(No Model.)

M. CRAWFORD.

COCKLE MACHINE.

No. 285,344. Patented Sept. 18, 1883.

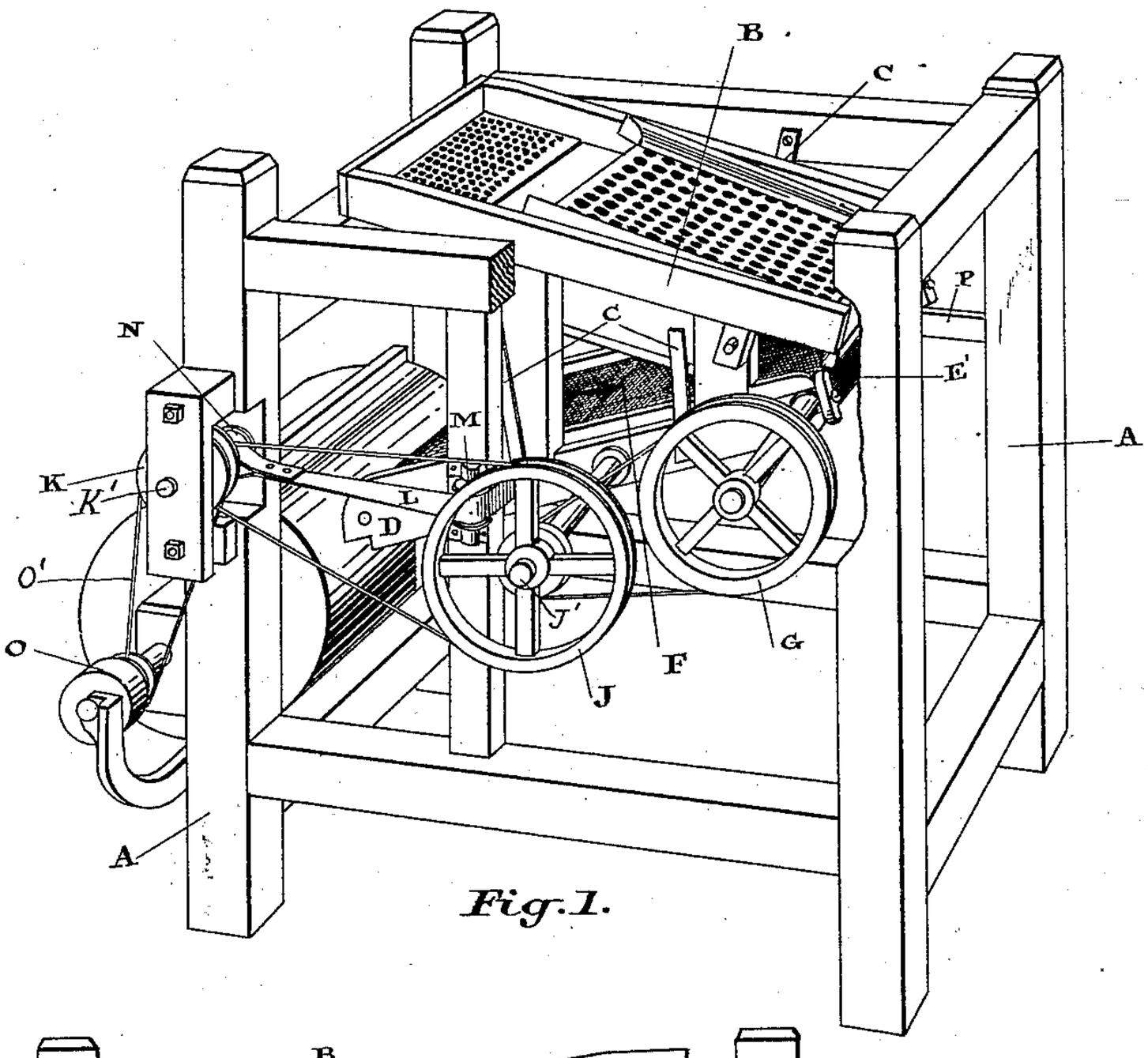

Fig. 1.

