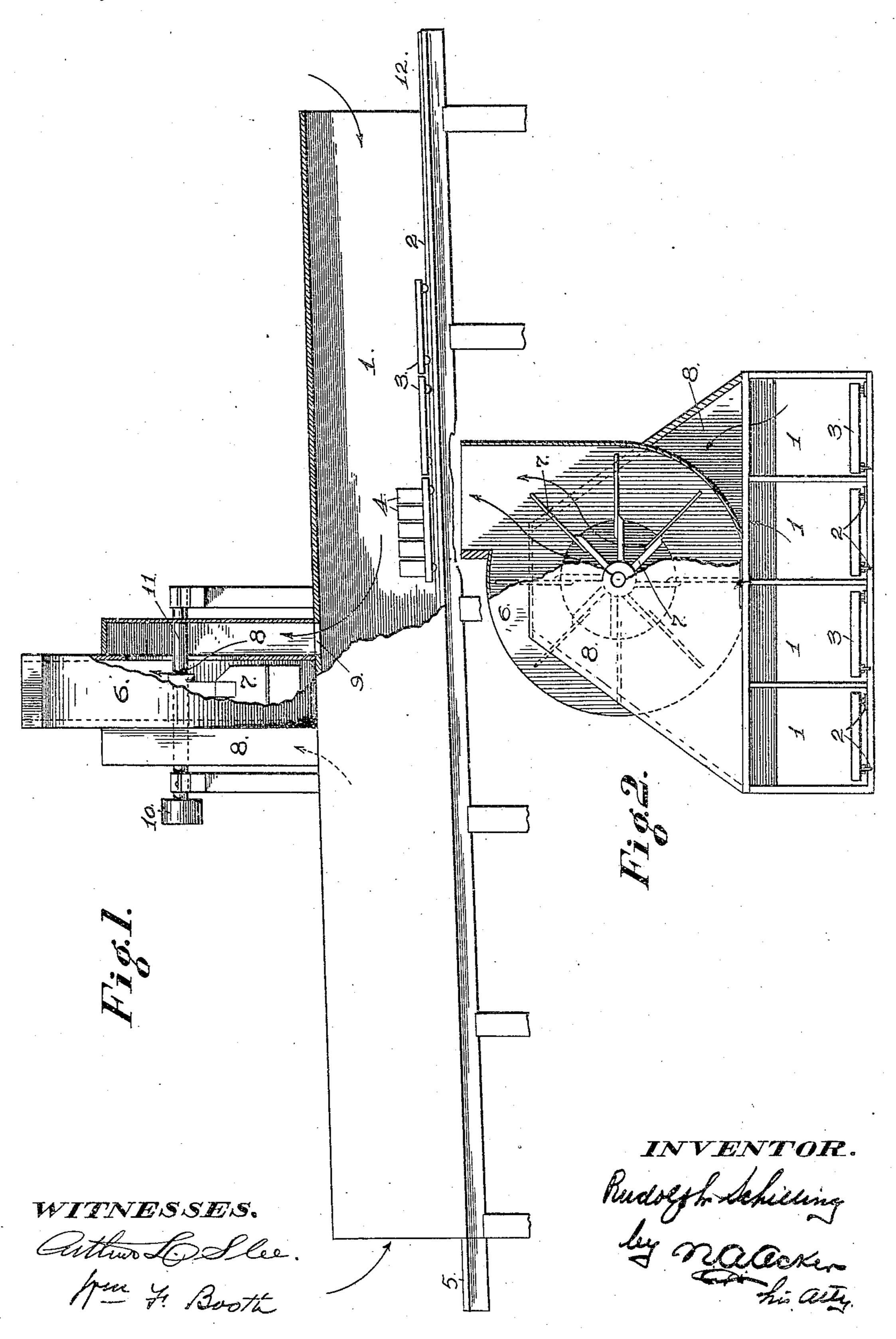
R. SCHILLING.

LABELED CAN DRIER.

APPLICATION FILED MAY 6, 1908.

938,713.

Patented Nov. 2, 1909.



UNITED STATES PATENT OFFICE.

RUDOLPH SCHILLING, OF OAKLAND, CALIFORNIA.

LABELED-CAN DRIER.

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Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed May 6, 1908. Serial No. 431,205.

To all whom it may concern:

Be it known that I, Rudolph Schilling, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Labeled-Can Driers, of which the following is a

specification.

The present invention relates to an improved apparatus for the drying of labels on cans or similar vessels as the same are passed therethrough, the object being to maintain the labeled cans or vessels bearing the same serial number in independent groups or assortments of labeled cans or vessels as passed through the drier, so as to retain the iden-

tity of each group.

The invention is mainly designed for use in such packing establishments as give to each box or packing case containing the canned goods, and to the allotment of canned goods for such box or package the same serial number. It is therefore essential, and in fact imperative that the identity of each 5 group or allotment of labeled cans or vessels be preserved as carried through the drier, so that as the same are successively discharged at the lower end of the drier the operator receiving them may at once ascertain by reference to the serial number thereof to which numbered box or packing case the received group of labeled cans or vessels belongs, thus obviating the confusion which would follow the non-grouping of the cans or vessels passed through the drier.

