J. H. Aiken.

Wool-Oiling Mach.

No. 59,308. Patented Oct. 30, 1866.

Fig. 1.

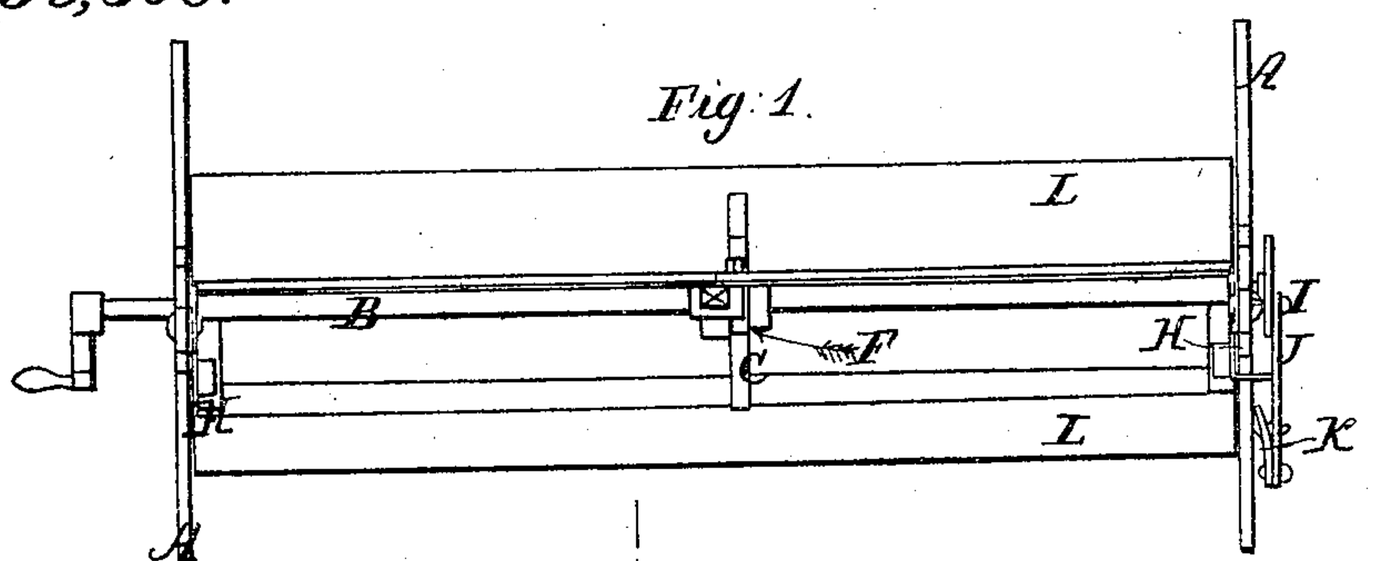


