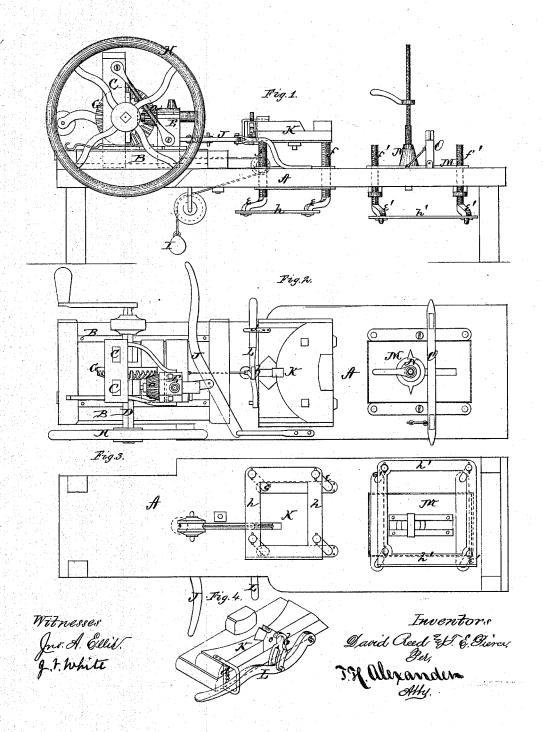
Total & Florce,

Short Machine.

10. 112,279. Fatented Feb. 28.1871.



## United States Patent Office.

## DAVID REED AND THOMAS E. PIERCE, OF SULLIVAN, INDIANA.

Letters Patent No. 112,279, dated February 28, 1871.

## IMPROVEMENT IN SPOKE AND FELLY MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, DAVID REED and THOMAS E. PIERCE, of Sullivan, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Combined Spoke and Felly-Machines; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of our invention consists in the construction and arrangement of a machine for turning spokes and boring fellies, as will be hereinafter more

fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which-

Figure 1 is a side elevation; Figure 2, a plan view; and

Figure 3, a bottom view of our machine.

Figure 4 is a perspective view of the felly-table.

A represents the bench upon which the machine rests, on the upper side of which are guides B, in which the machine slides back and forth.

In the guides B slides a frame, having uprights, C, for supporting the main shaft D, and a head-block, E.

The main shaft is turned by crank or belt or other suitable means, and provided with fly-wheel H and bevel-wheel G, said bevel-wheel gearing with a pinion, a, upon the shaft which carries the bits, this shaft be-

ing supported in the head-block E.

The machine is fed toward the work by means of the weight I, attached to a cord which is arranged

over pulleys, as shown in fig. 1.

It is brought back from the work by means of the lever J.

K represents the felly-table, on the side of which is a lever, L, provided with a hinged-hook, b, as shown in fig. 4, for holding the spoke while tenoning.

This lever is tightened and held by the ratchet d. The felly-table K is supported upon four temperscrews, ff, which pass through the bench a, and have at their lower ends cranks e e, connected by a plate, h, whereby all the screws are made to move simultaneously so as to raise and lower the table level at all

times. M represents the hub-table, which is raised and lowered in the same manner, by means of temper-screws f' f', cranks e' e', and plate h'.

This table is slotted, as shown in figs. 2 and 3, for the adjustment of the center-block N that centers the hub to suit any sized wheel.

O is a hinged rest to rest the ends of fellies upon when boring long ones.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is-

1. The combination of the screws f f with cranks e e and plate h, for raising and lowering the felly-table K, substantially as herein set forth.

2. The slotted hub-table M, raised and lowered as described, and provided with the adjustable center block N, as herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

DAVID REED. THOMAS E. PIERCE.

Witnesses:

RUSSELL R. CLUGAGE, STEPHEN BALLARD, Sr.