Dec. 19, 1933. J. H. WASHBURN 1,940,035

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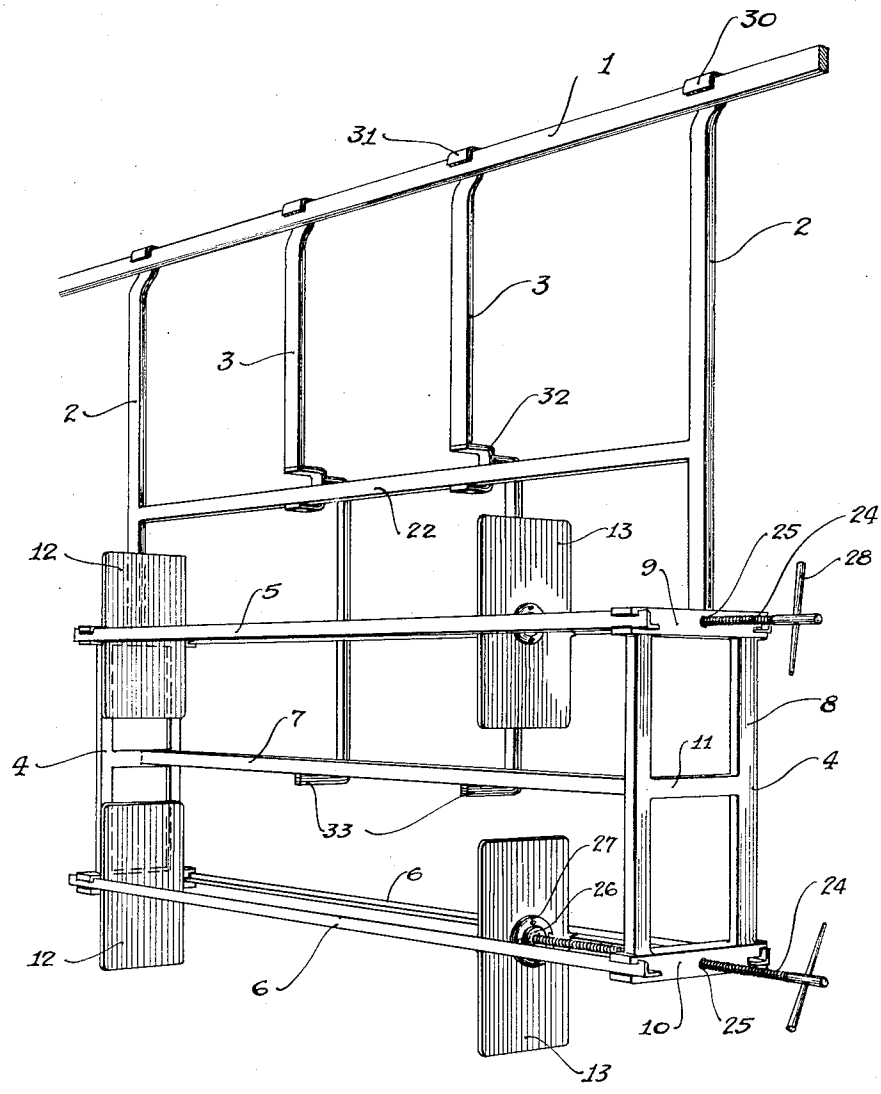


Fig. 1

John H. Washburn
INVENTOR

WITNESS
Wm. C. Meiser

BY Fay W. Johns
ATTORNEY

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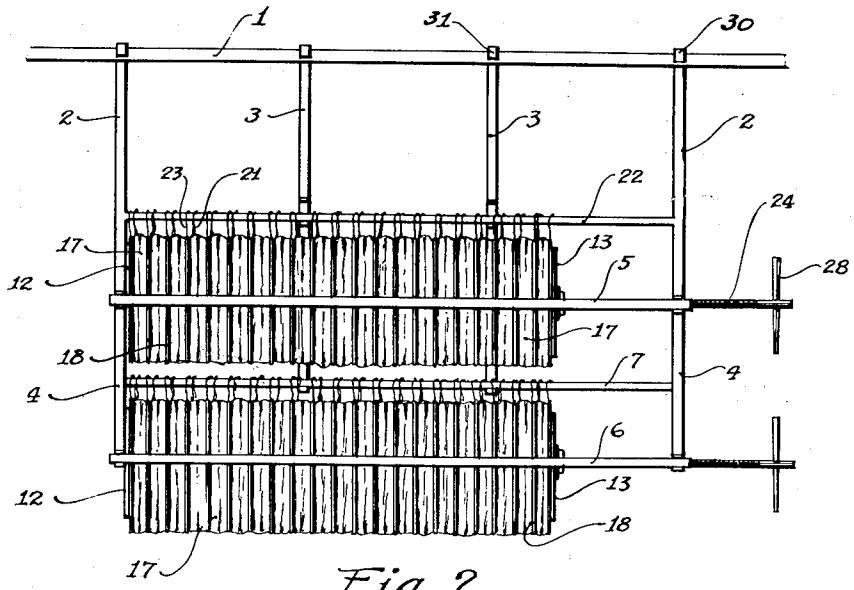


