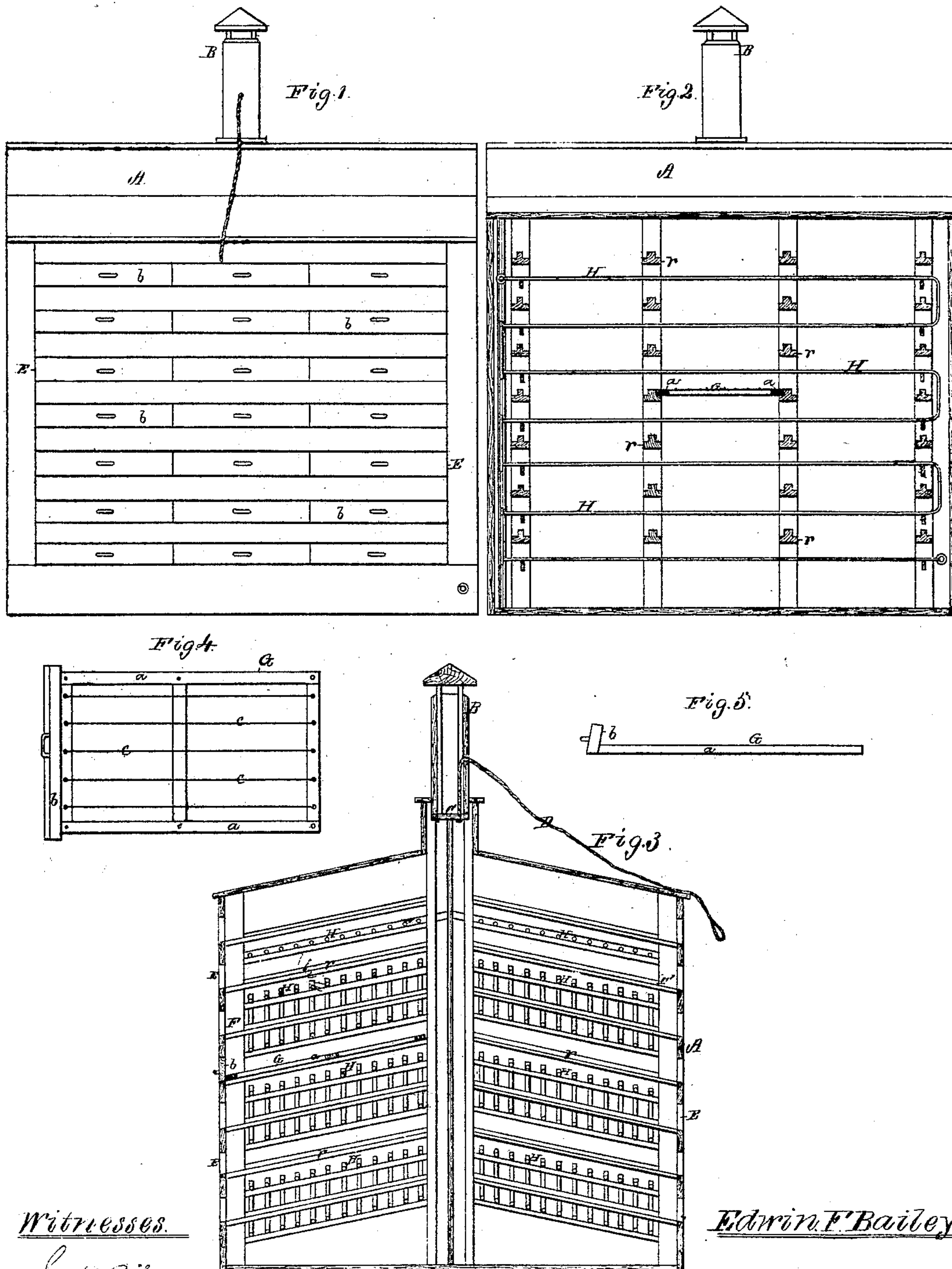


E. F. BAILEY.

Improvement in Card-Board Driers.

