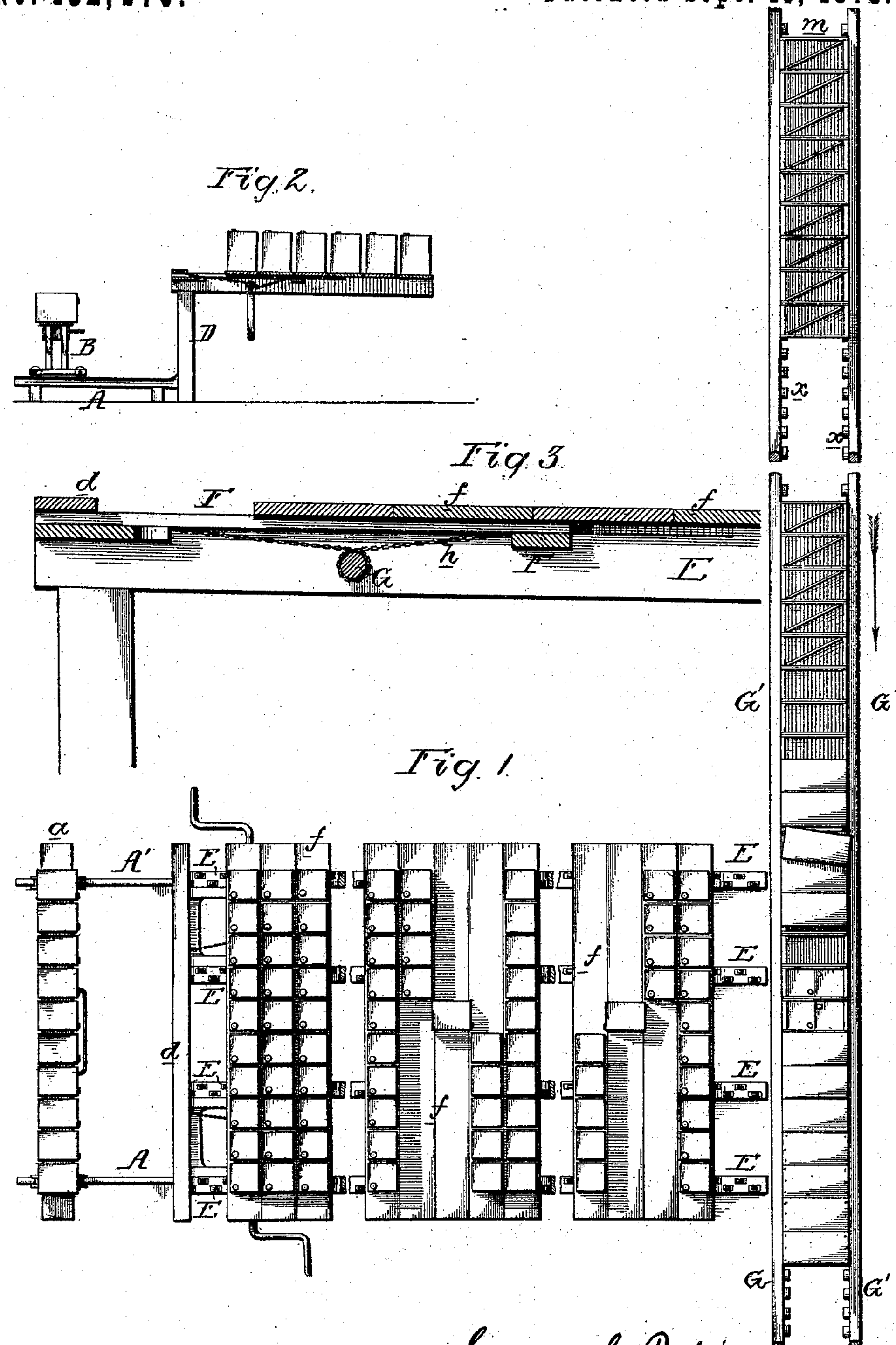
G. H. PERKINS.

APPARATUS FOR FACILITATING THE EXAMINATION AND PACKING OF CANS.

No. 182,470. Patented Sept. 19, 1876.



Witnesses
Harry Smith
John K. Rupertus.

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UNITED STATES PATENT OFFICE.

GEORGE H. PERKINS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND JOSEPH LE COMTE, OF NEW YORK CITY, AND ATLANTIC REFINING COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN APPARATUS FOR FACILITATING THE EXAMINATION AND PACKING OF CANS.

