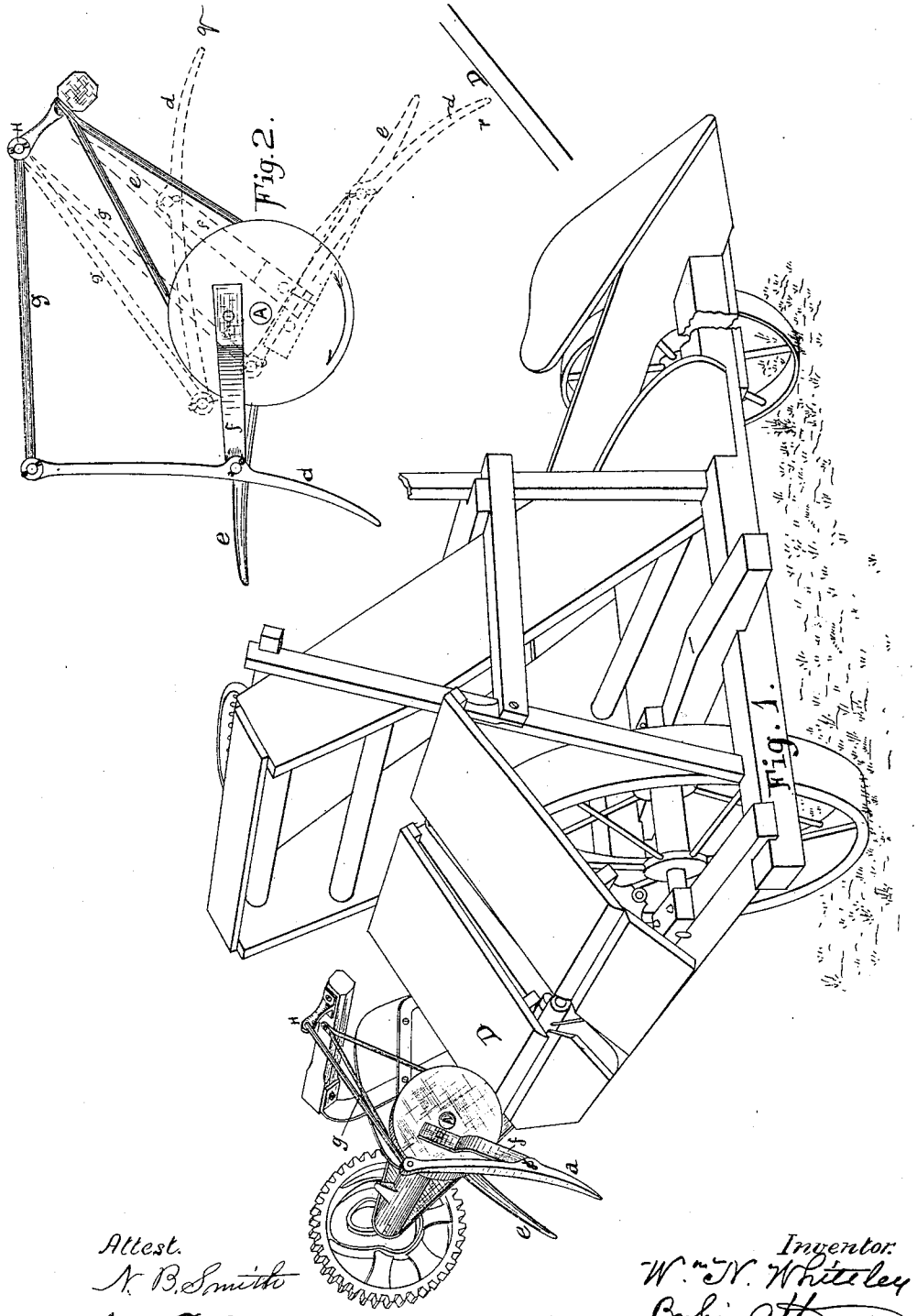
(Model.)

W. N. WHITELEY.

EJECTOR FOR AUTOMATIC GRAIN BINDERS.

No. 348,255. Patented Aug. 31, 1886.



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WILLIAM N. WHITELEY, OF SPRINGFIELD, OHIO.

EJECTOR FOR AUTOMATIC GRAIN-BINDERS.

SPECIFICATION forming part of Letters Patent No. 348,255, dated August 31, 1886.

Application filed September 29, 1885. Serial No. 178,494. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM N. WHITELEY, of Springfield, Ohio, have invented new and useful Improvements in Ejectors for Automatic Grain-Binders; and I do hereby declare that the following is a full and accurate description of the same, reference being had to the accompanying drawings, wherein—

Figure 1 is a perspective view of a harvester and binder with my invention applied. Fig. 2 is an elevation showing the action of it.

The ejector in common use with automatic grain-binders consists of an arm, *e*, projecting laterally from the main shaft A, whereby the knotter is propelled. The defect in its operation is in its descent, which is upon instead of behind the bundle; and the object of my present improvement is to secure an initial pressure squarely behind the bundle to set it in motion in advance of the arrival of the ordinary ejector. To this end I put upon the end of the shaft A a laterally-projecting crank-arm, *f*, and joint the ejector *d* at mid-length, or thereabout, to said crank-arm. The upper end of said ejector is jointed to the radius-rod *g*, the other end whereof is jointed to the frame at H. At each revolution of the shaft A the ejector *d* is carried around on the crank *f*, and its free end or point has an elliptical motion, while the upper end rises and falls in a curved path. The effect of this is to carry the ejector forward in an approximately horizontal position over the bundle, as shown by dotted lines at *q*, Fig. 2, and to cause it to descend behind the bundle in an approximately vertical position, as shown by dotted lines at *r*, Fig. 2, and in advance of the radial ejector *e*. The ejector *e* being carried directly by the shaft rotates with a uniform speed in a circular path; but the ejector *d*, being jointed to the crank *f* at or near its middle, and jointed at its upper end to the radius-rod *g*, has imparted to its point or lower end an elliptical orbit and a varying speed therein, alternately faster and slower than the speed of the ejector *e*. Therefore the ejector *e* passes the ejector *d* as they go nearer the deck or platform D, and in advance of said ejector *d* when the bundle is discharged, so that the initial motion of the bundle is produced by the ejector *d*, and its final discharge is effected by the ejector *e*.

Having described my invention, I claim—

1. In an automatic binder, the ejector *d*, jointed at one end to a radius-rod, whose other end is pivoted to a fixed part of the machine, the ejector being also midway its length jointed to a crank carried on the main knotter-driving shaft, combined with a radial ejector, *e*, carried by said main shaft, whereby the initial movement of the bundle is produced by said ejector *d*, and the final discharge by said ejector *e*, as set forth.

2. The combination, with the ejector *d*, of the radius-rod *g*, one end jointed to the frame at *h*, and the other end jointed to said ejector at one end, the crank *f*, shaft A, and radial ejector *e*, carried directly by the shaft, substantially as set forth.

WILLIAM N. WHITELEY.

Witnesses:

W. T. BEVITT,

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