

(No Model.)

J. A. & F. H. MARSHALL.

BAND CUTTER AND FEEDER FOR THRASHING MACHINES.

No. 292,667.

Patented Jan. 29, 1884.

Fig. 1.

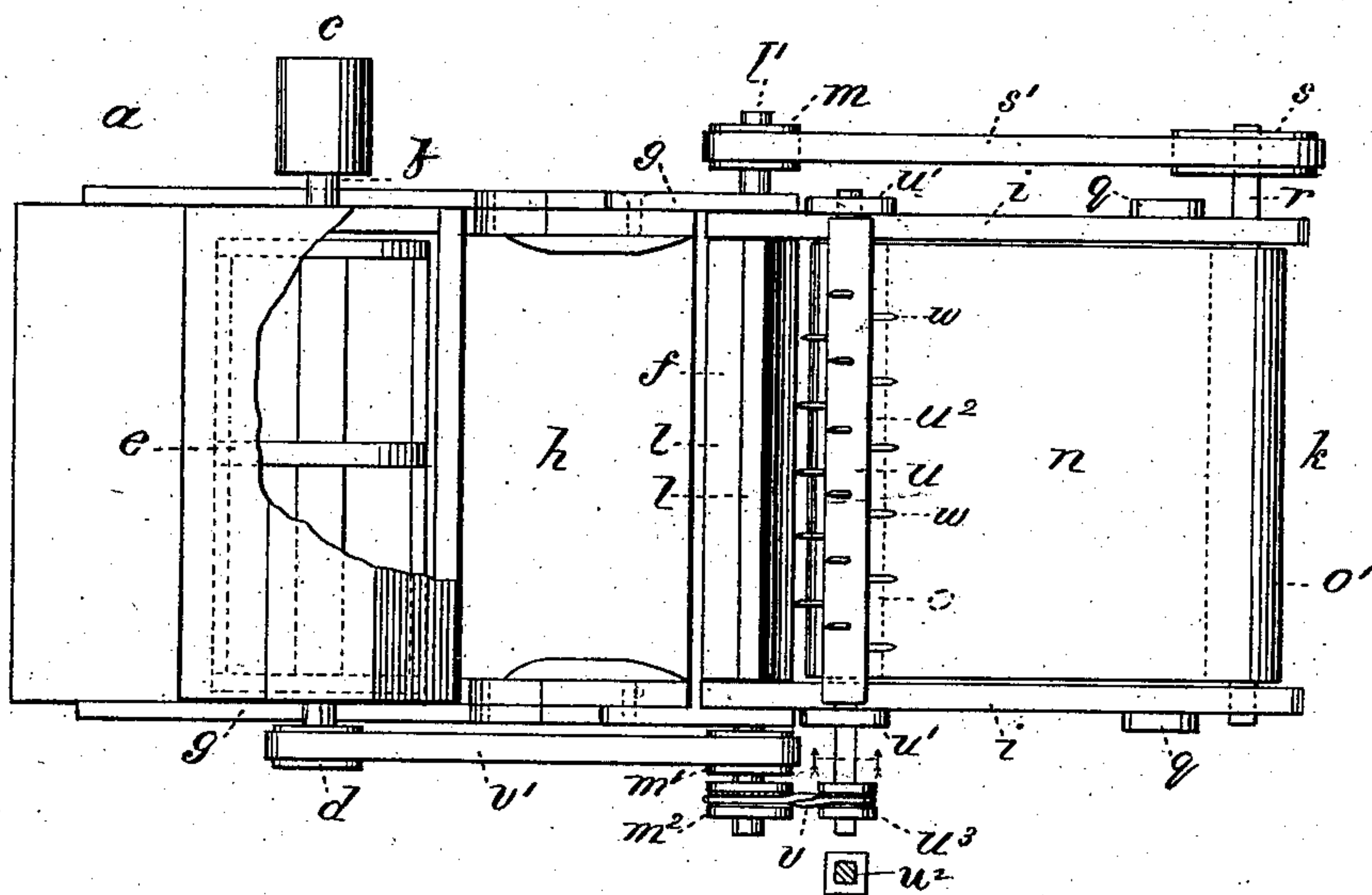
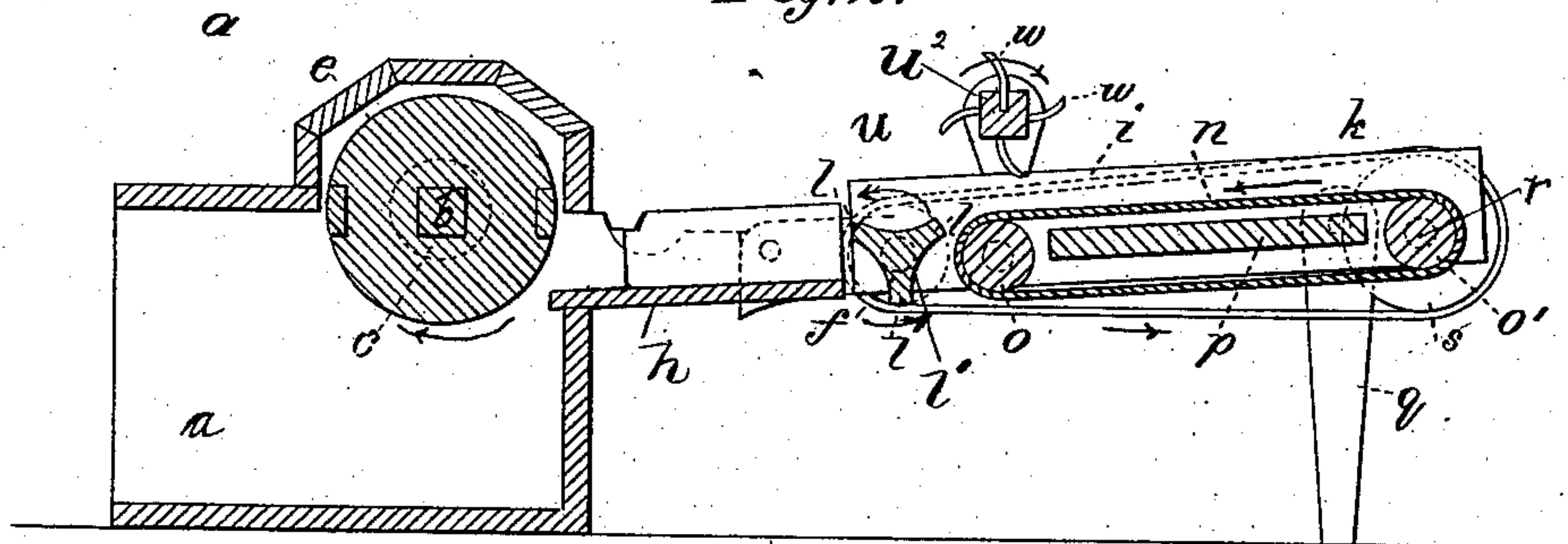