Specification forming part of Letters Patent No. **182,470**, dated September 19, 1876; application filed November 6, 1875.

To all whom it may concern:

Be it known that I, GEORGE H. PERKINS, of Philadelphia, Pennsylvania, have invented an Apparatus for Facilitating the Examination and Packing of Cans, of which the following is a specification:

The object of my invention is to afford an opportunity of readily and thoroughly examining cans which have been filled with liquid, so that any leakage may be detected, and a further object of my invention is to facilitate the packing of the cans, after they have been examined, in boxes.

These objects I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a plan view of the apparatus; Fig. 2, a side view of part of the same, and Fig. 3 an enlarged sectional view of part of the apparatus.

A and A′ are ways secured to the floor of the building in which the operations are conducted, and on these ways are rails adapted to the wheels of a truck, B, the top of which consists of a long platform, *a*, the upper surface of the latter being on a level, or nearly so, with a turn-table, which forms the subject of a separate application for a patent, and from which the cans filled with liquid, and with their screw-caps soldered and secured, are removed and placed on their sides on the said platform *a*, as shown in the drawing, after which the truck is removed to a position adjoining the front ends of the frame D, the top of the latter consisting of horizontal beams or ways E, (four, in the present instance,) which are supported above the floor in any suitable manner. On these ways, at the front of the same, is a transverse board, *d*, forming part of a sliding frame, F, which is so guided by the said ways that it can be moved to and fro in a longitudinal direction only, this movement being imparted by a shaft, G, provided with suitable handles, and adapted to fixed bearings on the frame.

Two chains are coiled round this shaft. One end of each chain is attached to the rear, and the opposite end to the front, of the said sliding frame. On the ways E are a series of boards, *f*, each board being long enough to receive a row of cans, in number the same as those on the platform *a*; and to facilitate the movement of these boards on the ways, I prefer to provide the latter with a series of small rollers or pulleys.

After the carriage B, with its load of cans, has been moved up to the front end of the ways E, the cans are removed and replaced on a loose board situated on the ways E, between the board *d* of the sliding frame and the adjoining board *f*, which has previously received a load of cans. Then, by operating the shaft G, the sliding frame is caused to move rearward, thereby pushing the whole of the boards *f* in the same direction to the extent of the width of one board. The sliding frame is then restored to its original position preparatory to the placing of another board on the ways for receiving another load of cans from the carriage B.

As these loaded boards are thus caused to traverse the ways with an intermittent movement, an opportunity is afforded for examining the cans with the view of determining whether any one or more of them is leaking, the examination being conducted by placing them first on one side, then on another, so that any slight leakage can be readily detected, and the can repaired.

At the rear end of the ways E, and at right angles to the same, are long ways or guides G′ G″, which extend in one direction to that part of the building in which the packing-boxes are made or stored, and in the other direction to any point where an examination of the packed cans can be conducted. These ways, which have a gradual downward inclination in the direction of the arrow, are provided with small rollers *x*, for facilitating the descent of the packing-boxes.

Box after box, each containing its loose lid, is placed on the ways, down which a continuous row of boxes are moved, an attendant, during this passage of the boxes, stenciling or otherwise branding the same with such marks as circumstances may require. As the boxes approach and pass the ends of the ways E E,

different attendants remove the lid from the interior of each box, place two filled cans in the same, and nail the lid to the box.

If desired, an endless belt extending from the machine for filling the cans to the point at which they are boxed, may be used instead of the system of longitudinal ways and transverse boards shown and described; but I prefer this plan on account of its economy of construction.

By this mode of conveying the cans each one has to traverse slowly from the filling-machine to the point at which it is boxed, and is turned completely over during the passage, so that ample time is given for any slight leak, in whatever portion of the can it may be situated, to develop itself.

I claim as my invention—

1. The combination of the carriage A, adapted to suitable ways, with the ways E and sliding frame F.

2. The combination of the ways E with the inclined guiding-ways G′G″, and their rollers x.

3. A device for testing cans filled with liquid, consisting of a way or platform extending from a point at which it receives the filled and soldered cans to a point at which the cans are delivered for boxing, the surface of said way moving at a determinate speed, and having facilities for turning the cans during their conveyance, all substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. PERKINS.

Witnesses:
HARRY HOWSON, Jr.,
HARRY SMITH.