B. G. TURNER.

Wheels for Harvesters, &c.

Patented Jan. 12, 1875.

No. 158,758.

Fig. 1.

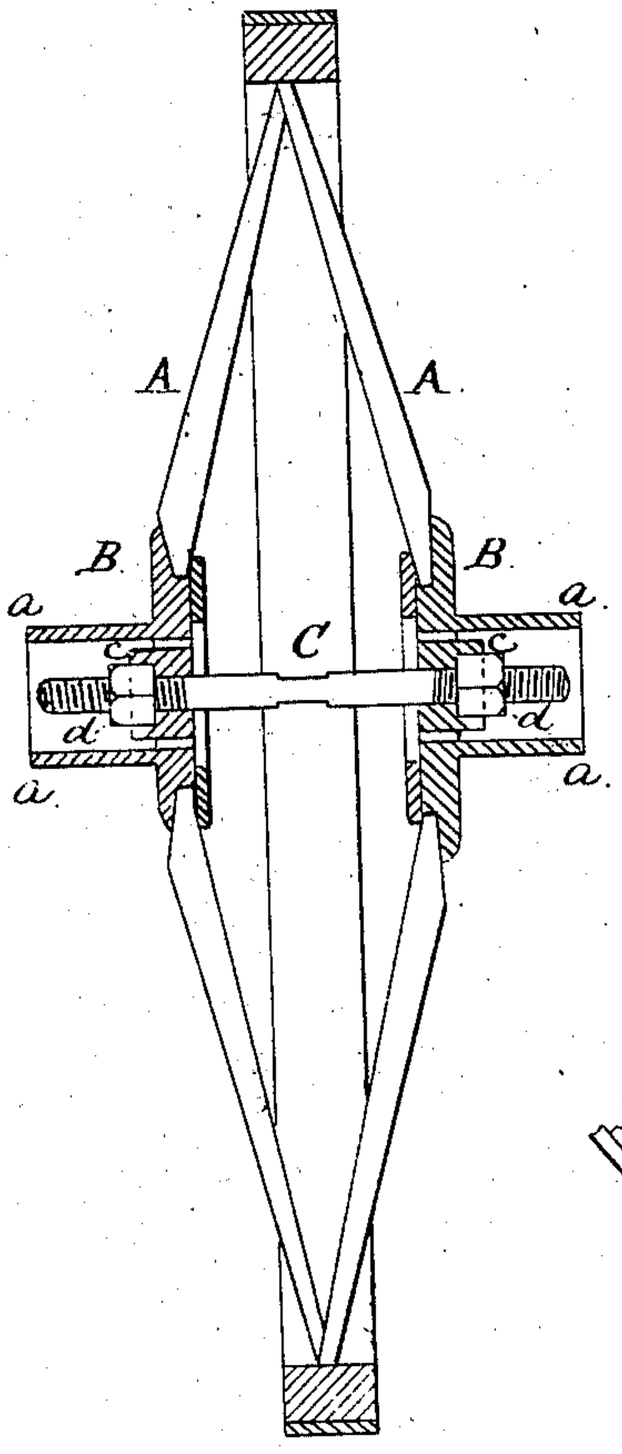


Fig. 2

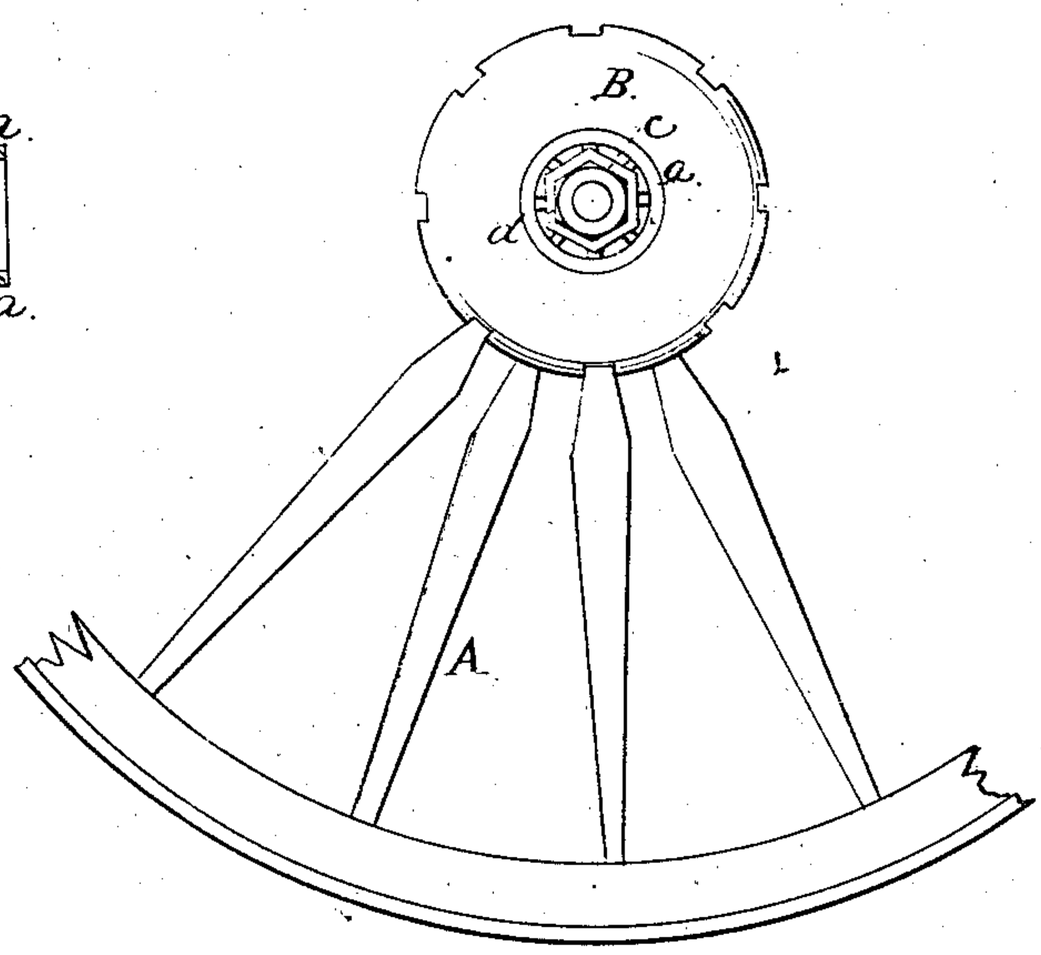
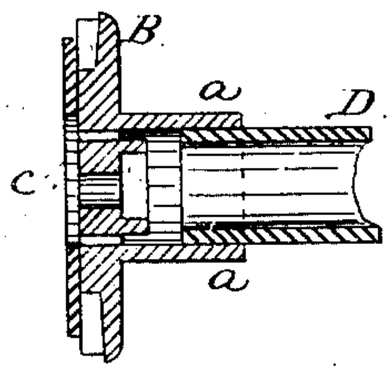