To comprehend the invention reference should be had to the accompanying sheet of

drawings, wherein-

Figure 1 is a side view in elevation of the drier partly broken away. Fig. 2 is an end view of the drier, the housing for the air fan being partly broken away to illustrate the communication of the air outlets of the drier with the outlet channels of the air fan hous-

ing.

In the drawings, the numeral 1, in the present case, is used to designate a plurality of downwardly inclined open ended runways, each being provided with the tracks 2, on which work the cars or trucks 3. In Fig. 1 of the drawings, three such cars or trucks are illustrated, one of which is filled with labeled cans or vessels 4. However, it will be understood that each car or truck 3 as placed within the respective runways contains a given number of labeled cans or ves-

sels as a group, which cars or trucks are forced through the runways from one end of the drier to the discharge end thereof in order to dry the labels placed onto the cans or vessels contained on the cars or trucks.

The filled cars or trucks are forced through the runways of the drier by the insertion of a fresh filled car or truck, which bearing against the end of the last inserted car or truck, on a slight pressure being exerted thereon, forces the line of filled cars or trucks to move downward or advance within the runways the length approximately of the filled car or truck entering therein, the line of cars or trucks being thus gradually moved toward the lower or discharge end of the runway. The downward inclination of the runways aids the easy movement of the line of filled cars or trucks, so that but slight pressure is required to propel the entire line of the filled cars or trucks.

As one filled car or truck reaches the platform 5, outside of the lower discharge end of the drier, the same is removed by an operator stationed to receive the same, and the cans or vessels with their labels properly dried taken from off the car or truck and placed in the box or packing case designed to receive the same, the empty car or truck being returned to the labeling operator stationed at the upper or receiving end of the

drier.

Each car or truck contains the same number of labeled cans or vessels, which is the 90 required number or group for a given box or packing case. The reason for placing the same number of labeled cans or vessels on each car or truck, is that each can or vessel of a group of labeled cans or vessels contains 95 the same serial number, which number corresponds with the serial number given to the box or packing case into which the said group of labeled cans or vessels is to be packed for shipment. Inasmuch as each box 100 or packing case is given a different serial number, and as each group of labeled cans or vessels contains a different serial number, it is essential that the integrity of each group of cans or vessels be preserved, which is ac- 105 complished by placing the labeled cans or vessels onto the cars or trucks in groups, each can or vessel of any one group containing the same serial number, so that when a loaded car or truck reaches the discharge end 110 of the drier, the operator receiving the same has only to glance at the serial number of

the group of cans or vessels to ascertain into which of the boxes or packing cases the entire group of cans or vessels contained there-

on is to be packed.

5 Above the drier midway the length thereof, a housing 6, for an air fan 7 is located. With the interior of the housing communicate the air channels 9, which, in turn, communicate with the runways of the drier by 10 means of the outlet openings 8 in each runway. Within the housing 6 is located the air fan 7, which is driven by a belt working over the pulley 10 on the shaft 11, or by any other suitable means. As the fan 7 is revolved at 15 a high rate of speed within its housing, it creates a strong suction, which draws air into the respective runways through each open end thereof, which air is drawn toward the center of the runways and into the hous-20 ing 6 through the air channels 8, entering said channels through the outlets 9 in each runway. The current of air thus entering the runways from each end thereof, passes over the cans or vessels contained on the cars 25 or trucks 3 passing therethrough, and quickly dries the labels applied to said cans or vessels.

The cars or trucks 3 while being filled with cans or vessels freshly labeled, rest on the platform 12, projecting beyond the receiving end of the drier, which car or truck, when filled with cans or vessels properly labeled, is shoved downwardly by the operator into its runway, and another empty car or truck placed on the said platform to receive its load.

A simple, effective, and cheap apparatus for the drying of labels on cans or vessels as

propelled therethrough in grouping is thus produced.

Having thus described the invention, what is claimed as new and desired to be pro-

tected by Letters Patent is—

In an apparatus of the character described, the combination of a substantially rectangu- 45 lar frame having unobstructed openings at its ends, and a pair of oppositely disposed openings extending transversely across the top, the frame being otherwise free from openings and the top openings being ar- 50 ranged substantially midway of the length of the frame, a casing supported on the top of the frame between the openings, the opposite walls of the casing constituting one wall of a housing extending transversely across 55 the top, the opposite wall of the housing being arranged outside of the top openings, and connecting with the casing which latter has openings in its opposite walls, a rotary shaft extending through the housing and the 60 opening in the casing, a fan within the casing carried by the shaft, vertical partitions in the frame separating the latter into a series of truck compartments and tracks in each compartment, the flooring for the 65 tracks projecting outwardly through the unobstructed openings at the ends of the frame to a substantial distance therebeyond.

In testimony whereof I have signed my name to this specification in the presence of 70

two subscribing witnesses.

RUDOLPH SCHILLING.

Witnesses:

N. A. ACKER, D. B. RICHARDS.