

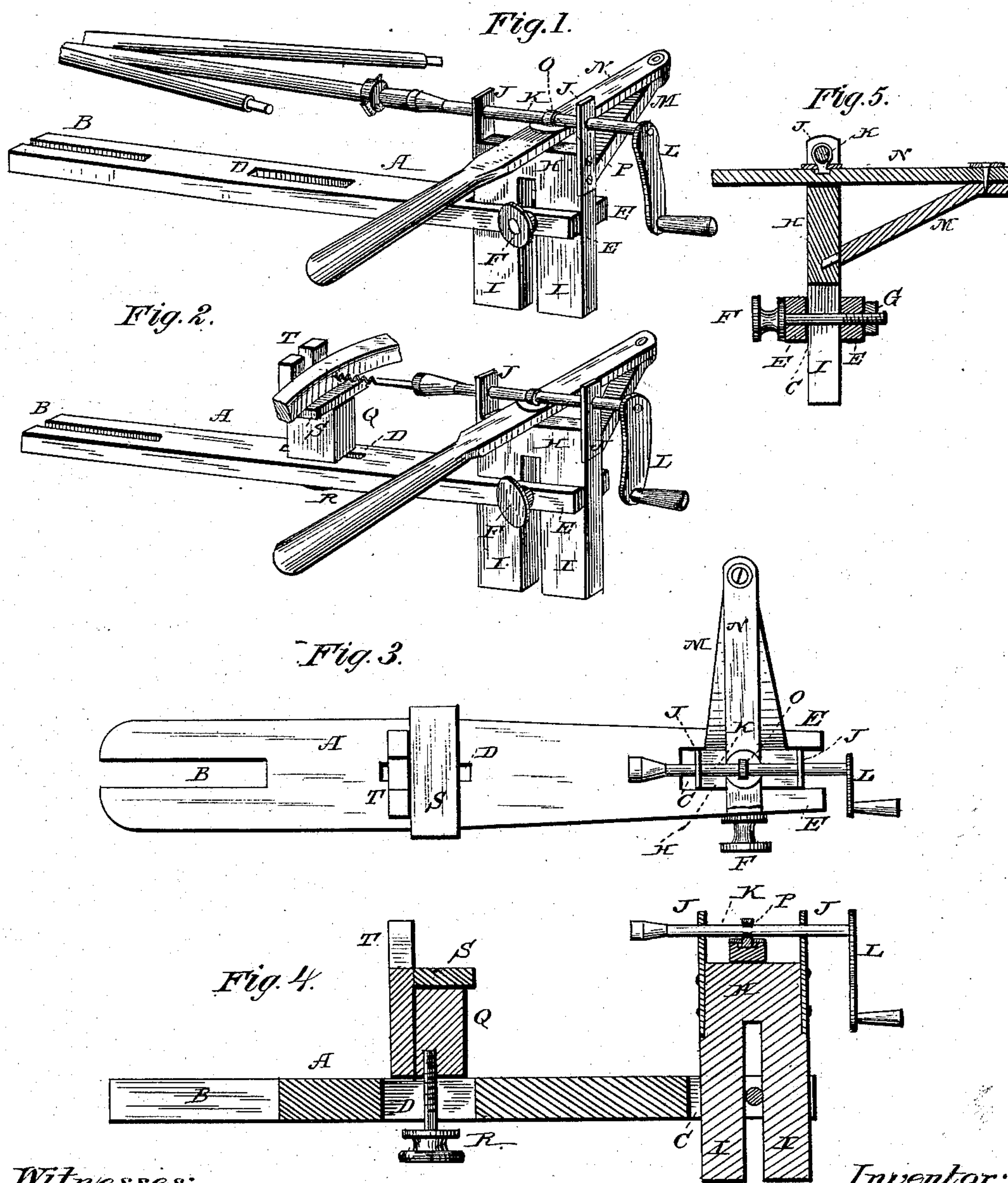
(Model.)

M. P. ELLISON.

Machine for Tenoning and Boring Spokes and Fellies.

No. 238,279.

Patented March 1, 1881.



Witnesses:

Fred G. Dietrich

R. Sittell,

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# UNITED STATES PATENT OFFICE.

MELVIN P. ELLISON, OF MIDDLESEX, NEW YORK.

## MACHINE FOR TENONING AND BORING SPOKES AND FELLIES.

SPECIFICATION forming part of Letters Patent No. 238,279, dated March 1, 1881.

Application filed December 18, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, MELVIN P. ELLISON, of Middlesex, in the county of Yates and State of New York, have invented certain new and useful Improvements in Machines for Tenoning and Boring Spokes and Fellies; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improved machine for boring spokes and fellies, the construction and operation of which will be hereinafter more fully described, with reference to the drawings, in which—

Figure 1 is a perspective view of the machine, as used for boring spokes. Fig. 2 is a perspective view, showing the felly-boring attachment in position. Fig. 3 is a top plan. Fig. 4 is a longitudinal vertical section, and Fig. 5 is a cross-section.

Corresponding parts in the several figures are denoted by like letters of reference.

A represents the bed of my improved machine, which consists of a plank provided at the ends with slots B C, and having a central vertical slot, D. The prongs E, formed by the slot C at the rear end of the bed, are provided with bearings for a thumb-screw, F, which, when screwed into a nut, G, may be used to tighten the said prongs together for the purpose of clamping and holding in position the tool-carrier H. The latter is provided with legs I I, straddling the screw F, which said legs enable the carrier to be adjusted vertically at any desired height. It is also provided with upward-projecting brackets J J, having bearings for the handle or clutch K of the tool or auger, which is operated by a crank, L. It is also provided with a laterally-projecting bracket, M, upon which is pivoted a lever, N, having a swiveled ring, O, fitting in a groove, P, in the tool-handle. By this mechanism it will be seen that the tool may be readily fed forward when the machine is operated.

The machine is, in practice, attached to the

so-called "wheel-horse," which is found in all well-appointed wagon-shops, it being adjusted, by the slot B, upon the spindle or upright supporting the hub in which the spokes have been placed in position, the unfinished wheel being placed upon the bed, or, more properly, above the bed of my improved machine. The spokes may then, one after the other, be turned to face the auger, which is rotated by crank L, and fed by lever N, thus boring the spokes to any desired depth.

The tool-carrier, as stated, is vertically adjustable, so that the auger may be made to face the spokes in wheels of any size.

The felly-boring attachment to my invention consists of an upright, Q, longitudinally adjustable in the slot D by a thumb-nut, R, and provided with a rest, S, just below its upper end, which is forked, as shown at T, so as to admit the point of the auger which projects when fellies are bored.

The operation will be readily understood. The felly is simply supported upon the rest S, while the tool is operated and fed through it by lever N.

By this invention a simple and inexpensive machine is supplied, by which the operation of boring spokes and fellies may be easily and accurately performed.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the bed A, having vertical end slot, C, forming prongs E, and tightening screw and nut F G, and the slotted tool-carrier H, vertically adjustable in said slot C of bed A, and having the usual supporting brackets J J, sliding tool-handle K, and operating-lever N, the several parts constructed and relatively arranged to operate in the manner herein shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MELVIN P. ELLISON.

Witnesses:

ARCHIBALD N. MCCLURE,  
FRANK C. TWITCHELL.