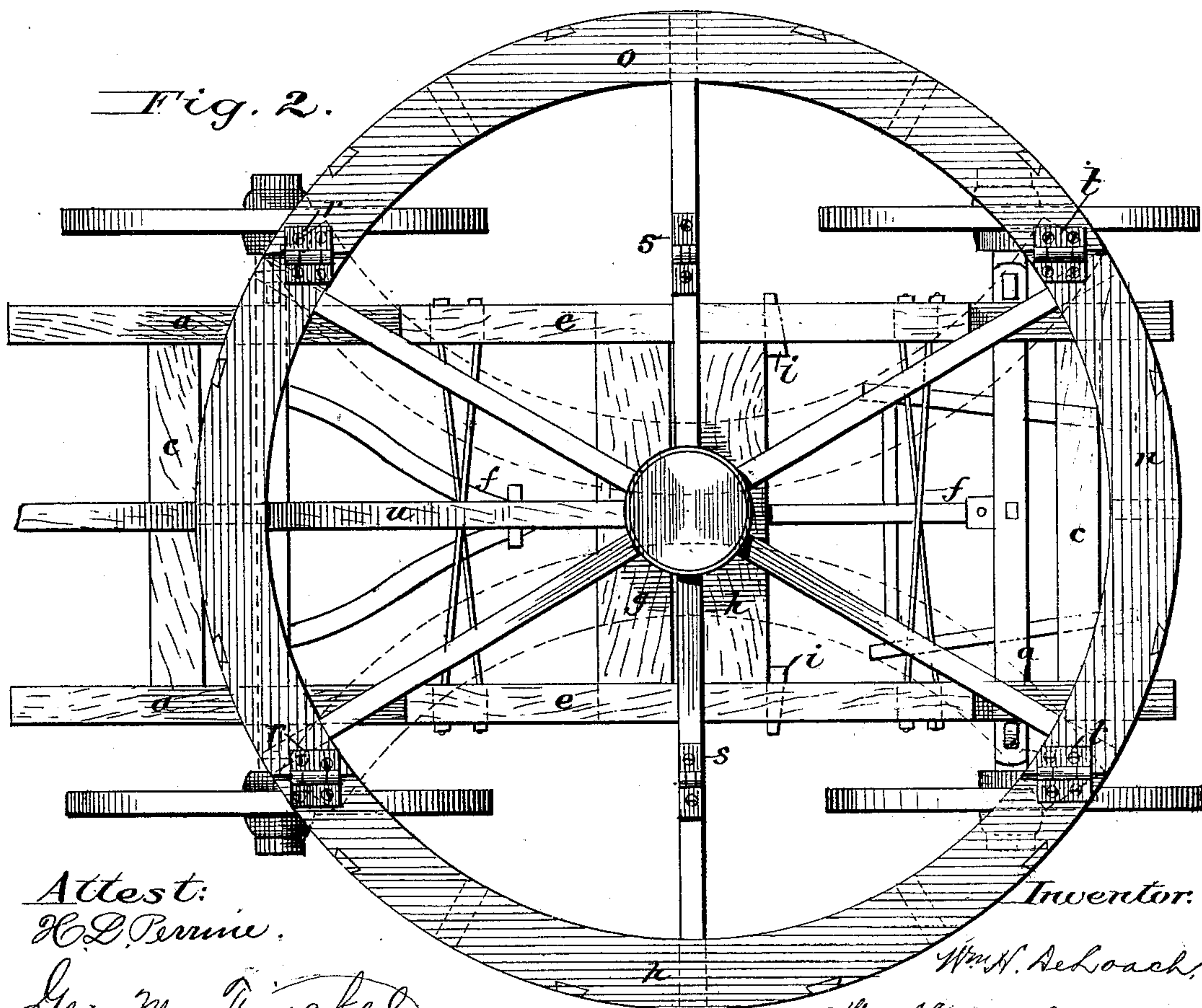
