

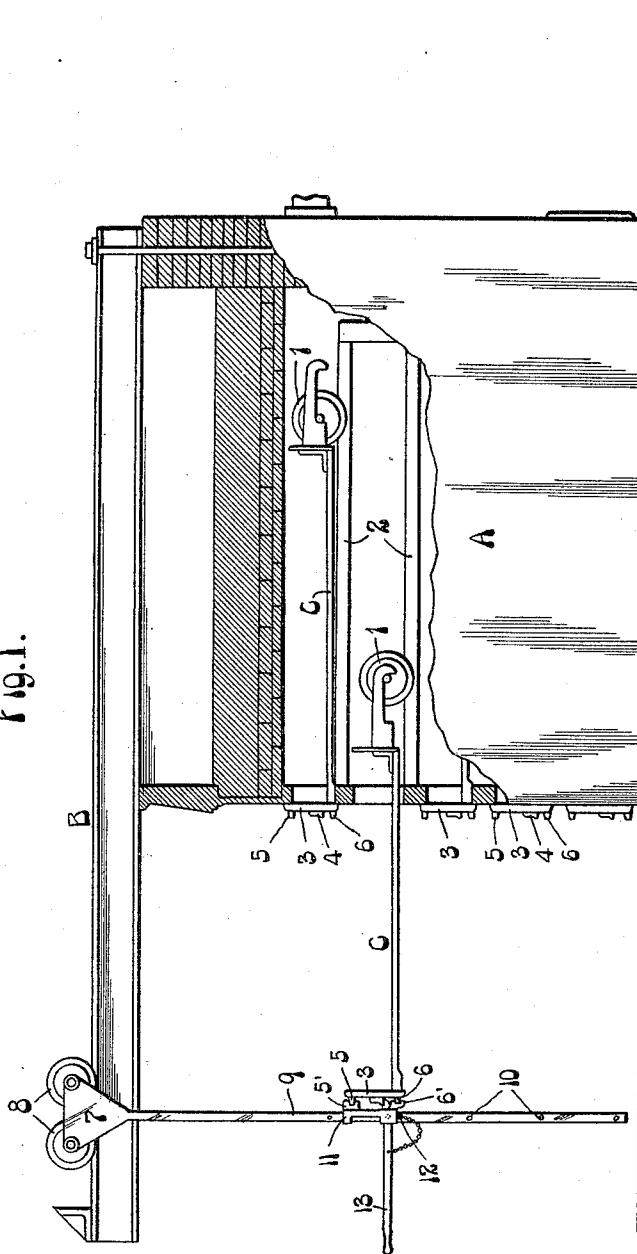
H. LECHTENBERG.
DRAWER OPERATING DEVICE.
APPLICATION FILED OCT. 17, 1910.

1,006,237.

Patented Oct. 17, 1911.

2 SHEETS—SHEET 1.

Fig. 1.



Attest
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Inventor:
Hy. Lechtenberg,
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2 SHEETS—SHEET 2.

