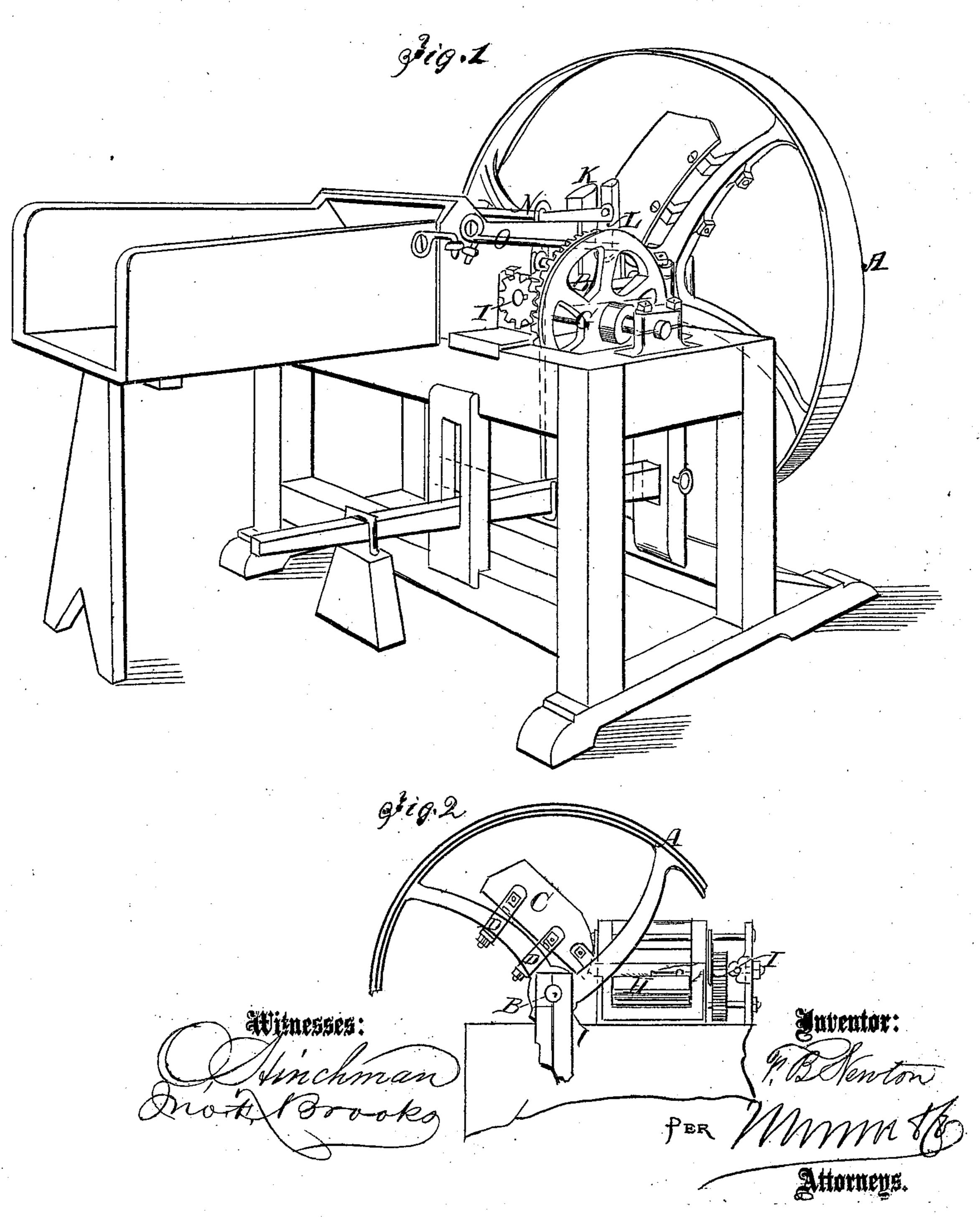
B. Button,

Stroubliter.

16. 92,342.

Faterated July 0.1869



Anited States Patent Office.

F. B. NEWTON, OF BOUCKVILLE, NEW YORK.

Letters Patent No. 92,342, dated July 6, 1869.

IMPROVEMENT IN STRAW-CUTTER.

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

To all whom it may concern:

Be it known that I, F. B. Newton, of Bouckville, in the county of Madison, and State of New York, have invented a new and improved Straw-Cutter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in feedcutters, designed to provide an improved construction of the same calculated to facilitate the removal of the cutters for grinding; also, certain improvements in the arrangement of the feed-mechanism, and the pressingapparatus, all as hereinafter more fully specified.

Figure 1 represents a perspective view of my im-

proved machine; and

Figure 2 represents a partial front elevation of the same.

Similar letters of reference indicate corresponding parts.

I propose to arrange the balance-wheel A in front of the end of the trough, upon a shaft, B, running parallel with the trough and at one side of it, as represented in fig. 1, in such a manner that the arms of the said wheel move sufficiently near the end of the trough to permit of supporting the cutters C thereon, by means of brackets D properly secured to the said arms, the cutters being bolted to the brackets in a manner to be readily detached for grinding or other purposes.

Upon the inner end of the shaft B is a pinion, F, which gears into a large wheel, G, of one of the feed-

rollers, for operating them.

The pinion F is detachably connected to the said

shaft, at the outer end thereof, and secured by a nut and screw for the purpose of applying pinions of various sizes to change the feed. When such changes are made, the driving-wheel is adjusted on its shaft, as required by the sizes of the different pinions applied.

For operating the presser-block H, it is suspended from a shaft, I, having journals projecting through the slotted posts K, and suspended by links L, from the crank-shaft N, upon the top of the trough. Springs O are arranged on each side of the trough, with their free ends upon the journals of the shaft I, adjusted to have a constant downward pressure thereon.

This arrangement provides a simple and efficient means for compressing the straw, at the point of cutting, which is easily removed when required by springing the ends of the springs laterally over the journals of the shaft I, leaving it free to be raised out of the slotted bearings.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The arrangement of the balance-wheel A, relatively to the end of the trough, and the attachment to the arms thereof of the cutters, by means of the brackets, all substantially as specified.

2. The arrangement of the shaft B, detachable pinions F, wheel G, on the feed-roller shaft, all substan-

tially as specified.

3. The presser-block H, shaft I, links L, slotted bearings K, crank-shaft N, and springs O, all arranged substantially as specified.

F. B. NEWTON:

Witnesses:

F. G. WICKWIRE, L. E. COE.