Fig. 2.



WITNESSES

Villette Anderson,
Theo. Mungew

INVENTORS

Joseph A. Marshall
Flavius H. Marshall
by Anderson & Smith
their ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH A. MARSHALL AND FLAVIUS H. MARSHALL, OF DARLINGTON, IND.

BAND-CUTTER AND FEEDER FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 292,667, dated January 29, 1884.

Application filed September 17, 1883. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH A. MARSHALL and FLAVIUS H. MARSHALL, citizens of the United States, residing at Darlington, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Band-Cutters and Feeders for Thrashing-Machines; and we do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a top view. Fig. 2 is a vertical longitudinal section.

This invention has relation to band-cutters and feeders for thrashing-machines; and it consists in the novel construction of devices, as will be hereinafter fully described, and particularly pointed out in the claim appended.

Referring by letters to the accompanying drawings, *a* designates the front end of a thrashing-machine, a portion of the thrashing-machine being sufficient to illustrate our improvements.

b is the cylinder-shaft, with wide pulley *c* at one end and narrow pulley *d* at the other end, and *e* is the cylinder of the machine. A revolving feeder or shaker, *f*, has its bearings in the front ends of the arms *g g*, hinged or pivoted to the sides of the inclined chute *h*, over which the grain is fed to the cylinder, and its journals also pass through the inner projecting ends of the side rails, *i i*, of the sheaf-carrier frame *k*, whereby this frame *k* is hinged on the journals of the feeder or shaker. The feeder or shaker has two or three striking edges, *l*, as may be desired, and its shaft *l'* is provided with plain pulleys *m m'* outside of the hinged arms *g g*, and a grooved pulley, *m²*, next to the pulley *m'*.

n designates the endless sheaf-carrying apron, mounted on two rollers, *o o'*, journaled in the side rails, *i i*, of the carrier-frame *k*, which has a bearing-board, *p*, for the end-

less apron *n* between the rails. The carrier-frame *k* is slightly inclined downwardly toward the machine, as shown, and is provided near its outer end with folding or hinged legs *q q*, which, when extended, hold it in position. The shaft *r* of the roller *o'* of the sheaf-carrier is provided with a large pulley, *s*, which is connected with the pulley *m* by an endless belt, *s'*. The band-cutter *u* is mounted in bearings *u' u'*, rising from the side rails of the carrier-frame *k*, near their hinged ends. The shaft *u²* of the band-cutter is rectangular in cross-section between its bearing-points, and its extreme end on the side next the grooved pulley *m²* is also rectangular, but smaller in cross-section, and receives a small grooved pulley, *w³*, which is connected by a crossed band, *v*, to the larger grooved pulley, *m²*, on the feeder-shaft. An endless belt, *v'*, connects the pulley *m'* on the feeder-shaft with the pulley *d* on the cylinder-shaft. The knives *w* of the band-cutter are flat pointed blades, convex on the cutting-edge and concave on the opposite edge. The cutters may be circular disks and have a continuous cutting-edge. The knives *w* are set in the shaft zigzag or staggered, so that it will be impossible for a sheaf or bundle to pass under the band-cutter without having its band cut. When the sheaf passes from the carrier under the cutter and onto the revolving feeder, it will be spread out upon the inclined chute, and will be fed evenly and uniformly to the cylinder.

When the band-cutter and feeder is not in use, or when the machine is being moved, it may be turned back upon the thrashing-machine by reason of its hinged arms and hinged side rails. It is obvious that, instead of being hinged to the front of the machine, it may be hinged to either side at the front.

A band-cutter and feeder of this construction is cheap, simple, and light, and is not likely to get out of order. It may be folded on top of the machine when not in use, and is therefore convenient in this particular.

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

In a band-cutter and feeder for thrashing-

machines, the combination, with the hinged
carrier-frame, the rotary band-cutter *u*, the
endless apron, the rotary feeder or shaker *f*,
having its bearings in the projecting ends of
5 the side rails of the carrier-frame, the short
arms *g*, the inclined chute, and operating
mechanism, substantially as specified.

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

JOSEPH A. MARSHALL.

FLAVIUS H. MARSHALL.

Witnesses:

F. W. CAMPBELL,

W. W. CHAMBERS.