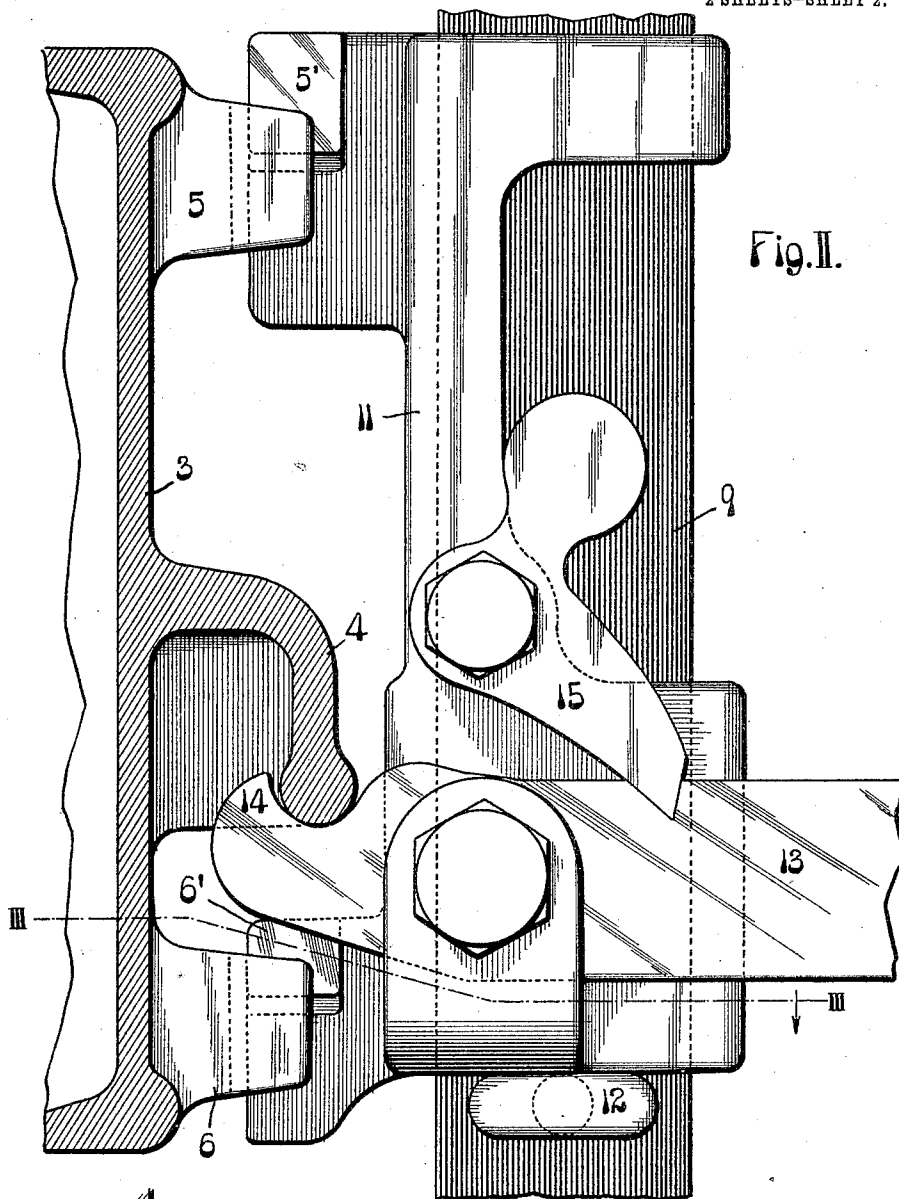


Fig. II.

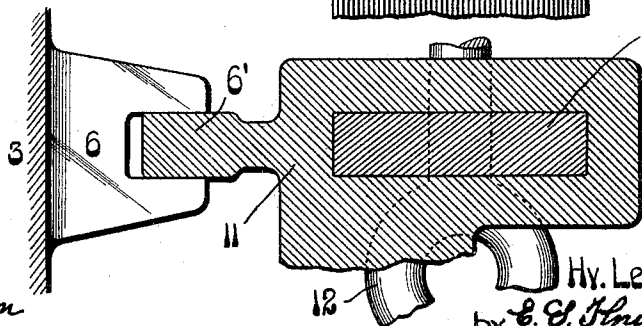


Fig. III.

Attest
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UNITED STATES PATENT OFFICE.

HENRY LECHTENBERG, OF QUINCY, ILLINOIS.

DRAWER-OPERATING DEVICE.

1,006,237.

Specification of Letters Patent.

Patented Oct. 17, 1911.

Application filed October 17, 1910. Serial No. 587,636.

To all whom it may concern:

Be it known that I, HENRY LECHTENBERG, a citizen of the United States of America, residing in Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Drawer-Operating Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a device for operating drawers or trays used in core ovens, in which founders' cores are baked, and it has for its object the production of a structure or device of this kind by which the drawers or trays of the core oven may be moved outwardly and inwardly in the oven with ease; and further, to provide, in such drawer operating device, means whereby the drawer or tray being operated is prevented from tilting when withdrawn from the core oven.

Figure I is a view, partly in elevation, and partly in section of a core oven and my drawer operating device. Fig. II is an enlarged view, partly in elevation, and partly in section, of the front piece of one of the core oven drawers, and the parts of the drawer operating device which engage the front piece of the drawer. Fig. III is a horizontal section taken on line III—III, Fig. II.

In the accompanying drawings: A designates a core oven, and B is an overhead horizontal track-rail extending longitudinally of the core oven, said rail being projected beyond the front end of the oven.

C are drawers or trays in the core oven adapted to hold cores to be baked in the oven. The rear ends of these drawers are supported by wheels 1 arranged on runners 2 provided therefor in the oven. These wheels so support the rear ends of the drawers as to provide for easy movement of them. The front ends of the drawers rest upon cross pieces at the entrance ways to the drawer compartment, and one of the offices of my drawer operating device is to lift these front ends and support them while the drawers are being moved outwardly or inwardly in the core oven, thereby relieving the drawers and making it possible to shift the drawers, when heavily loaded, much more readily than they could be shifted in the event of breaking connection between

the drawers and the cross pieces of the oven beneath them.

Each of the drawers C is provided at its forward end with a front piece 3 that serves as a closure for the drawer when in the oven, and upon said front piece is a pull member 4. Near the top of the drawer front piece is a slotted lug 5, and near the bottom of said front piece is a slotted lug 6, these two lugs being located in the same vertical line as that occupied by the drawer pull member 4. The utility of these members will be hereinafter made clear.

7 designates a carriage provided with track wheels 8 operable upon the overhead track-rail B. The carriage 7 serves as a support for a pendant carrier bar 9, movable toward and away from the front of the core oven, and provided with a plurality of pin holes 10, corresponding in number to the number of drawers arranged in a tier in the core oven.