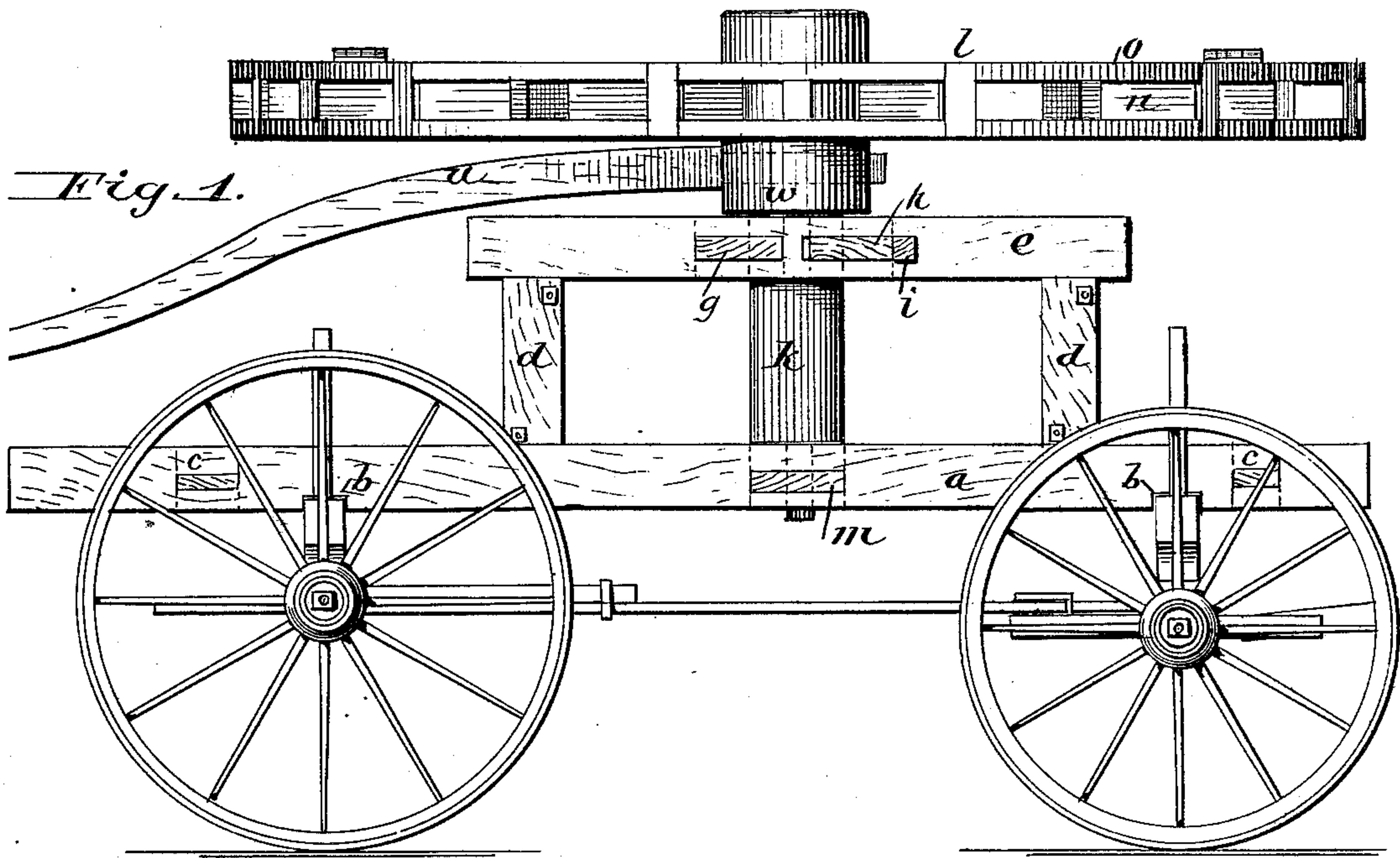


