White & Bostwick,

Horse Power.

No. 49,944. Patented Sep. 12, 1865.

Fig. 1.

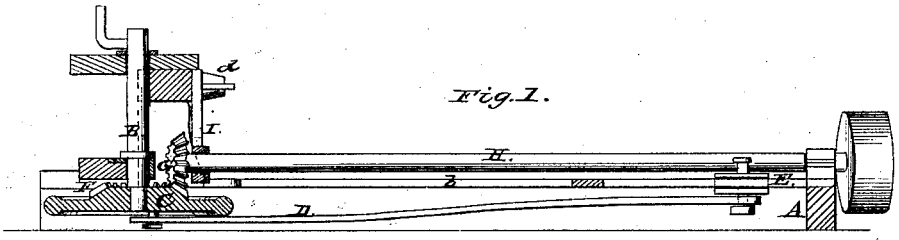


Fig. 2.

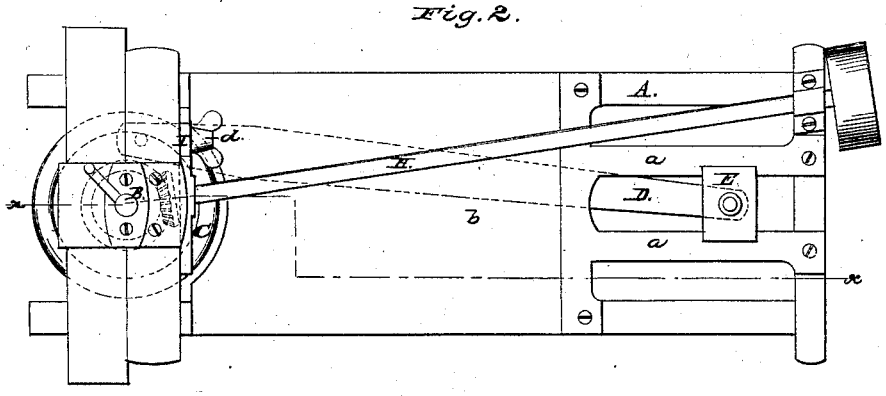
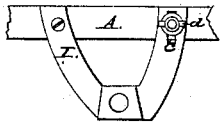


Fig. 3.



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UNITED STATES PATENT OFFICE.

ORSAMUS A. WHITE AND I. W. BOSTWICK, OF NORWALK, OHIO.

IMPROVED HORSE-POWER FOR SAWING-MACHINES.

Specification forming part of Letters Patent No. **49,944**, dated September 12, 1865.

To all whom it may concern:

Be it known that we, ORSAMUS A. WHITE and ISAAC W. BOSTWICK, of Norwalk, in the county of Huron and State of Ohio, have invented a new and Improved Horse-Power for Sawing-Machines; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of our invention, taken in the line *x x* in Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a detached view of a portion of the same.

Similar letters of reference indicate corresponding parts.

This invention consists in combining or arranging a shaft with a horse-power, and also arranging the pitman of the latter in such a manner that both a reciprocating and a circular saw may be driven separately, as desired.

A represents a framing, which supports the working parts of the device, and B is a shaft placed vertically therein, and having a fly-wheel, C, keyed on its lower end, said fly-wheel also serving as crank-pulley, and having a pitman, D, attached to it, which drives the cross-head E, fitted between guides *a a*, and to which the arm of the reciprocating saw is secured.

This arrangement admits of the pitman and also the shaft H being under the platform *b* of the framing, as shown clearly in Fig. 1. The shaft B has the power applied to it, the requisite speed being given it by means of gearing from the shaft to which the sweep is attached, (not shown;) and on the upper side of the fly-wheel C, concentric with it, there is a bevel-wheel, F, which gears into a corresponding wheel, G, on a horizontal shaft, H, the latter extending diagonally along under a portion of the platform *b*, so as not to interfere with the cross-head E, and so, also, to be out of the way of the horses in stepping onto the platform in operating the power as they pass around, and always step first onto the side of the platform opposite the shaft H, and by its position, as indicated, are not impeded in stepping onto the platform, and by its being under a portion of the platform are not liable to be thrown in stepping onto the shaft H while it is in motion.

The shaft H has its inner bearing in a circular bar, I, one end of which is pivoted to the framing A, and the opposite end having an oblong slot, *c*, made in it, through which a screw, *d*, passes into the framing. By adjusting this bar I it will be seen that the wheel G may be thrown in and out of gear with wheel F and motion communicated to the shaft H, or the latter rendered inoperative, as desired.

The circular saw is driven from the shaft H. Other devices, however, than saws having a circular motion may be driven from it.

Thus by this simple and compact arrangement of parts a reciprocating and rotary motion, either or both, may be given to saws with one and the same horse-power; and the advantages secured in its several arrangements are:

First, in running the shaft H from its drive-wheel to the corner indicated it is out of the way of the horses in first stepping onto the platform.

Second, in running it under a portion of the platform permanently the accumulation of dirt and snow under it in using is prevented and the possibility of its being bent or the horses thrown by stepping onto it while in motion obviated.

Third, in the adjustable bar I we are enabled to run the reciprocating saw without removing the shaft H from the machine, also obviate the possibility of bending the shaft by frequent removals in changing saws, and also the liability of not properly adjusting the shaft in its bearings in replacing it by inexperienced hands.

We are aware that a shaft for obtaining rotary motion has been run in several different ways by the same power, but none in the manner set forth.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

A horse-power arranged and constructed substantially as and for the purposes herein set forth.

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Witnesses:
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