B. F. Penny, Splitting Wood. Patented Sep.12, 1865.

Fig. 2 0 1 Witnesses: Aso Xe Billings Wood Gonghlorough B. F. Pennys

## United States Patent Office.

B. F. PENNY, OF ROCHESTER, NEW YORK.

## IMPROVEMENT IN WOOD-SPLITTING MACHINES.

Specification forming part of Letters Patent No. 49,913, dated September 12, 1865.

To all whom it may concern:

Be it known that I, B. F. Penny, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Wood-Splitting Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front elevation of my invention.

Fig. 2 is a side elevation of the same.

Similar letters indicate corresponding parts

in both figures.

This invention consists, mainly, in providing wood-splitting machines with a vertically-adjustable splitting-rest, and in the employment of an ax stripper or clearer, which is also adjustable.

To enable others to make and use my invention, I will describe its construction and oper-

ation.

I construct a suitable frame, A, unless the machine is to be set up permanently in a building. The upright iron stock B, to which the rest C and clearer D is attached, is bolted to this frame.

The guides E and F may be cast to the stock or made separate and attached with bolts.

The ax bar or mandrel G is fitted to work freely through the square openings through the outer ends of the guides; or one-half of the opening may be made in the guides and the other half formed by an ordinary clasp or cap attached to the end of the guides by screws or otherwise. The shank of the ax A' is secured in the mandrel by a set-screw, s.

The object of having a square mandrel is to keep the edge of the ax in the same direction

horizontally at all times.

The rest C and clearer D are made adjustable by means of clamping-bolts J, which pass through the slot H of the stock B. They are provided with lips which clasp the flanges f on each edge of the said stock B. This prevents any derangement of these parts when the clamping-bolts are loosened to change the adjustment of the rest or the clearer. If desirable, the latter may either or both be bal-

anced by a weight and cord or chain running over a pulley at the top of the frame, or they may be raised and lowered by a rack and pinion, or by a screw and crank.

The crank-arm d of the driving-shaft S may be provided with several holes for the crankpin i, whereby the stroke or throw of the ax may be increased or diminished, as circum-

stances may require.

The machine as here shown is portable and may be used anywhere. When it is to be put up for use in a building the stock B may be extended upward, so as to support the front end of the shaft S, and the other end may rest in an ordinary hanger attached to the ceiling.

When the operator wishes to split twelve or fifteen inch wood he should set the rest C far enough from the clearer to receive the length of the wood between them and leave an inch, more or less, of space besides, and the connecting-rod R should be attached to the crank at the outer hole, e; but if he wishes to split kindling which is only five or six inches long the rest C should be elevated accordingly and the rod R hung as shown in Fig. 1, because a very short stroke is sufficient for such work. The operator feeds the blocks through under the ax, splitting as fine as desired, then turns it quartering and feeds through again. The clearer D prevents the wood from rising with the ax, if it happens to stick, which is very frequently the case, and which, without this feature, would cause great danger of accident to the operator and trouble and delay in his manipulations. P is the driving-pulley, and P' is designed

P is the driving-pulley, and P' is designed for driving an elevator for conveying the split kindling or wood away from the machine.

What I claim as my invention, and desire to

secure by Letters Patent, is-

The relative arrangement of the stripper D, vertically-adjustable rest C, ax A', and stock B, in the manner and for the purposes specified.

B. F. PENNY.

Witnesses:

ASA H. BILLINGS, Wm. S. LOUGHBOROUGH.