(No Model.)

G. W. McALISTER.

MACHINE FOR BORING FELLIES AND TENONING SPOKES.

No. 491,582. Patented Feb. 14, 1893.

Fig. 1.

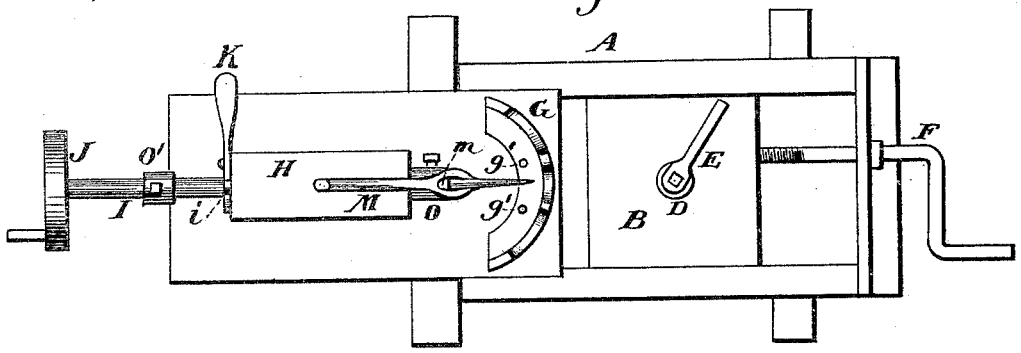


Fig. 2.

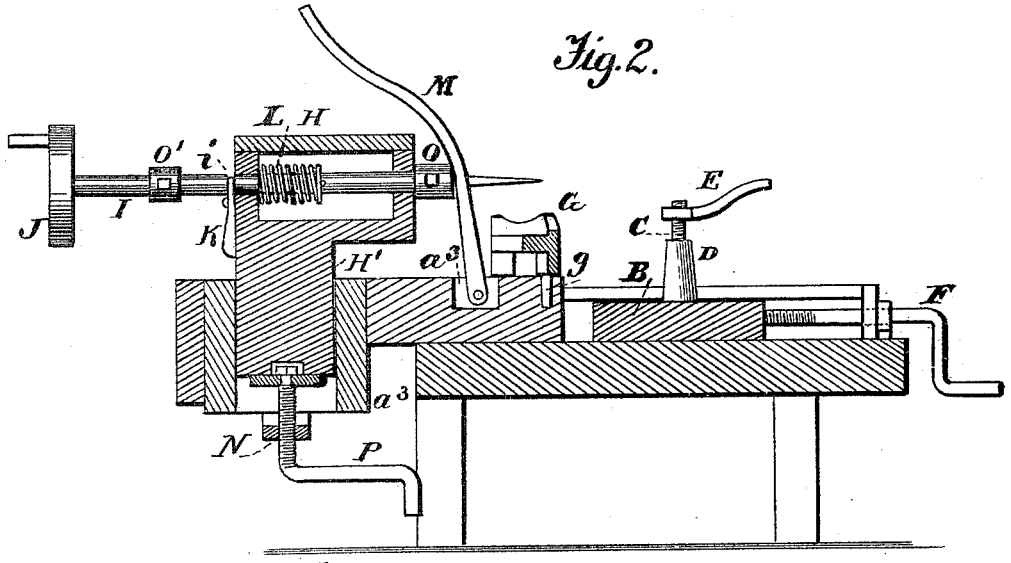


Fig. 3.

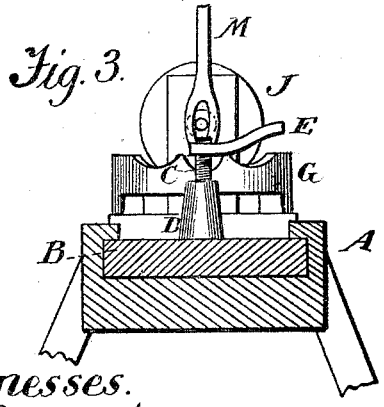
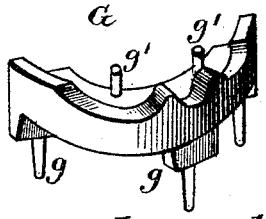


Fig. 4.



Witnesses.
A. Ruppert.
B. H. Naylor

Inventor.
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UNITED STATES PATENT OFFICE.

GEORGE W. McALISTER, OF JAKE'S PRAIRIE, MISSOURI.

MACHINE FOR BORING FELLIES AND TENONING SPOKES.

SPECIFICATION forming part of Letters Patent No. 491,582, dated February 14, 1893.

Application filed February 27, 1892. Serial No. 423,016. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MCALISTER, a citizen of the United States, residing at Jake's Prairie, in the county of Crawford and State of Missouri, have invented certain new and useful Improvements in Machines for Boring Fellies and Tenoning Spokes; 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 appertains to make and use the same.

The special object of the invention is to make a machine whereby spokes may be tenoned and fellies mortised to receive the tenons in a rapid, effective and inexpensive way.

Figure 1 of the drawings is a plan view, Fig. 2 a longitudinal, vertical section, Fig. 3 a vertical, transverse section, and Fig. 4 a detail perspective view of the felly holder.

In the drawings, A represents a table supported by suitable legs, the rear part being higher than the front.

B is a wheel holder from the middle of which rises the endthreaded post C whereon the hub is placed so as to rest on the tube D and be clamped by the lever-nut E. The holder B is adjusted forward and back by a crank screw F. On the higher plane of the table, I arrange the detachable felly holder G which has, on the underside, three pins g which work in table-holes, to hold it firmly in place and also has on top the two pins g' which serve to hold the felly firmly in position in its seat in the holder while the felly is being bored.

H is a hollow guide in which are the bearings of the rotary shaft I, the latter carrying at its front end the tools for tenoning the spokes and boring the fellies, while at its front end, is located the handcrank disk J by which the shaft I is rotated. On the other end of the shaft is placed the tool holder O, while O' is an adjustable collar or stop to limit the extent to which the shaft may be fed forward. On the shaft I, I also make the shoulder i against which works the front end of the catch K whose rear end is weighted to hold the front one against the said shoulder, and the middle pivoted to the guide H. Around the shaft I and within the guide H is arranged the spiral spring L which feeds the shaft forward as the tool does its work. M is a lever pivoted in the slot a^2 of the table and provided with the slot m through which passes the tool while the tool holder O bears upon the lever on each side of the slot. By pulling the lever toward the operator, the shaft is forced back with the spring until the tool holder O strikes the guide when the catch K comes up against the shoulder i to hold the shaft until the felly or spoke has been fixed in a proper position to be operated upon by the rotary tool. Then the spring feeds the tool forward as it cuts the tenon or bores the felly until the stop collar O' strikes the guide H. The latter is attached to a post H' which is movable up and down in the well a^3 of the table by a thereto swiveled crank screw P which works in a thread of the crossbar N, to regulate the height of the toolshaft.

What I claim as new is:

1. The felly holder of a boring and tenoning machine, having the subjacent pins g to fit holes in the table and superposed pins g' to retain the felly in place; whereby the holder is held tightly but detachably to the table while the felly is held securely but detachably to the holder as and for the purpose set forth.

2. The combination with the guide H, of the tool-shaft I, provided with a spring L, constructed to press forward said shaft, a shoulder i and weighted catch K, substantially as set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. MCALISTER.

Witnesses:
E. A. EVANS,
J. S. JONES.