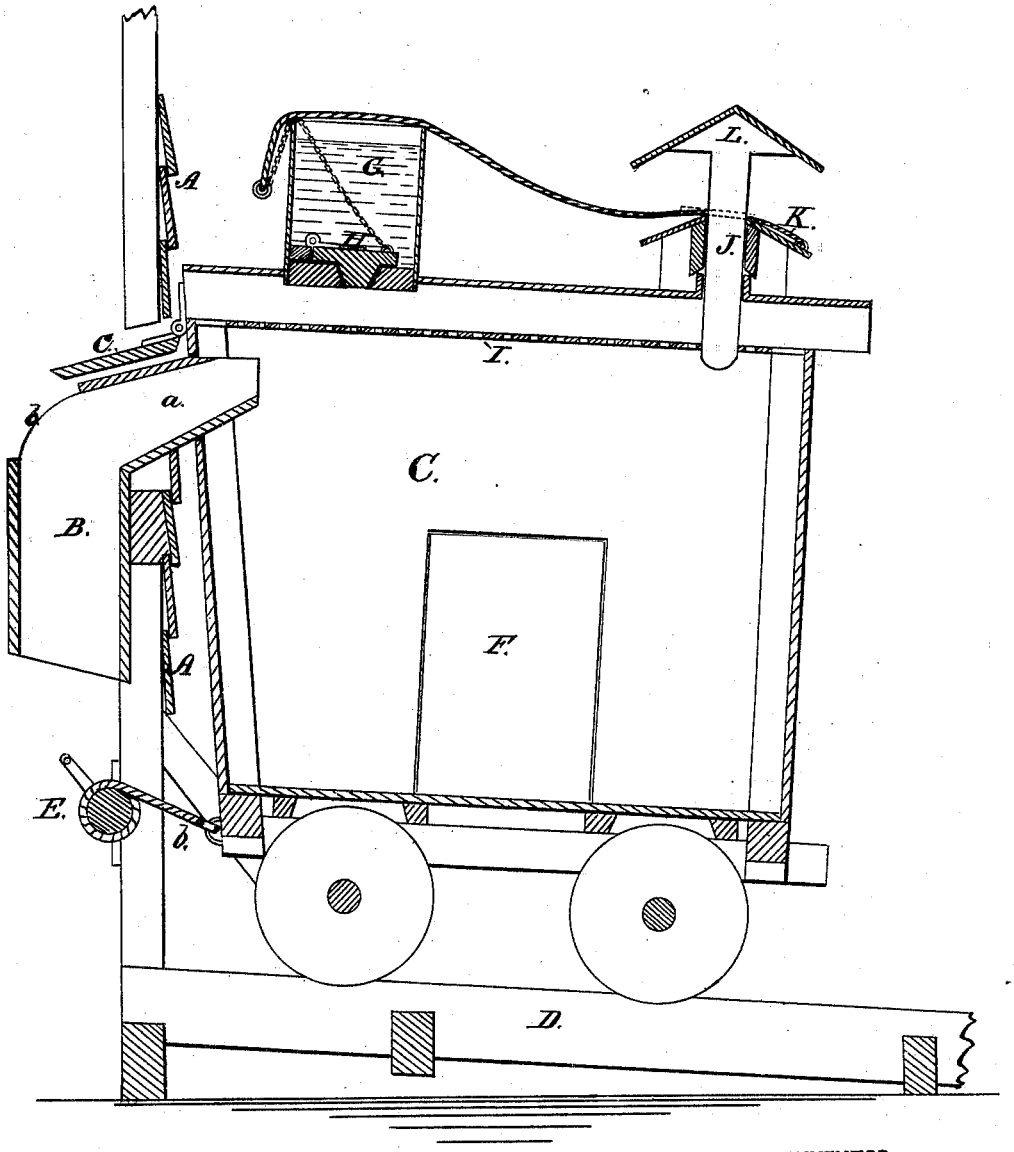
F. L. ELLIS.

LINT-ROOM AUTOMATIC FIRE-EXTINGUISHER.

No. 180,565. Patented Aug. 1, 1876.



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FIELDING L. ELLIS, OF GREENVILLE, ALABAMA.