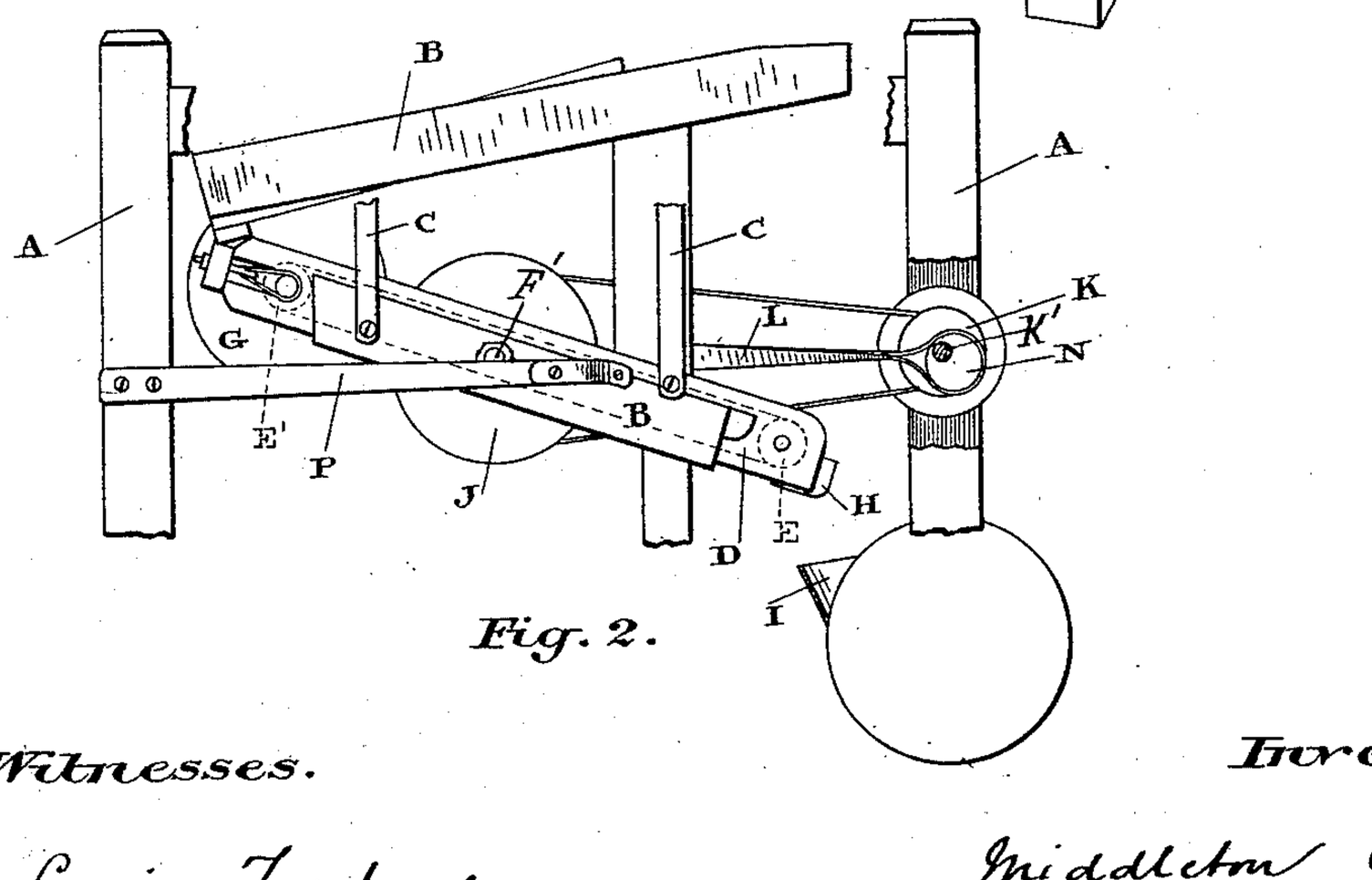

Fig. 2.

