

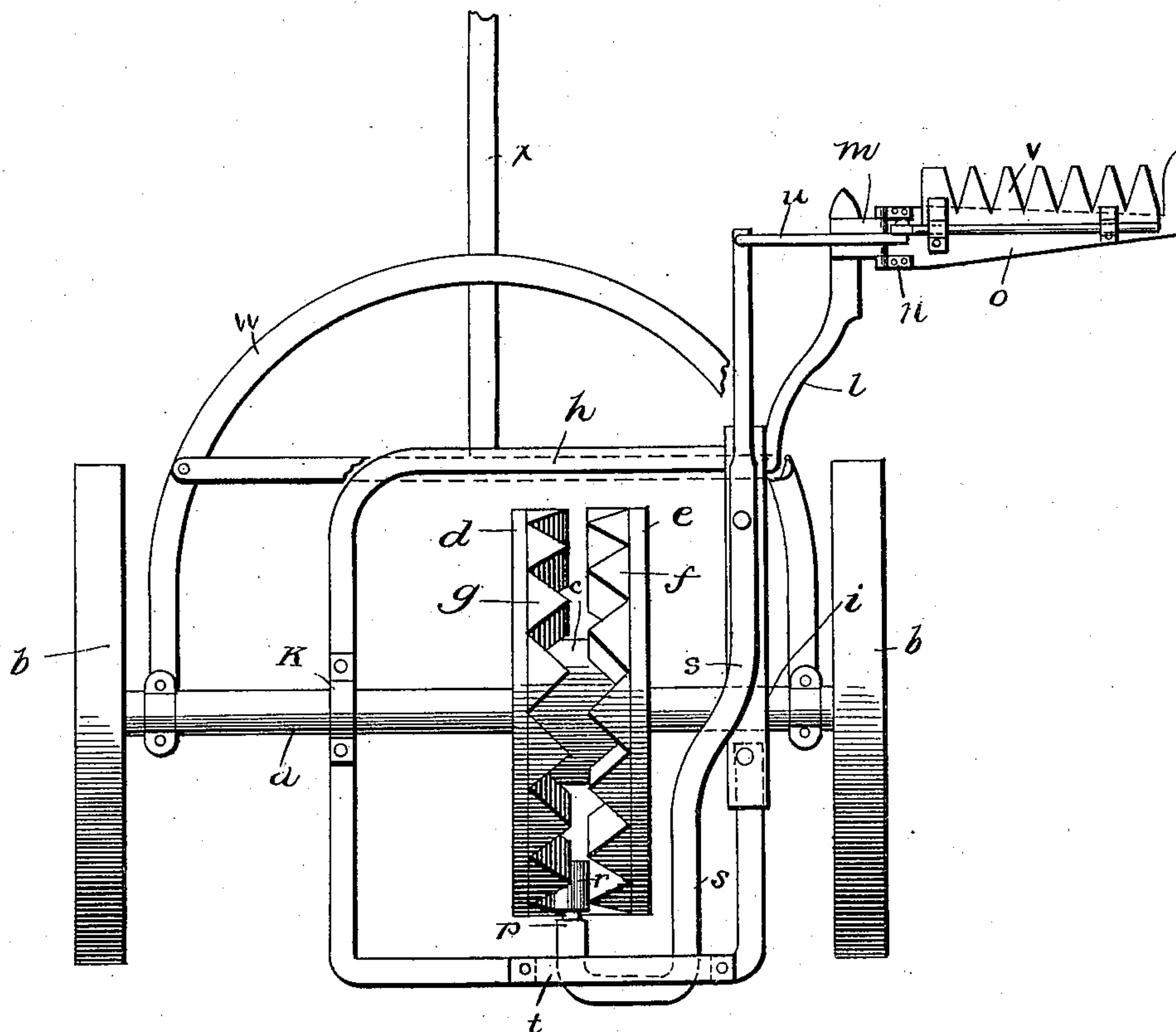
No. 618,443.

