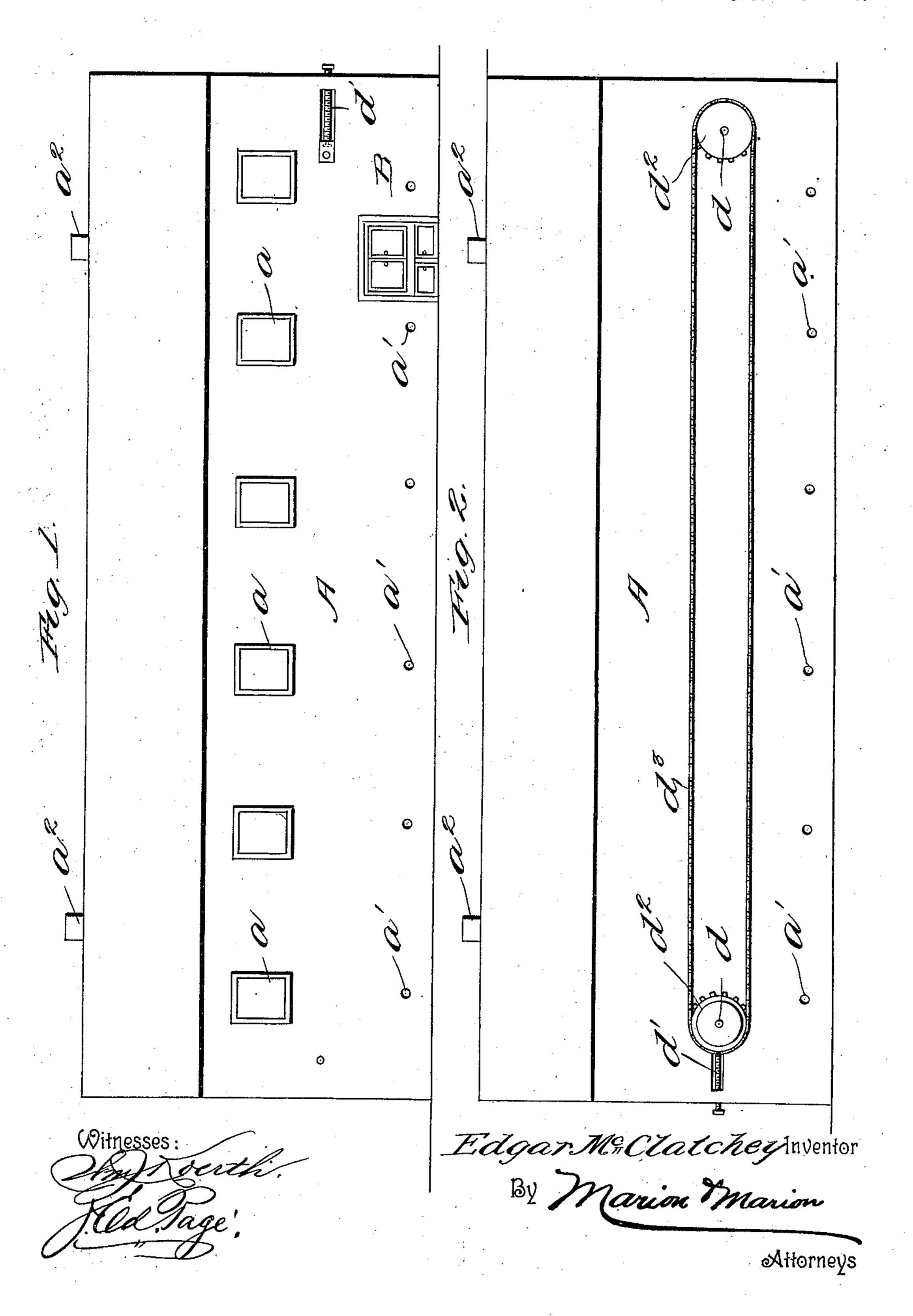
E. McCLATCHEY. FRUIT DRIER.

(Application filed Sept. 25, 1899.)

(No Model.)