IMPROVEMENT IN LINT-ROOM AUTOMATIC FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **180,565**, dated August 1, 1876; application filed March 8, 1876.

To all whom it may concern:

Be it known that I, FIELDING LOUIS ELLIS, of Greenville, in the county of Butler and State of Alabama, have invented a new and Improved Portable Lint-Room; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which the figure is a vertical longitudinal section of the car upon the inclined track, in position beside the gin-house.

The object of my invention is to provide a portable fire-proof lint-room, in the form of a car, for conveying the lint from the gin-house to the cotton-press; and it consists in the construction and arrangement of the car, which is provided with an air-vent and a flooding water-tank, to obviate danger and loss in case of fire.

In the drawing, A represents the side of the gin-house, which is inclined inwardly from the bottom, and to which, upon the inside, is attached a box, B, just below the gin. This box passes through the side of the house in the form of a throat, *a*, and receives its lint through the opening *b* at the bend, the lower end of the box being left open and projecting through the floor, so as to form a flue, down which pass all impurities in the shape of motes, which are of greater weight than the lint. C is the portable lint-room or car, which is made of any suitable material and dimensions, and is constructed of a little greater area at the top than at the bottom.

To contain lint to the amount of four bales of five hundred pounds each, the dimensions should be twelve by ten feet upon the inside at the bottom, ten feet high, and ten by thirteen feet upon the inside at the top. This room is mounted upon wheels, which, for the sake of cheapness, may be made of wood. These wheels are constructed with flanges, after the manner of car-wheels, and are arranged to run upon a wooden tramway or track, D, which track is inclined away from the gin-house to the cotton-press, with a fall of about one-half inch to the foot, so that when the car is loaded it passes of its own weight down the inclined track to the press to be unloaded.

E is a windlass, with a cord, *b*, attached to the car, by means of which the latter may be restored to its position upon the higher portion of the track beside the gin-house to be refilled. In one end of the car is a window near the top, having a hinged door, *c*, through which window the throat *a* of the box B protrudes to deliver the lint from the gin into the car; and F is a hinged side door, through which the lint is discharged at the cotton-press.

By means of this arrangement, it will be seen that the extra handling and packing the cotton in baskets is dispensed with, and the lint kept cleaner from impurities, so that it samples better.

The arrangement of the car upon the inclined track also enables me to economize time and labor to a very considerable extent, as with this arrangement two boys are enabled to accomplish the work ordinarily performed by two men and a boy in packing the lint into baskets, transporting it to the press, and unpacking the same. The movable character of the lint-room also involves other important advantages, in that it permits, in case of fire, of the detachability of the car, which will start down grade from the slightest start, and thus diminish the percentage of possible losses from this source.

In order to provide additional means of security against fire, I construct upon the roof of the car a water-tank, G, in the bottom of which is located a valve, H, which opens or closes communication between the tank and the interior of the car or lint-room. In the top of the car also, beneath the water-tank, and extending nearly across the whole area, is a perforated ceiling, I, of wood or sheet metal, upon which the water is discharged from the tank. Now, whenever a fire occurs, the hinged valve H is opened by a pull upon a rope, and the water, descending through the perforations in the ceiling, fills the room with an extinguishing shower. Upon the roof of the car also is arranged a ventilator or air-vent, J, which is provided with a hinged leaf, K, and a rain-shed, L, the hinged leaf being connected by a rope with the rope operating the valve in the water-tank. Whenever, therefore, the water-tank valve is opened, the

same movement closes the hinged leaf K upon the air-vent, and, by cutting off the draft and closing the room air-tight, assists in suppressing the fire.

I am aware of the fact that it is not new to employ in cotton-bins a superposed tank of water with a valve and spray-pipes, in which device the valve is opened by the fall of a weight effected by the discharge of gunpowder in the event of fire, and I therefore limit this portion of my invention to the combination of the tank and valve with the ventilating apparatus, so arranged as to let on the water and close the ventilator simultaneously and by the same movement.

Having thus described my invention, what I claim as new is—

The combination, with the lint-room, of the perforated ceiling I, water-tank G, valve H, air-vent F, and hinged leaf K, connected with valve H, and operated simultaneously therewith, for the purpose set forth.

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