

Nelson & Ross,

Horse Power.

N^o 252.

Patented June 30, 1837.

Fig. 1.

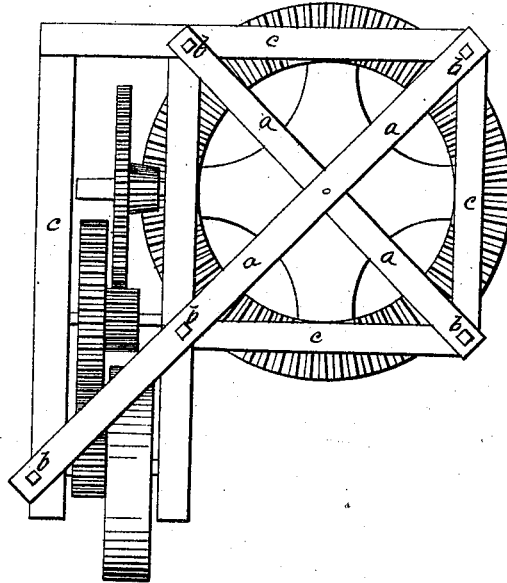


Fig. 2.

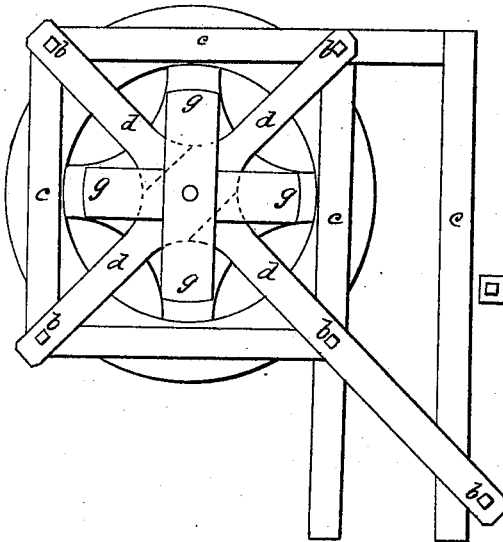
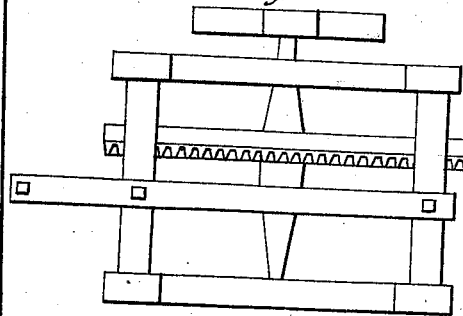


Fig. 3.



UNITED STATES PATENT OFFICE.

JOHN A. NELSON AND J. P. ROSS, OF LEWISBURG, PENNSYLVANIA.

CONSTRUCTING THE FRAMEWORK OF A PORTABLE HORSE-POWER.

Specification of Letters Patent No. 252, dated June 30, 1837.

To all whom it may concern:

Be it known that we, JOHN A. NELSON and JAMES P. ROSS, of the borough of Lewisburg, in the county of Union and State of Pennsylvania, have invented a new and useful Improvement in the manner of constructing the framework for a portable horse-power, in which simplicity, stability, lightness and economy are combined; and we do hereby declare that the following is a full and exact description thereof, reference being had to the drawings which accompany and make a part of this specification.

Figure 1, represents the lower side of the frame, *a, a*, being the sills upon which the whole machine rests. These consist of 3 by 4 inch scantling, which is the general size of that composing the frame. The longer piece in a machine which we have made, is 5 feet 10 inches, the shorter 4 feet, 2 inches; these are halved into each other, so that three of the ends are of the same length. The drawing is upon a scale of one inch to a foot, from which the dimensions of the respective parts may be readily deduced. From the upper side of this sill, at the point marked by bolt heads, or mortises, and lettered *b, b, b, b, b*, rise five posts, or uprights, which extend to the top of the frame, shown in Fig. 2. These posts are 1 foot, $7\frac{1}{2}$ inches long in the clear, and are securely fastened by bolts, or otherwise. To the middles of these are fastened the girths *c, c, c, c, c*, which brace the whole together, and sustain the gudgeons of the band and spur wheels; these are marked with the same letters in Fig. 2, as are, also, the places of the bolts passing into the uprights. The

girths are fastened to the uprights by being notched in and screw-bolted, or otherwise.

Fig. 2, represents a top view of the frame, the pieces *d, d, d, d*, corresponding with those marked *a*, at the bottom. The band wheel *e* receives its motion through the intervention of wheels and pinions driven by a large crown wheel *f*, on a vertical shaft, as in many other horsepowers. We deem it unnecessary to give the proportion of the wheels and pinions employed, as these will be varied according to the speed required, and may also be varied in their arrangement; to this part we do not lay any claim whatever, and introduce it merely to show the manner in which it is sustained by the frame. The cross *g, g, g, g*, is on the upper end of the vertical shaft, to receive the levers by which the horses draw.

Fig. 3, is an elevation of one side of the machine, showing two of the vertical posts *h, h*; its intention, and connection will be obvious upon inspection.

What we claim as our invention, and wish to secure by Letters Patent is—

The forming, or constructing, the frame of a portable horse-power, with the sill and cap pieces crossed in the manner herein described, and connected together by upright posts, with girths to brace them, and to sustain the gearing, the whole combined together, substantially in the manner set forth.

JOHN A. NELSON.
JAMES P. ROSS.

Witnesses:

JAMES F. LINN,
JOSEPH F. GREER.