2 Sheets-Sheet 1.

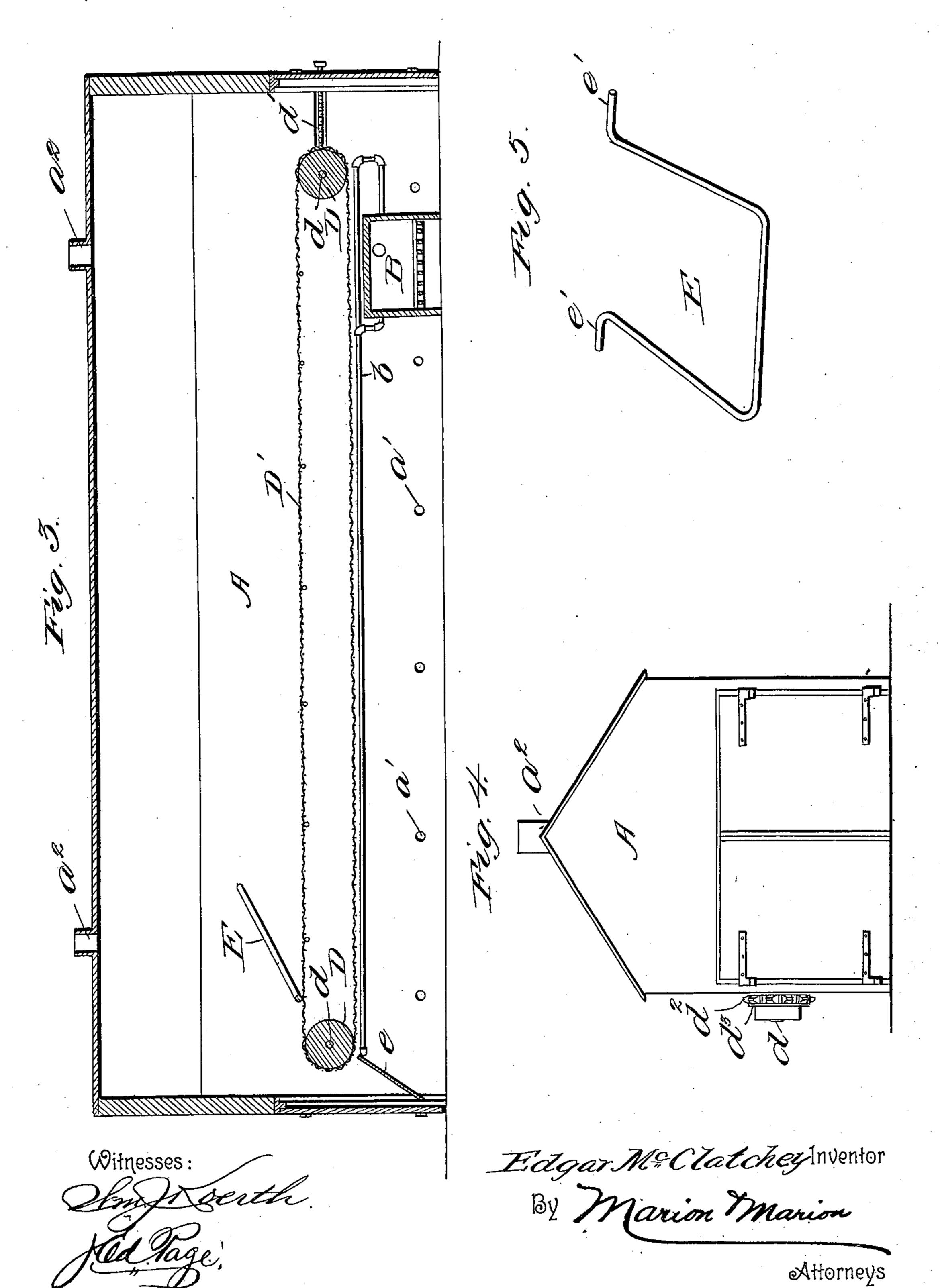


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2 Sheets-Sheet 2.



