R. M. LIVINGSTON.

Scutching Machine.

No. 3,190.

Patented July 20, 1843.

Fig. 1.

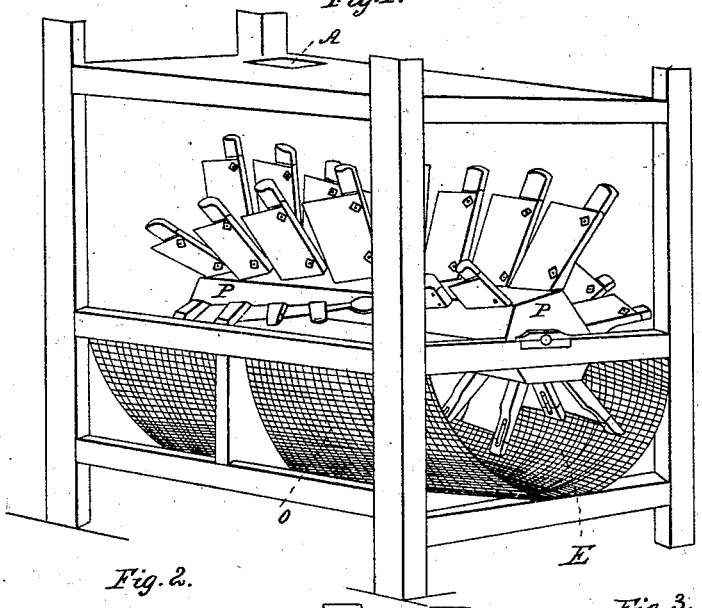


Fig. 4.

Fig. 2.

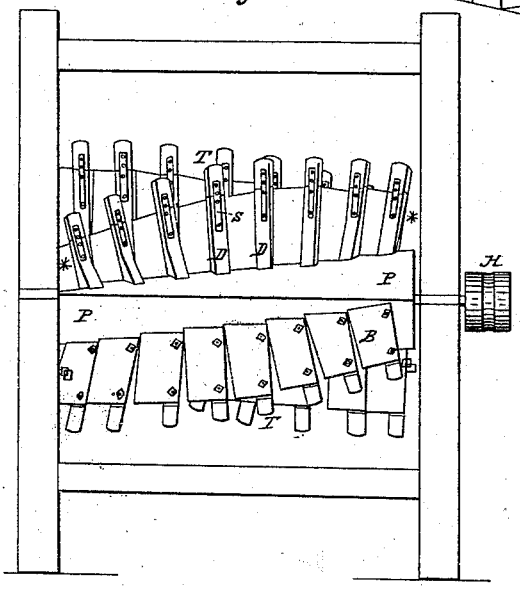
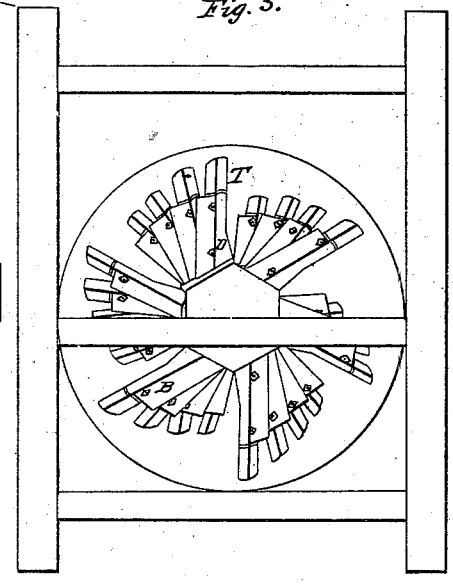


Fig. 3.



UNITED STATES PATENT OFFICE.

ROBERT M. LIVINGSTON, OF MOBILE, ALABAMA.

IMPROVEMENT IN MACHINES FOR CLEANING UNGINNED COTTON.

Specification forming part of Letters Patent No. **3,190**, dated July 20, 1843.

To all whom it may concern:

Be it known that I, ROBERT M. LIVINGSTON, of the city and county of Mobile, and State of Alabama, have invented a new and useful Machine for Cleaning Unginned Cotton, called "Livingston's Cotton-Cleaner;" and I 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 annexed drawings, making a part of this specification, in which—

Figure No. 1 is a perspective view; Fig. No. 2, a longitudinal section; No. 3, a transverse section; and Fig. No. 4, an addendum.

This machine consists of a framed box, within which revolves a peculiarly-constructed fanner, having also beaters on the outer edge. This box may be made of various dimensions. (A convenient size is about thirty inches long, forty-eight inches high, and thirty inches wide.) It is covered on the top, leaving an opening, as at A, Fig. 1, to feed the machine. It is closed likewise on the other sides with the exception of openings indicated at O O and E, Fig. 1. The bottom O, Fig. 1, is concave, half-round, formed of wire or wooden strips, leaving interstices sufficient to allow the dirt and trash to pass through.

The fanner consists of a shaft, P, Figs. 1 and 2, on which is built or fastened several arms or spokes D, Figs. 2, 3, and 4, each radiating from its center, and placed at intervals in a longitudinal oblique line. On each arm is fastened a thin wooden slat, B, Fig. 2, the whole together forming longitudinal sections of a curved or spiral form, as will appear by reference to Fig. 3. The back of these sections is shown by ⁂, Fig. 2, and the front indicated thus ⧉, Fig. 2. At the outer end of each arm or spoke is a beater, T, Figs. 2, 3, and 4, which is a kind of short flail or block of wood, connected to the spoke by a spring or thin plate of metal, S, Fig. 2, one end of the spring fastened to the spoke, as at L, Fig. 4, and the other end to the beater, as at V, Fig. 4. This spring plays freely backward and forward on a wire with a button or head, Q, Fig. 4, and which serves to regulate its action. This wire passes through a hole in the spring, and has a screw on one end, by which the play of the beater may be more or less free.

The machine operates as follows: The fanner being set in motion by a pulley, H, Fig. 2, at one end of shaft, the machine is fed by an opening, A, Fig. 1. The cotton is brought in contact with the beaters, and they open the burr or cotton-seed as they revolve, loosening the dirt, leaf, and trash, which the fanner winnows out through the interstices of the wire or other bottom.

The cotton-seed, after undergoing the necessary operations upon it by the beaters and fanner, is worked and thrown out at the lower end of one side, E, Fig. 1, by reason of the spiral conformation of the sections or wings.

What I claim as my invention, and desire to secure by Letters Patent, is—

The peculiar construction of the fanner, not in its spiral form, but in its combination with spring-beaters to be applied to the cleaning of unginned cotton, in freeing it of dirt, leaf, and trash.

ROBT. M. LIVINGSTON.

Witnesses:

WM. D. BLANCHARD,

S. F. WILSON.