Witnesses.

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Att'y.

UNITED STATES PATENT OFFICE.

MIDDLETON CRAWFORD, OF WIARTON, ONTARIO, CANADA, ASSIGNOR OF ONE-HALF TO HERBERT CAMPBELL, OF SAME PLACE.

COCKLE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 285,344, dated September 18, 1883.

Application filed May 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, MIDDLETON CRAWFORD, a subject of the Queen of Great Britain, of the village of Wiarton, in the county of Bruce, in the Province of Ontario, Canada, miller, have invented certain new and useful Improvements in Cockle-Machines, of which the following is a specification.

This invention relates to certain new and useful improvements in cockle-machines; and it consists in the peculiar construction, arrangement, and combination of parts, as hereinafter more fully described and claimed.

Figure 1 is a perspective outside view of my improved machine, part of the frame being broken away. Fig. 2 is a view from the opposite side to that shown in Fig. 1, with most of the framing removed.

A is the main frame of the machine, constructed in a substantial manner, and designed to carry the working parts, as shown.

B is the vibrating frame, flexibly supported on the frame A by the hangers C.

D is an inner frame pivoted on the frame B, and provided with rollers E E′, around which the endless web-sieve F passes. The spindle of the roller E′ extends out beyond the frame, and has keyed or otherwise fastened to it the pulley G, the revolving of which causes the endless web-sieve F to travel around the rollers in the direction indicated by the arrow.

The frame D, carrying the endless web-sieve F, is pivoted in frame B at F′, so that the angle of its inclination may be adjusted to suit the character of the grain passing through it, the angle being such as will cause the grain to travel down toward the spout H, leading to the hopper I, opening into the scourer. The upper surface of the sieve F is caused to travel upwardly, so as to carry over the upper edge of the sieve the cockle and other small grain, which will naturally fall into the meshes of the sieve, the good grain rolling gradually down, as before stated, toward the spout H.

In order that the speed of the traveling sieve F may be regulated, it will be found well to make the pulley G with several steps, corresponding steps being formed on the pulley J, which is journaled on a spindle, J′, fixed to the frame B, and is connected to the pulley K, attached to a shaft, K′, running in bearings in the frame A, as indicated.

L is a strap attached at one end to the frame B, and after passing around the pulley M, secured to one of the timbers of the frame A, is connected at the other end to an eccentric, N, arranged to revolve with the pulley K, which pulley is connected by a belt, O′, to the driving-pulley O, fixed to the end of the shaft of the scourer, so that when power is applied to cause the scourer to revolve the frame B derives a lateral vibratory movement through the revolving of the eccentric, while the endless web-sieve F is caused to travel upwardly through the revolving of the roller E. A compensating spring, P, is attached to the frame A and vibrating frame B, which draws back said frame B to its original position after it has been acted on by the eccentric N and strap L.

I am aware that endless sieves have been before used in machines of this kind, and therefore do not claim, broadly, an endless sieve; but

What I claim as my invention is—

1. The combination, in a cockle-machine with the vibrating frame B, of the inner frame, D, pivoted thereto, the rollers E E′, the endless sieve supported on said rollers, and mechanism, substantially as described, for giving motion to the frame and apron, as and for the purposes set forth.

2. The combination, in a cockle-machine with the vibrating frame B, of the inner frame, D, pivoted thereto, the rollers E E′, the endless sieve supported on said rollers, and mechanism, substantially as described, for giving a sidewise vibrating motion to the frame, and a motion at right angles thereto to the apron, as and for the purposes set forth.

Dated at Wiarton this 1st day of May, A. D. 1883.

MIDDLETON CRAWFORD.

In presence of—

JAMES V. CRAWFORD,

W. G. TANNERS.