Fig. 3.



Witnesses
W. F. Burris
R. L. Lacey

Inventor
Benj. G. Turner
By his Attorney
G. B. Fowles

UNITED STATES PATENT OFFICE.

BENJAMIN G. TURNER, OF FREMONT, NEBRASKA.

IMPROVEMENT IN WHEELS FOR HARVESTERS, &c.

Specification forming part of Letters Patent No. **158,758**, dated January 12, 1875; application filed December 26, 1874.

To all whom it may concern:

Be it known that I, BENJAMIN G. TURNER, of Fremont, in the county of Dodge and State of Nebraska, have invented a new and useful Improvement in Wheels for Harvesters, Trucks, &c.; and I 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Figure 1 is a vertical section of my improved wheel, taken through the line of its axis; Fig. 2, a side view; Fig. 3, a sectional view of hub detached, showing its journal arranged to revolve on hollow pivot.

Like letters in both figures of the drawings indicate like parts.

This invention relates to the class of wheels having a double set of inclined spokes and double hubs; and its object is, in tightening the spokes to strengthen the wheel, to draw in each set of spokes equally and simultaneously, so as not to disturb the proper adjustment or set of the wheel, as will be hereinafter more fully explained.

A A are the double set of inclined spokes; B B, the double hubs, made with journals *a a*. The inner sides of the hubs are provided with radial mortises to receive the spokes, which are secured by plates riveted to the hubs over the mortises. The spokes, however, may be attached to the hubs in any other suitable manner.

The hubs are connected together by a central rod, C, having right and left hand screw-threads on its ends arranged to pass through rings *c c*, supported by radial arms on the inside of the hubs, the purpose of which is to allow the air to pass freely through the hubs, to keep their journals cool while revolving in the boxes, and at the same time form bearings for the screw-nuts *d d*. The rod C is made square in the center, or in such a manner that a wrench can be applied thereto to turn the rod, so that in tightening the spokes to strengthen the wheel, the spokes will be drawn in equally and simultaneously, and thus not disturb the proper adjustment of the wheel.

If preferable, the rings in the hubs may be provided with screw-threads, and the screw-nuts thus dispensed with; also, the journals of the hubs may be swung on hollow pivots D, and the journal-boxes thus dispensed with, the pivots being made hollow to receive and allow a free play to the projecting ends of the rod during the revolution of the wheel.

This wheel is especially adapted for use in a harvester, wheelbarrow, truck, or other similar class of machinery, as it can be provided with a broad felly or band to secure easy locomotion, and the requisite strength obtained to sustain such a wheel.

I am aware that a central rod or spindle has been used; but the objection to that is, that it is constructed so that each set of spokes of the wheel cannot be drawn in equally and simultaneously toward the middle of its axis in tightening the wheel, but each set of spokes has to be drawn in at a time; consequently there is a liability of the set or adjustment of the wheel being disturbed. In this invention the spokes are drawn in equally and simultaneously toward the middle of the axis of the wheel, thus obviating entirely the objection above referred to.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

In a wheel having a double set of inclined spokes and double hubs, the central screw-rod C, in combination with the inner rings or bearings, *c c*, and screw-nuts *d d*, to draw in each set of spokes of the wheel equally and simultaneously toward the middle of its axis, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of December, 1874.

BENJAMIN G. TURNER.

Witnesses:

ASBURY TOWNSEND,

CHRIST. MARTEN.