No. 128,455.

Patented July 2, 1872.



Witnesses.

S. N. Piper

L. N. Moller

Edwin F. Bailey

by his attorney

N. M. Moller

UNITED STATES PATENT OFFICE.

EDWIN F. BAILEY, OF ASHLAND, NEW HAMPSHIRE.

IMPROVEMENT IN CARD-BOARD DRIERS.

Specification forming part of Letters Patent No. 128,455, dated July 2, 1872.

To all persons to whom these presents may come:

Be it known that I, EDWIN F. BAILEY, of Ashland, of the county of Grafton and State of New Hampshire, have invented an Improved Card-Board Drier; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side elevation, and Fig. 2 a transverse section of it. Fig. 3 is a vertical and longitudinal section taken through its heating apparatus.

The purpose of the drier is to effect the desiccation of sheets of pasteboard, card-board, or other articles of like character, and in doing this it accomplishes what the apparatus represented and described in the United States Patent No. 68,146, granted August 27, 1867, to me, was intended to do. My present invention may be termed, in some respects, an improvement with reference to the patented one; and it consists of a new arrangement of heating-pipes with reference to the card-board carriers and their supporting-frames, whereby the heat radiated from the heating-pipes is thrown upon opposite sides of each sheet of board at one and the same time, and to better advantage, than by the drying apparatus as heretofore patented by me. It further consists in the building as provided with openings in its side or sides, in combination with the card-board carriers as provided with front boards to close such openings and to regulate the ingress of air passing through such openings and across the card-board or its carriers.

In the drawing, A denotes a close box or building, formed as represented, and provided with a ventilator, B, placed at the middle part of the upper portion of the said box or building, there being to such ventilator a valve, C, to be actuated by a rope, D. In each of the two opposite sides of the box is a series of long rectangular openings, E, for reception of the card-board carriers or frames G, a top view of one of them being given in Fig. 4, and an edge view of it in Fig. 5. It consists of a rectangular frame, *a*, furnished with a drawer-front, *b*, and a series of support-wires, *c c c*, or the equivalent thereof, all being arranged as shown. Connected with the said openings of each side of the box is a frame,

F, provided with inclined guides or rails *r* for supporting the several card-board carriers G, those in each vertical row being parallel or about so to each other, and inclined to the horizon and upward from their respective openings E in the side of the building. When each carrier is fully in place in the supporting-frame F the front board *b* closes the aperture E for its reception. By drawing backward, however, the carrier, the opening may be more or less opened for the passage of air into it and over the card-board when supported on the carrier. The hot-air or steam pipes for heating the card-boards are shown at H as arranged in a serpentine course, so as to pass both over and under each of the carriers, there being a series of pipes running over and across each carrier, and also between it and the next one directly over it, all being as shown, and so connected that steam or heated air, when let into the pipes, may be caused to circulate through them, so as to cause them to radiate heat both to the upper and under sides of each card-board carrier. The air let into the carrier-openings E will flow up between the carriers, and, receiving the vapors passing from their card-boards, will convey it to and into and through the ventilators, the entering currents of air being gauged by more or less pulling backward the mouth-boards *b* of the carriers.

My present construction of card-board drier enables me not only to heat the card-boards to better advantage than I could by my patented drier, but to better regulate the aerial currents necessary to carry off the vapor escaping from the boards while in the act of being dried.

I therefore claim—

1. In the card-board drier as described, the building as constructed with the openings E in its side, in combination with the card-board carrier G, constructed with the drawer fronts or boards *b* to close such openings.

2. I also claim the heating-pipes as arranged to extend both above and below such carrier G, and across it, and through its supporting-frame F, all being substantially as shown and described.

Witnesses:

EDWIN F. BAILEY.
R. H. EDDY,
J. R. SNOW.