11 is a head slidably fitted to the carrier bar 9 so that it is moved vertically thereon. This head is adapted to be supported opposite to any drawer it may be desired to operate through the medium of my device by a pin 12 insertible through one of the pin holes 10 in the carrier bar, at the proper point for the desired support of the head.

13 designates a lift lever pivotally connected to the head 11, and extending forwardly therefrom, the lever being provided at its rear end with a hook 14 adapted to be placed in engagement with the pull member 4 upon the front piece of a drawer it is desired to operate in the use of my device.

15 is a dog supported by the head 11 above the lift lever 13, and arranged for engagement with said lift lever, as seen in Fig. II, to maintain the hook of the lever in engagement with the pull member of the drawer front piece.

5' and 6' designate lugs carried by the head 11 at its side which faces the front of the core oven. These lugs are arranged at the upper and lower ends of the head 11, and they are so positioned as to permit of the lug 5' engaging the lug 5 on a drawer front piece, and the lug 6' engaging the lug 6 on a drawer front piece, when the head 11 is moved to a drawer front piece, and connected thereto by the lift lever 13.

When one of the drawers of the core oven is to be drawn outwardly by the use of my

device, the carriage 7 and pendant carrier bar 9 are moved to the front end of the core oven, and head 11 on said carrier bar, having been adjusted to the proper height thereon, is so presented to the front piece of the drawer that is to be operated as to cause the lugs 5' and 6' on the head to enter into the slots in the lugs 5 and 6, respectively on the drawer front. The lift lever 13 is then liberated to place its hook in engagement with the drawer pull member 4, after which the handle end of the lever is moved downwardly, and the engagement of the hook with said pull member is retained through the medium of the dog 15. As the lever 13 moves downwardly, its hook acts to elevate the front end of the drawer, and consequently, when the pendant carrier bar 9, with the parts supported thereby, is moved in a direction away from the front of the oven, the drawer is upheld by a rolling support furnished by the carriage 7, thus resulting in the front end of the drawer being as readily moved as the rear end of the drawer, which is supported by the wheels 1.

It will be obvious that if the drawer operated by my device was supported at its front end only by the lift lever 13, and the parts supporting said lift lever, there would be a constant tendency of said drawer to tip or tilt when it was extended from the core oven, and this would be particularly the case if more weight were placed upon the drawer at one side of its longitudinal center than at the other side. The chief novelty in my present improvement lies in the provision of means for preventing such tilting of the drawers, and the elements comprising such means are the lugs 5-6 and 5'-6' that, by their location, respectively, upon the drawer front pieces and the head 11, are adapted to interengage with each other in a manner to make it possible for the head 11 to hold the drawer front pieces, and consequently the drawers, constantly in alinement with the head during the periods in which the lift lever 13 is in engagement with the pull members 4 on the drawer front pieces.

I claim:

1. A drawer operating device comprising a track member extending longitudinally of the drawer to be operated, a movable carrier arranged upon said track member and movable longitudinally of the drawer to be operated, a head carried by said carrier, and means associated with said head for engagement with said drawer to impart movement thereto during the movement of said carrier; said head being provided with means

for engagement with the drawer to be operated to prevent tilting of the drawer while it is being moved.

2. The combination with a drawer having a front piece, of means for operating said drawer, comprising a track member extending longitudinally of the drawer to be operated, a carrier supported by said track member in front of said drawer front piece and movable longitudinally of said drawer, a head carried by said carrier, means carried by said head for engagement with said drawer front piece; said drawer front piece and head being provided with means for interengagement with each other to prevent tilting of the drawer while it is being operated upon the movement of said carrier.

3. The combination with a drawer having a front piece, of means for operating said drawer, comprising a carrier movable in front of said drawer front piece, a head carried by said carrier, and means carried by said head for engagement with said drawer front piece; said drawer front piece being provided with a lug, and said head being provided with a lug for engagement with the lug on the drawer front piece to prevent tilting of the drawer while it is being operated during the movement of said carrier.

4. The combination with a drawer having a front piece, of means for operating said drawer, comprising a carrier movable in front of said drawer front piece, a head carried by said carrier, and means carried by said head for engagement with said drawer front piece; said drawer front piece being provided with a slotted lug, and said head being provided with a lug for entrance into said slotted lug to prevent tilting of the drawer while it is being operated during the movement of said carrier.

5. The combination with a drawer having a front piece, of means for operating said drawer, comprising a carrier movable in front of said drawer front piece, a head carried by said carrier, and means carried by said head for engagement with said drawer front piece; said drawer front piece being provided with a pair of lugs located at different elevations, and said head being provided with a pair of lugs for engagement with the lugs on the drawer front piece to prevent tilting of the drawer while it is being operated during the movement of said carrier.

HENRY LECHTENBERG.

In the presence of—

H. C. SPRICK,

WALTER W. HEIDBREDER.