPROVEMENT IN HORSE HAY-RAKES.

Specification forming part of Letters Patent No. 123,357, dated February 6, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, LINUS A. PADDOCK, of the village of Pecatonica, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Sulky Hay-Rakes; and I do hereby declare that the following is a full and exact description of my invention, reference being had to the accompanying drawing forming a part of this specification, in which—

Figures 1 and 2 are sectional elevations, and Figs. 3 and 4 detached parts.

The nature of my invention consists in operating the teeth-shaft or bar with a combined foot-lever, firmly secured to the foot-board on the thills, and connected with a lever on the teeth-shaft or bar, so as to operate after the manner herein described.

To enable others to clearly understand and make my invention I will proceed to describe its construction and operation.

In Figs. 1, 2, and 3, A is the treadle of a foot-lever, having an arm, *a*, at nearly right angles thereto, which connects, by the means of a connecting-rod, *b*, to the lever B, which is so arranged as to be secured to the back of the teeth-shaft D, and having an arm, *c*, projecting at right angles with the teeth-shaft. The projecting crooked arm *d* of the lever A is so arranged as to encircle the foot-board *e* on the thills E, to which the lever A is secured. In Fig. 1, the rake is shown with its teeth F down in a position when the rake is in operation of raking the hay together, and is held firmly in this position by the arrangement of the arm *c* of the lever B, as the connecting-rod *b* is attached above a direct line, where it is attached to the arm *a* of the lever A, and when the teeth F of the shaft come in contact with any impediment, it will be held firmly in its position by throwing the arm *a* against the foot-board *e*, thereby forming, in combination, a firm lock, and allowing the teeth F to spring and pass over the impediment.

Now, when the teeth-shaft D is to be adjusted or raised, the right foot of the operator presses down on the lever A, which throws the arm *a* up and over forward, by the means of the connecting-rod *b*, and lever B throws up the teeth F, as shown in Fig. 2, and the levers A and B sustain the relative positions,

respectively, as shown in Fig. 2, while the crooked or circular arm *d* encircles the foot-board *e*, and is in position for the operator to press the heel of his right foot on the projecting end *s* of this part of the lever A, sending the lever A back to its former position, as shown in Fig. 1. By this means and manner the teeth of the shaft are raised and lowered, as the necessity of the case requires.

The advantage gained by this device for operating the teeth-shaft or bar D of the rake is, that the operator can, with the front part of his foot, raise the teeth, and throw it back or lower it with the heel of the same foot, making it a great convenience and advantage to the operator.

The lever G, which is secured to the teeth-shaft, may be used in case of the teeth clogging, when additional power may be necessary to raise the teeth-shaft, aside from the foot.

The teeth F of my improved sulky hay-rake is shown in Figs. 1, 2, and 4, and are so formed as to combine a compound spring by arranging an ogee, *r*, and T-shaped steel rod, or composed of opposite curves *r* and *t*, having a circular spring, *y*, formed of the same rod near or at the point of intersection of the two curves, thereby giving additional elasticity to the spring. This spring is properly fastened by the stem *w* to the teeth-shaft D, and the R-curved portion of the teeth passes around in front of and under the teeth-shaft, leaving sufficient space between the spring or curved part *r* and the teeth-shaft for yielding, when in passing over an obstacle or impediment.

The finger *x* presses the hay out from the teeth when the teeth are raised up in operating the rake.

The seat *z* is arranged so as to be in a convenient position for the operator in using his foot on the different parts of the foot-lever A.

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

The foot-lever A, having a projecting crooked or circular arm, *d*, in combination with the arm *a*, for the purpose of operating the teeth-shaft or bar D, arranged so as to operate substantially as herein described, and for the purpose set forth.

L. A. PADDOCK.

Witnesses:

L. WEICHSELBANA,
A. CAMPBELL.