United States Patent Office.

EDGAR MCCLATCHEY, OF LEAMINGTON, CANADA.

FRUIT-DRIER.

SPECIFICATION forming part of Letters Patent No. 639,755, dated December 26, 1899.

Application filed September 25, 1899. Serial No. 731, 523. (No model.)

To all whom it may concern:

Be it known that I, EDGAR MCCLATCHEY, a subject of Her Majesty the Queen of Great Britain, residing at Leamington, county of Essex, Province of Ontario, Canada, have invented certain new and useful Improvements in Fruit-Driers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to fruit-driers; and its object is to provide a drier which is especially adapted to dry or evaporate the moisture from large quantities of fruit in a very brief space of time.

A further object is to provide a drier which is simple in construction, effective in operation, and which may be manufactured at a moderate cost.

To these ends the invention consists in a fruit-drier constructed substantially as herein illustrated and described, and defined in the appended claim.

Referring to the drawings, in which similar letters of reference indicate similar parts, Figure 1 is an elevation of a drying-house constructed in accordance with this invention. Fig. 2 is a similar view showing the opposite side of the house. Fig. 3 is a vertical central longitudinal section thereof. Fig. 4 is an end view, and Fig. 5 is a detail.

In the drawings, A represents a drying-house, which may be constructed of any suitable fireproof material and in any style convenient for the intended purpose. A series of windows a are provided along the entire length of one side of the structure, through which the operation of drying the fruit may be inspected. Below the windows a are provided a series of openings a', which extend along the entire length of both sides of the

vided a series of openings a', which extend along the entire length of both sides of the building for the admission of air. A suitable number of chimneys a^2 or other ventilators are provided on the top of the building to permit the hot moisture-laden air to escape.

Near the front end of the building is located the furnace B, which is built into the wall of the building and is supplied with hot-air pipes b, which extend the entire length of the

building and serve to distribute the heat equally throughout the structure. Each end of the building is supplied with suitable doors, and at each end of the building convenient to said doors is journaled a shaft d, upon 55 which is fixed a roller D, over which passes an endless conveyer-belt D', preferably constructed of wire-gauze and upon which the fruit to be dried is to be placed. One of the shafts d is provided with a suitable tension 60 device d', by means of which the belt D' may be kept sufficiently taut. Upon one end of each of the shafts d is fixed a sprocket-wheel d^2 , which are preferably located outside of the building and are connected together by 65 means of a sprocket-chain d^3 , whereby the strain is equally distributed to both shafts d.

At the rear of the building is arranged a scraping device E for loosening the dried fruit from the gauze belt, thus permitting it to fall 70 upon the inclined guide e, down which it is directed to any suitable receptacle. (Not shown.) The scraper E may be of any suitable construction for the purpose; but as shown it is constructed of a yoke-shaped 75 rod having at its upper end the outwardly-extending arms e', by means of which it is adapted to be pivotally secured to the sides of the building above the belt D' and having its lower end in contact with said belt, as 80 shown in Fig. 3.

While I have herein shown a preferred form of carrying my invention into effect, yet I do not desire to limit myself to such preferred details of construction, but claim the right to use any and all modifications thereof which will serve to carry into effect the objects to be attained by this invention in so far as such modifications and changes may fall within the spirit and scope of my said invention.

A drier, comprising a fireproof building having suitable doors at each end thereof, inspection-windows formed in the sides of said building; air-openings formed on both 95 sides of the building at the lower part thereof; suitable ventilators mounted on the upper part of said building; a furnace; hot-air pipes leading therefrom throughout the said building; a shaft journaled in each end of the 100

building; a roller fixed upon each of said shafts; an endless conveyer - belt passed about said rollers; a sprocket-wheel secured to each of said shafts; a sprocket-chain connecting said sprocket-wheels; a power-driven pulley fixed upon one of said shafts; and a scraper pivotally secured to the sides of the said building and adapted to bear at its lower

end upon the upper surface of said belt, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

EDGAR McCLATCHEY.

Witnesses:

L. COULSON,
P. PHILLIPS.