Fig. 2

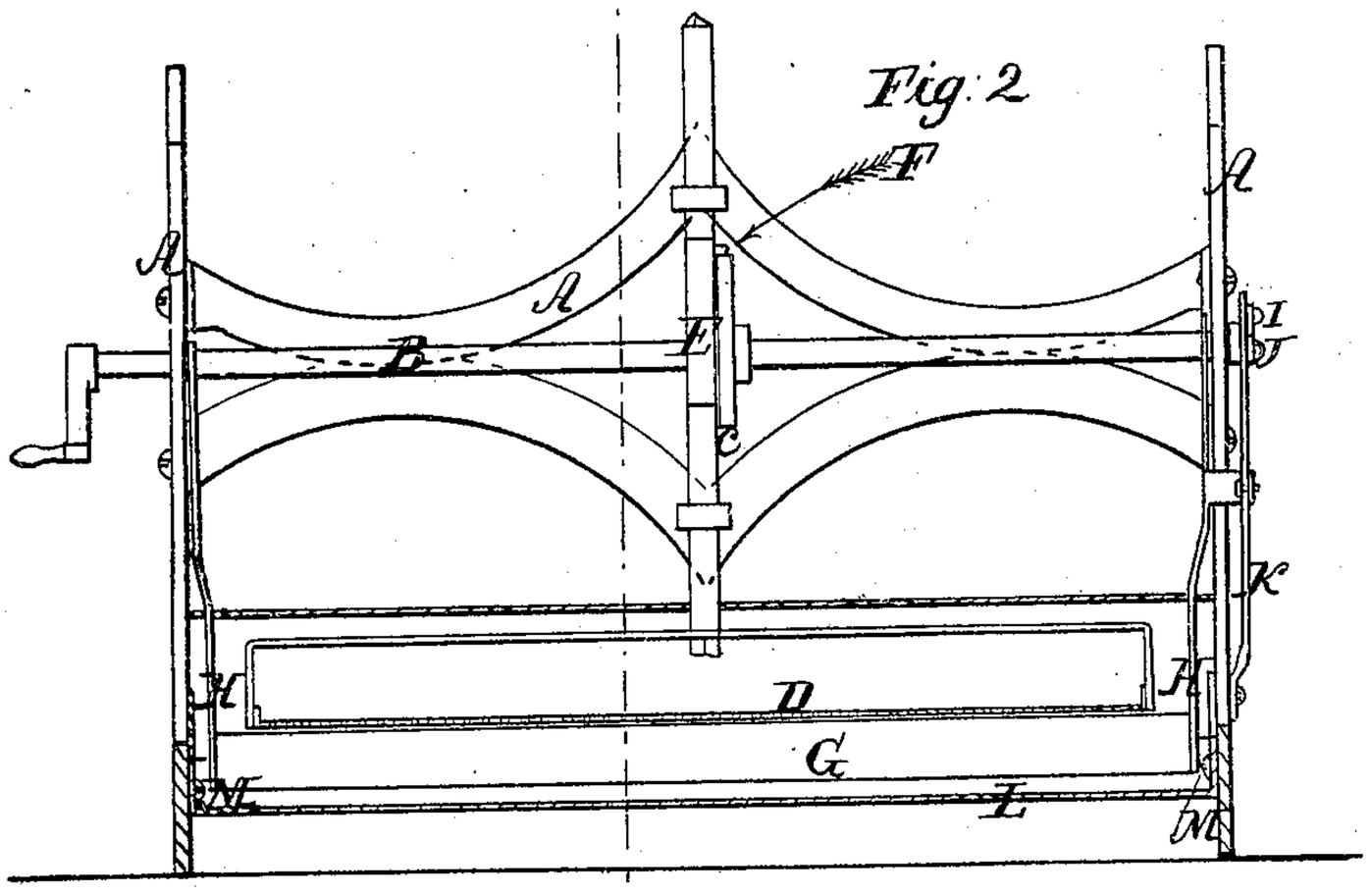
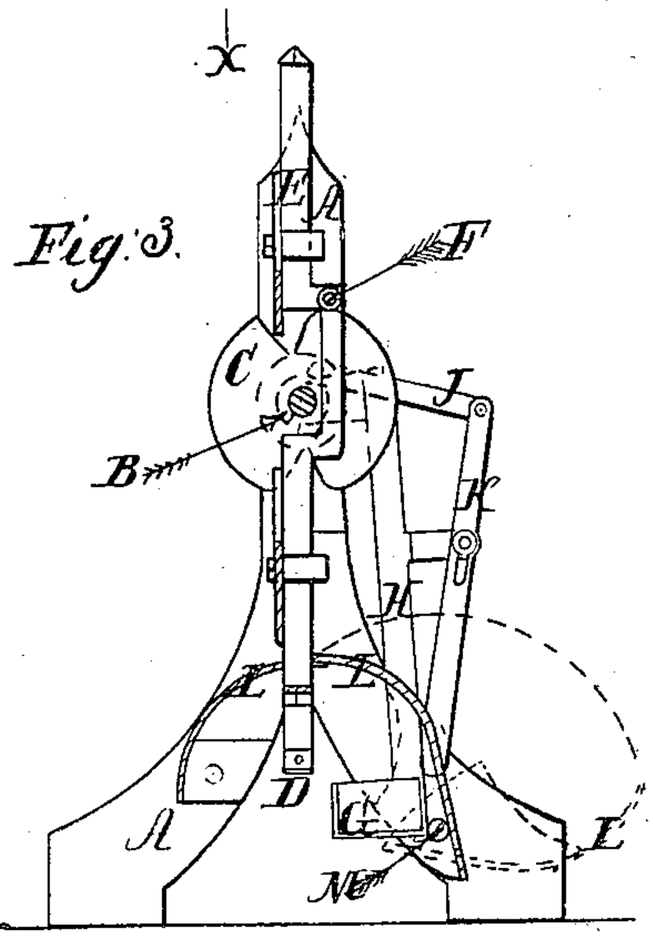


Fig. 3.