Fig. 2

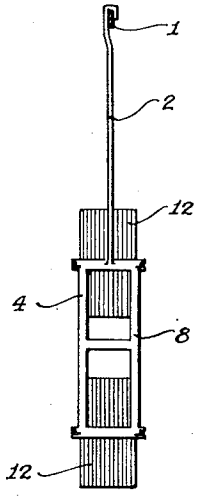


Fig. 3

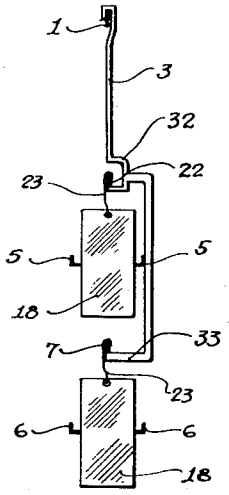


Fig. 5

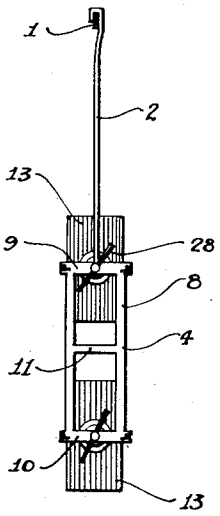


Fig. 4

John H. Washburn
INVENTOR

BY Fox W. Johns
ATTORNEY

WITNESS:
Wm C. Meiser

Dec. 19, 1933. J. H. WASHBURN 1,940,035

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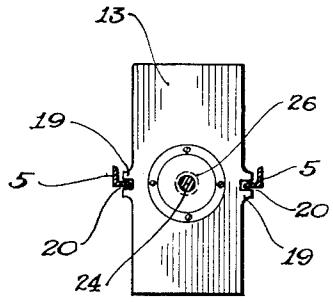


Fig. 6

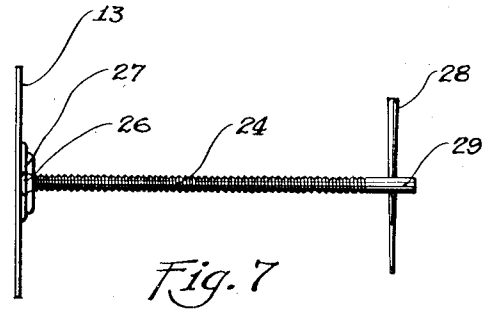


Fig. 7

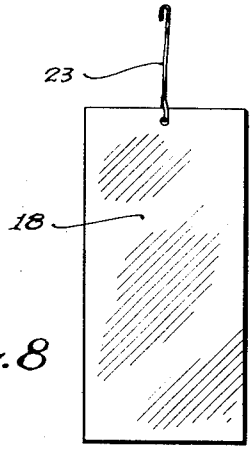


Fig. 8

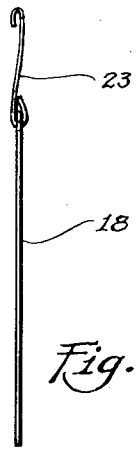


Fig. 9

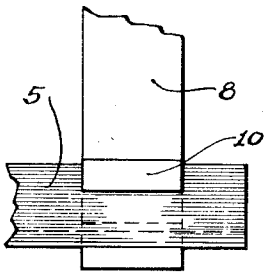


Fig. 10

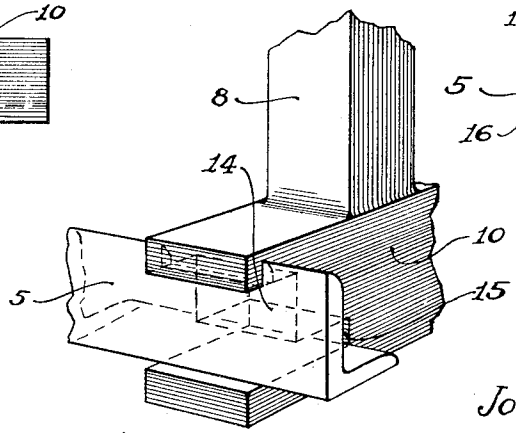


Fig. 12

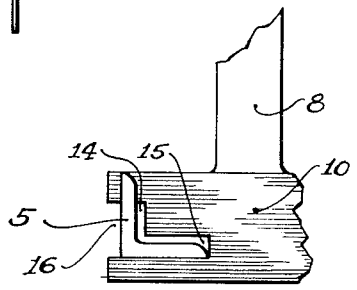


Fig. 11

WITNESS
Wm C Meiser

John H. Washburn
INVENTOR

BY Geo. W. Johnson
ATTORNEY

Patented Dec. 19, 1933 1,940,035

UNITED STATES PATENT OFFICE

1,940,035

BELLY PRESS

John H. Washburn, Milwaukie, Oreg., assignor to Swift and Company, Chicago, Ill., a corporation of Illinois

Application December 10, 1931
Serial No. 580,095

6 Claims. (Cl. 100—57)

The invention relates to a press for removing curl from smoked skinned bellies.

