Gilpin & Dickinson,

Rossing Bark.

No. 82,400. Patented Sep. 22, 1868.

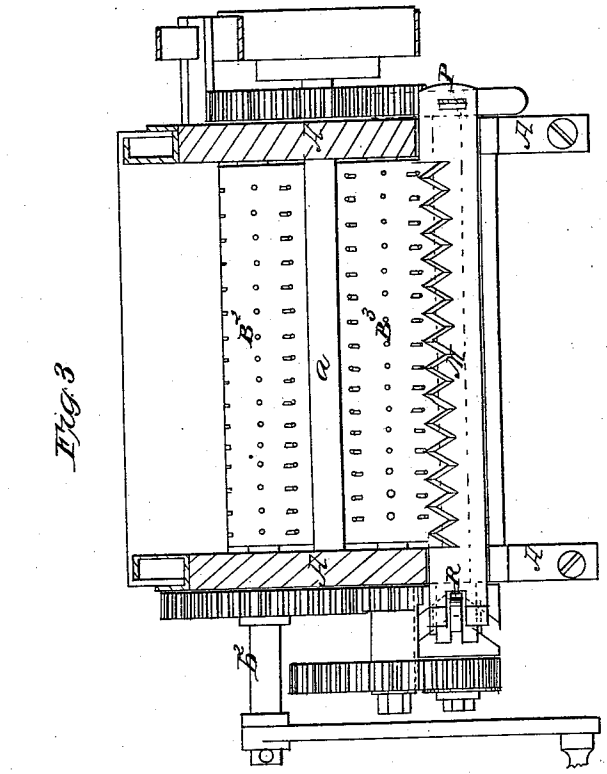

Fig 3

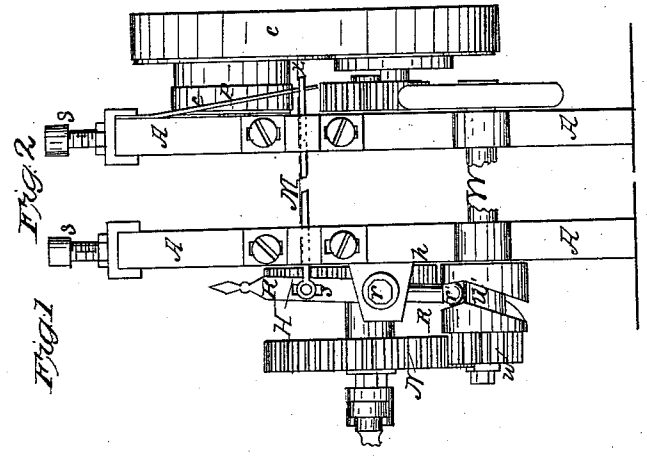

Fig 2

Fig 1

Witnesses:
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CHARLES GILPIN AND LAURENCE T. DICKINSON, OF CUMBERLAND, MARYLAND.

Letters Patent No. 82,400, *dated September* 22, 1868.

IMPROVEMENT IN ROSSING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, CHARLES GILPIN and LAURENCE T. DICKINSON, of Cumberland, in the county of Alleghany, and State of Maryland, have invented a new and improved Rossing-Machine; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation, showing both ends of the machine, its centre being removed.

Figure 2 is a horizontal section through line *x x* of fig. 1.

This improvement consists in the employment of a reciprocating saw, instead of a cutting-blade, to split the bark as it comes from the rollers.

In the drawings, A is the frame; B^2 B^3, the lower rollers; T, the feed-table; *a*, an iron rod between the rollers, and connecting the ends of the frame; b^2, the working-shaft; E, the gearing, and *c* the belting, which connect the rollers, and convey motion from one to the other, of our improved rossing-mill. We will not describe these parts further, for the reason that their construction and office are fully explained in an application for Letters Patent thereon, filed contemporaneously with this.

This invention is an improvement upon said machine, consisting in the employment of a vibrating saw, M, in place of the knife K, described in the other application. The knife is operated by a lever, R, hinged to the frame at *r*, and worked by a cam, *u*, on a shaft, W, in the manner shown in the drawings. The end of the lever that runs in the cam-groove on the shaft may be provided with friction-rollers, or a loose sleeve or cap, as shown at *r'*, to diminish friction. A spring-bar, P, is employed at the opposite end of the frame, to give the saw the necessary tension.

The cam-shaft W has a small pinion, *w*, on its outer end, which gears with a large wheel, N, on an idle-shaft. On the inner end of the latter shaft is another small pinion, *h*, gearing with a large wheel, H, on the driving-shaft b^2. The cam-shaft is thus rotated at great speed by the motion of the driving-shaft.

The principal object in using the saw is to split off the outer woody crust of the bark when it is very hard and dry. When the bark is soft, the sharp-edged knife will perhaps answer the purpose better, but when it is hard, and very thick, there is a decided advantage in employing the saw to cut into it.

By having a vertical slot, *s*, in the lever, and connecting the end of the saw-pitman thereto by a set-screw, or other adjustable fastening, the stroke of the saw may be increased or decreased at pleasure.

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

1. The arrangement of the reciprocating saw M with relation to the rollers, substantially as described.

2. The combination of the saw M, pitman H, spring P, lever R, and cam *u*, on shaft W, substantially as described, and for the purpose specified.

CHARLES GILPIN,
LAURENCE T. DICKINSON.

Witnesses:

JOHN C. BRADY,
JOHN B. HUDSON.