

G. B. Fitz,
Evaporating Pan.
No. 24,407. Patented Aug. 31, 1869.

Fig. 1.

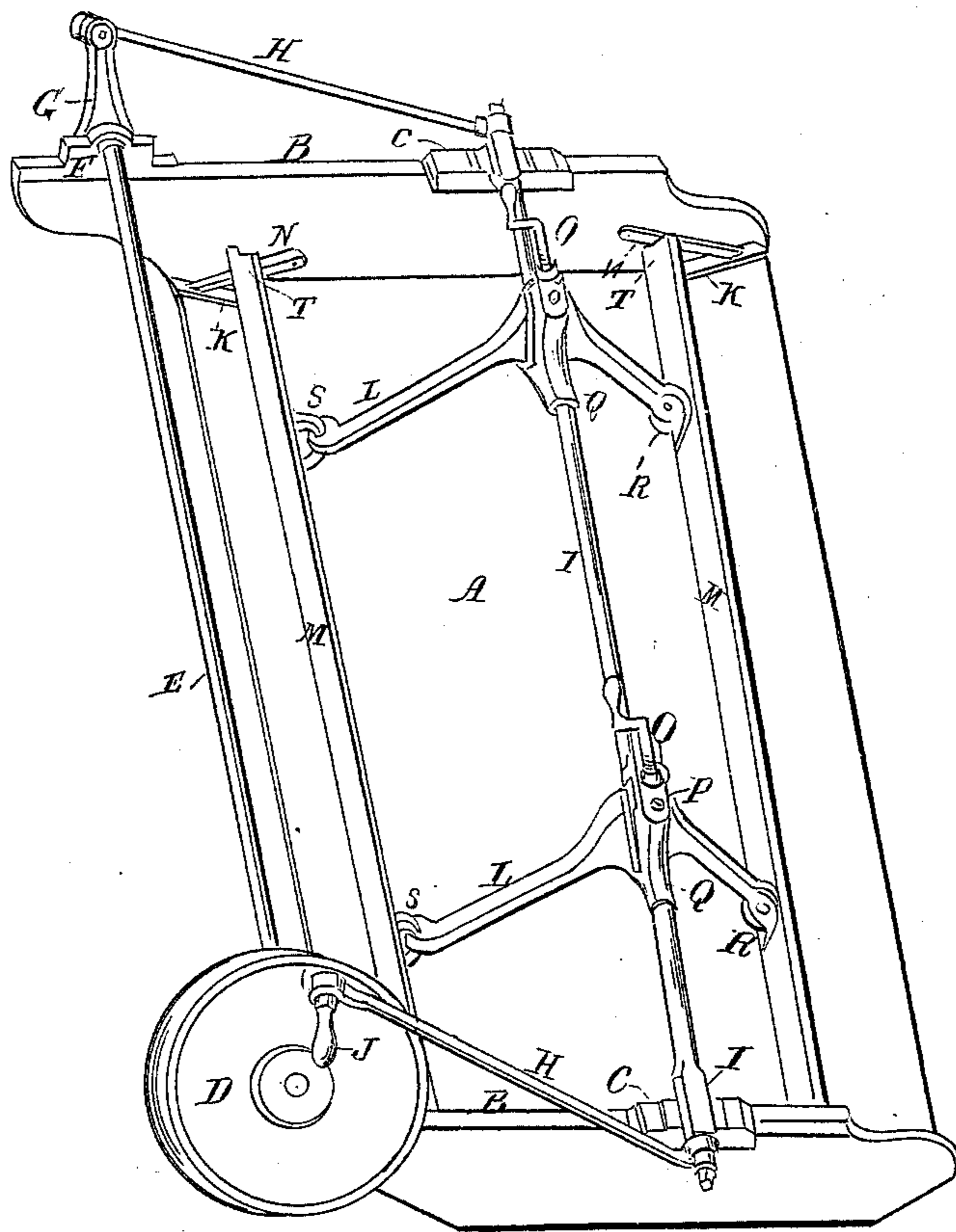
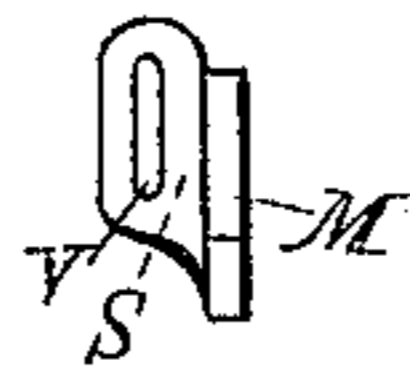


Fig. 2.



WITNESSES.
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GEORGE B. FITTZ, OF LOUISVILLE, KENTUCKY.

Letters Patent No. 94,407, dated August 31, 1869.