Witnesses;
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UNITED STATES PATENT OFFICE.

JOHN H. AIKEN, OF NORWALK, CONNECTICUT, ASSIGNOR TO HIMSELF AND REUBEN ROWLEY, OF NEW YORK CITY.

IMPROVEMENT IN MACHINES FOR OILING WOOL FOR CARDING-ENGINES.

Specification forming part of Letters Patent No. **59,308,** dated October 30, 1866.

To all whom it may concern:

Be it known that I, JOHN H. AIKEN, of Norwalk, Fairfield county, and State of Connecticut, have invented certain new and useful Improvements in Machinery for Oiling Wool; and I do hereby declare that the following is a full description of the same.

The nature of my invention consists, first, in the use of a perforated oil-distributer; second, in the use of a revolving double-acting cam, in combination with the perforated oil-distributer, for the purpose of taking up the oil and discharging it on the wool as it passes along under the oil-distributer; third, in the use of an intermittent vibratory oil-box, in combination with a perforated oil-distributer; fourth, in the use of an adjustable shield, in combination with the oil-distributing apparatus, for the purpose of protecting it from the dust of the carding-engine.

But, to describe my invention more particularly, I will refer to the accompanying drawings, forming a part of this specification, the same letters of reference, wherever they occur, referring to like parts.

Figure 1 is a plan view of the machine. Fig. 2 is a front elevation of the machine, having the adjustable shield open. Fig. 3 is a transverse cut section of the machine through the line *x x*, Fig. 2.

Letter A is the frame of the machine, which is made in any suitable way to adapt it to fit on the frame of a carding-machine, just over the feed-board or endless apron for carrying the wool into the machine. In the upper part of this frame is secured in suitable bearings a driving or propelling shaft, B, to which motion is communicated by belts or gearing connecting with the driving-power of the carding-machine. On the shaft is secured a double-acting cam, C, which at half-revolutions elevates and drops an oil-distributer, D, attached to the lower end of a lifting-rod, E, as the stud or pin F in the lifting-rod E traverses the irregularities of the face of the cam *c*. The shape of the cam may be varied; but the theory on which I have constructed my oil-distributer aims at giving to the distributer a sudden drop-motion, so as to discharge the oil taken up by the distributer (through the perforations of the oil-distributer) on the wool.

It will be obvious that the precise form of the oil-distributer is not absolutely essential, as a series of rods or points dipped into a box of oil would take up oil enough for the purpose of sprinkling the wool, and therefore the equivalent of my perforated plate.

Letter G is an oil-box, arranged in the frame parallel with the oil-distributer, and suspended on two rods, H H, hinged at their upper ends to the propelling-shaft B, or any other fixed center of motion, attached to the frame of the machine. This oil-box is caused to vibrate backward and forward by means of a crank, I, on the end of the shaft B operating the levers J and K, communicating motion to the rods or hangers H of the oil-box.

The object of this vibratory motion is to carry the oil-box under the oil-distributer when let down for a charge of oil, when immediately that it is charged and lifted by the rotation of the cam C clear of the sides of the box it is drawn back from under the distributer, to let it drop and sprinkle the wool with the oil held on its surface.

Letter L is an adjustable shield or case surrounding the distributing apparatus. One-half of this case is made permanently fast to the frame. The other is secured on or by ear-pieces and center-pins M, so that it may be opened or let down at pleasure to supply oil to the oil-box or adjust the apparatus, as may be required.

Having now described my invention, I will proceed to set forth what I claim and desire to secure by Letters Patent of the United States.

1. Giving to a perforated oil-distributer an abrupt or sudden falling or dropping motion by means of a cam, or equivalent device, for the purpose of sprinkling the oil on the wool, as hereinbefore set forth.

2. In combination with an oil-distributer having an abrupt or sudden falling or dropping motion, a vibratory oil-box, substantially as hereinbefore set forth.

3. In combination with a vibratory oil-box, the crank I and levers J and K, or their equivalents, for the purposes hereinbefore set forth.

4. In combination with a vibratory oil-box, the adjustable shield or case L, for the purposes substantially as hereinbefore set forth.

JOHN H. AIKEN.

Witnesses:

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