W. H. De LOACH.  
Horse Power.

No. 231,410.

Patented Aug. 24, 1880.



Attest:  
H. L. Bennie.

Geo. M. Finkel.

Inventor.

Wm. H. DeLoach.

By Wm. H. Finkel. Atty.



# UNITED STATES PATENT OFFICE.

WILLIAM H. DE LOACH, OF KIRBY SPRINGS, GEORGIA.

## HORSE-POWER.

SPECIFICATION forming part of Letters Patent No. 231,410, dated August 24, 1880.

Application filed February 19, 1880.

*To all whom it may concern:*

Be it known that I, WILLIAM HENDERSON DE LOACH, of Kirby Springs, in the county of Bryan, in the State of Georgia, have invented certain new and useful Improvements in Horse-Powers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, illustrating the same and forming part hereof.

The object of my invention is to provide a simple, strong, and readily-portable horse-power adapted to the requirements of farmers in thrashing their crops.

The invention consists in a horse-power having a folding driving-wheel mounted upon a frame which is adapted to be attached to the running-gear, axles, or pillow-blocks of ordinary farm-wagons, so as to permit of the ready transportation of the mechanism from place to place, the wheel being made with hinged segments adapted to fold back upon the body of the wheel, so as to contract it between the wagon-wheels, thereby reducing its bulk to admit of its being drawn along narrow woods-bound roads.

In the above-referred-to drawings, Figure 1 is a side elevation of my horse-power mounted, and Fig. 2 is a top-plan view, the wheel being shown folded by dotted lines.

A represents a frame, composed of longitudinal stringers *a*, having notches *b* therein, and connected by cross-pieces *c*. From the stringers *a* rise posts *d*, supporting beams *e*. These posts are braced by crossed rods *f*, to prevent lateral displacement and to strengthen the frame.

Centrally of the beams, and mortised therein, are cross-timbers *g h*, the former being fixed and the latter adjustable, and held at desired adjustment by wedges or cams *i*. Centrally of these timbers semicircular recesses are made, and in these recesses and between the timbers *g h* is placed the shaft *k* of the driving-wheel *l*. This shaft has a step-bearing in or is pivoted upon a cross-piece, *m*, mortised in the stringers *a*. Said shaft is held in its bearing between the timbers *g h* with the proper tension by the adjustment of the timber *h* through the wedges or cams *i*.

The rim *n* of the wheel may be made in skeleton form to insure lightness, its strength being in nowise thereby diminished. The said rim has two leaves or segments, *o p*, hinged, as at *r s t*, at the top of the body of the wheel, so as to permit such segments to be turned up and back and folded upon the wheel, as indicated in dotted lines, Fig. 2, so that when the mechanism is mounted upon the running-gear of a wagon, as illustrated in the drawings, the wheel may be folded within the compass of the sides of the same, and so permit travel along roads closely bound by woods and render the load less top-heavy. The periphery of this driving-wheel *l* is adapted to receive any suitable belt, chain, or rope for transmitting motion to the thrashing or other machine, and when said belt, chain, or rope is in working position its tension upon the wheel will be sufficient to hold the folding parts thereof horizontally extended and prevent their displacement.

The lever or pole *u*, by which the power is to be driven, is inserted in a socket in the hub *w* of the wheel. Any number of levers may be employed.

This horse-power is designed to be moved from farm to farm by thrashing parties; and to this end its stringers are provided with the notches *b*, whereby it is adapted to be easily applied to the head or pillow blocks or axles of ordinary wagons, and hence no special carriage of peculiar construction and excessive cost is required.

During transportation the levers, belting, gearing, &c., may be stowed upon the frame beneath the wheel.

This horse-power may be made of wood, and is strong and cheap, and a desideratum long looked for in farming neighborhoods removed from thickly-settled localities.

What I claim is—

1. A driving-wheel for horse-powers provided with hinged leaves or segments arranged to be folded back upon the body of the wheel, substantially as described, for the purpose specified.

2. The combination of transversely-connected notched stringers *a*, brace-posts *d* thereon,

beams *e*, secured to said posts, and supporting a fixed piece, *g*, and an adjustable member, *h*, and the cross-piece *m* on the stringers, with the vertical shaft *k* and folding driving-  
5 wheel *l*, constructed and arranged to form a portable horse-power adapted for use substantially as shown and described.

To the above specification of my invention I have signed my name this 4th day of August, A. D. 1879.

W. H. DE LOACH.

Witnesses:

A. H. SMITH,  
W. W. ALLIFF.