Patented Jan. 31, 1899.

S. & J. SHULL.
MOWING MACHINE.

(Application filed Mar. 2, 1897.)

(No Model.)



Samuel Shull
John Shull

Inventors,

by *Geo. H. H. H. H.*

Atty.

Witnesses.
Grace C. Chandler
Edw. S. Duran

UNITED STATES PATENT OFFICE.

SAMUEL SHULL AND JOHN SHULL, OF TOSTON, MONTANA.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 618,443, dated January 31, 1899.

Application filed March 2, 1897. Serial No. 625,707. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL SHULL and JOHN SHULL, citizens of the United States, residing at Toston, in the county of Meagher, State of Montana, have invented certain new and useful Improvements in Mowing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to mowing-machines in general, and more particularly to the mechanism for transmitting motion from the wheels to the finger-bar, and has for its object to provide such a construction and arrangement as will permit the usual gearing to be dispensed with with the advantages incident thereto.

In the drawing forming a portion of this specification the figure shows a plan view of a machine constructed in accordance with our invention, the tongue being thrown back to show the parts of the mechanism.

In the drawing, *a* represents the axle of the machine, to each end of which is affixed a wheel *b*, adapted to turn with the axle, which latter also carries a drum comprising a hub *c* and disks *d* and *e*, the latter having on their adjacent faces triangular teeth *f* and *g*, the teeth of one disk being arranged opposite the spaces between the teeth of the opposite disk, the result being a worm-wheel. Inclosing the worm-wheel is a framework *h*, suitably journaled upon the axle *a* at *i* and *k*, said framework having at one corner a projection *l*, which extends into the path of the wheel *b* and is provided with one element *m* of a hinge-joint, the opposite element *n* thereof being secured to the finger-bar *o* of the machine.

Pivoted to one side of the frame *h*, adjacent the projection *l*, is a lever *s*, which extends rearwardly of the frame and then is bent upon itself in a horizontal plane, the extremity *p* being provided with a friction-roller *r*, which engages the worm-wheel to be reciprocated thereby. The bent portion of the said lever *s* has a bearing upon the rear bar of the frame *h*, and secured to said bar, to prevent raising of the lever therefrom, is a plate

t, there being sufficient room between the said plate and bar to allow reciprocation of the lever. The forward end of the lever *s* is provided with a link *u*, pivotally connected therewith at one end, the opposite end of said link being pivotally connected with usual sickle *v*.

A sulky-frame *w* is suitably connected with the axle *a*, said frame being provided with a pole *x* for attachment of horses. It will thus be seen that as the machine is drawn forward the worm-wheel will revolve, and as a result the engaging end of the lever *s* will be reciprocated, causing a similar movement of the opposite end of the lever and a resultant cutting action of the sickle.

It will be readily understood that we may vary the specific arrangement and construction herein shown without departing in any way from the spirit of our invention.

Having thus described our invention, what we claim is—

1. In a mowing-machine, the combination with an axle having supporting-wheels fixed to revolve therewith of a frame carried by the axle and having an extension, a finger-bar hinged to the extension of the frame, a sickle slidably arranged upon the finger-bar, a worm-wheel fixed upon the axle to revolve therewith, a lever pivoted to the frame having one end bent upon itself and entering the worm-wheel, a link connection between the sickle and the lever, and a second frame carried by the axle independent of the first frame.

2. A device of the class described comprising an axle having wheels secured thereto, a frame on the axle, a lever pivoted to the frame and having one end bent upon itself, an extension of the frame having a finger-bar hinged thereto, a sickle on the finger-bar, a link connection between the sickle and the lever, and a worm-wheel on the axle in engagement with the bent end of the lever to reciprocate it.

In testimony whereof we affix our signatures in presence of two witnesses.

SAMUEL SHULL.
JOHN SHULL.

Witnesses:

C. E. BEMBRICK;
GEO. F. PASSMORE.