IMPROVED SORGHUM-PAN SKIMMER.

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, GEORGE B. FITTZ, of the city of Louisville, county of Jefferson, and State of Kentucky, have invented a new and useful Improvement in Sorghum-Pan Skimmers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention or improvement consists in the application of machinery, driven by steam, horse, or other power, adapted to the purpose of skimming sorghum-pans while under the process of boiling or evaporation.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, by reference to the drawings and letters of reference marked thereon.

Figure 1 is a perspective view of the pan and machinery, showing its general construction and arrangement.

A is the pan, and is made of galvanized iron or other material.

B B are the ends of the pan, to which the machinery is attached, and are made of cast-iron, wood, or other material, and attached to the ends of the pan A, by riveting or otherwise, and having a small projection on the out edge of the top surface, which, when planed off, constitutes a slide, on which the guides C C work.

D is the pulley by which the machine is driven, and is made of cast-iron or wood, with a concave surface, in order to work a round band or cord.

E is the shaft by which motion is transmitted to either end of the shaft I, and is made of iron.

F is the pillar-block in which it revolves, and is made of iron.

G is the crank, which gives motion to the shaft I, and is also made of iron.

H H are the pitmen transmitting motion to the shaft I.

J is the handle, by which the machine is operated by hand, when necessary.

L is the main sweep-shaft, extending parallel with the pan from end to end, and which is made of cast, wrought-iron, or wood, with two broad, flat places near the ends, at Q, and having a notch cut in top edge, so as to admit the arms L L to drop down into them, fitting neatly, and it being deeper than the depth of the arms L L, so that they will admit of being raised or lowered by the screws O O which are attached to and work loose in the arms L L, below the caps P P.

O O are the guides for the shaft I, and are made of iron, and attached to it by bolts or otherwise, and the

under sides of said guides are shaped so as to correspond with the shape of the slides B B, on which they work.

L L are the adjustable arms, to which the sweeps M M are hung, said arms being made of iron, with a deep notch in the under side, corresponding with that of the shaft I above, and dropping down in the same, fitting neatly, with a small flange on the sides working against the shaft I, in order to prevent it from working sideways when adjusted to any point, the ends of said arms extending down below the lower edge of the sweeps M M, forming a rest against which they fall when in operation, and having a long slot cut in the ends to receive the lug S of the sweeps M M, which fit into them like a hinge, and are held to their places by a bolt through the arms L L, at R, and on which it rises or falls.

M M are the sweeps or skimmers, and are made of wood or other material, about four or five inches wide, and having the cast-iron lug S, fastened to the inside by screws or otherwise, which extends above the upper edge of the sweep, and having a long slot-hole through it, so as to permit the sweep to rise as it approaches the edge of the pan A, and fall again as it passes over and behind the triggers N N, it having one corner cut off at T T, in order to permit its passing under the triggers N N without striking them, and said sweeps are attached to the lower ends of the arms L L, by bolts through the same, at R, and on which they rise or fall, and revolve like a hinge.

N N are the triggers, which operate the sweeps by their passing under as they approach the edge of the pan, until they clear the triggers, which drop down, and, as the sweep returns, catch it and turn it up like a leaf or hinge, and is held up until it drops down behind the triggers N N again.

K K are thin pieces of iron, riveted to the pan A as slides, to prevent the sweeps M M from touching the pan while in operation, the under side of said sweep being lined with iron, to prevent its wearing off on said slides.

Figure 2 is an end view of the sweep M, showing the lug S, with the slot-hole V, and is hung to the end of the arms L L, by the bolts through the same, at R, on which they are permitted to rise or fall.

The above is a full description of the construction of the above machine, which is operated by applying power to the pulley D, which transmits motion to the shaft I, by the connections thereto, which cause it to oscillate and give motion to the sweeps M M, they being sufficiently low down to enter the sirup, and as they advance to the edge of the pan, under the triggers N N, they skim off any surplus matter that may be thereon, and, as they are drawn back, they are

turned up and held in that position, by passing over the triggers N N, until they drop down behind again, and so continuing alternately while in operation.

Now, therefore, I do not claim anything as original in the construction of the pan; but

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

1. The combination of skimmers M, adjustable arms L L, and shaft I, adapted to be moved back and forth over the pan, substantially as described, all constructed and arranged to operate as set forth.

2. In combination with a pan, A, shaft I, arms L,

and skimmers M, the slides C, shaft E, cranks G J, and connecting-rods H H, all constructed, arranged, and operated substantially in the manner described.

3. The pivoted arms N N, arranged and operating substantially as described, in combination with the reciprocating skimmers M, having slotted lugs S V, by which they are hung to the arms L, substantially as and for the purpose set forth.

GEORGE B. FITTZ.

Witnesses:

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