An object of the present invention is to provide a simple, inexpensive and efficient belly press of strong and durable construction, adapted to flatten and remove the curl from smoked skinned bellies and capable of enabling the product to be placed in and removed from it without touching the meat with the hands, thereby eliminating one source of contamination heretofore present in means employed for straightening or flattening slabs of bacon for removing curl therefrom.

A further object of the invention is to provide a belly press of this character with which it will not be necessary to leave the bacon in the clamping or pressure applying means more than one hour and which will permit the slabs of bacon when the pressure is removed to be hung back on the trees or spread apart and permitted to remain on suspending means of the belly press to prevent the bellies from sweating.

With these and other objects in view, the invention consists in the construction and novel arrangement of the parts hereinafter described, illustrated in the accompanying drawings and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—

Figure 1 is a perspective view of a belly press constructed in accordance with this invention.

Fig. 2 is a front elevation of the same illustrating the manner of pressing the smoked skinned bellies.

Fig. 3 is an end elevation showing one end of the belly press.

Fig. 4 is a similar view showing the other end of the belly press.

Fig. 5 is a transverse sectional view of the belly press.

Fig. 6 is a detail view of the slidable pressure plates.

Fig. 7 is a detail view of the pressure applying screw and the slidable pressure plate.

Fig. 8 is a detail side view of one of the bacon separating and flattening plates.

Fig. 9 is an edge view of the same.

Figs. 10, 11 and 12 are detail views illustrating the manner of slidably interlocking the horizontal guide bars of the press with the ends of the same.

In the accompanying drawings in which is illustrated the preferred embodiment of the invention the belly press comprises in its construction a rigid frame suspended from an overhead supporting rail 1 by means of end and intermediate hanger bars 2 and 3 and provided with a lower body portion composed of substantially oblong end members 4 and upper and lower pairs of horizontal guide bars 5 and 6. The end members 4 which are connected by a lower centrally arranged horizontal suspension rail 7 are composed of spaced vertical side bars 8 and top, bottom and intermediate horizontal connecting bars 9, 10 and 11 disposed transversely of the ends of the body portion of the frame of the belly press and preferably formed integral with the vertical bars 8, as clearly illustrated in Fig. 1 of the drawings.

The upper and lower horizontal guide bars 5 and 6 which extend longitudinally of the body portion of the frame of the belly press at the top and bottom of the said body portion are spaced laterally to receive between them fixed vertical press plates 12 and slidably vertically disposed press plates 13 and they consist preferably of angle bars having vertical and horizontal webs or flanges which are slidably interlocked with vertical and horizontal slots or branches 14 and 15 of recesses 16 formed in the ends of the top and bottom bars 9 and 10 of the ends of the press frame. The vertical flanges of the horizontal guide bars extend upwardly from the angle of the bars and the horizontal webs or flanges of the angle bars extend inwardly from the vertical webs or flanges to form guides for the press plates 13 and also to confine the slabs 17 of bacon and bacon separating and flattening plates 18 within the frame of the press.

The slidable interlocking of the guide bars 5 and 6 with the ends of the frame enable the said bars to be readily removed when desired.

The fixed vertical press plates 12 which are located at one end of the frame may be welded

or otherwise connected with the adjacent end 4 of the frame of the press and they extend above and below the horizontal guide bars 5 and 6. The slidable press plates 13 which are supported and guided by the horizontal flanges of the guide bars 5 and 6 are provided at their side edges with laterally projecting lugs 19 which are spaced apart to form intervening recesses or slots 20 to receive the horizontal flanges of the guide bars, as clearly illustrated in Fig. 6 of the drawings. The slabs of bacon which are provided with suitable hangers 21 are hung in the press from the lower horizontal suspension bar 7 and also from an upper horizontal suspension bar 22 located above the body portion of the press and formed integral with or otherwise rigidly connected with the hanger bars 2 and 3. The oblong plates 18 which are provided with suitable hangers 23 are suspended from the horizontal rails or bars 7 and 22 and are interposed between the slabs of bacon for separating the slabs and for presenting flat surfaces to the same to flatten the slabs of bacon and remove the curl therefrom when pressure is applied to the slidable press plates 13 by means of screws 24.

The screws 24 which are disposed longitudinally of the body portion of the frame of the press at the top and bottom thereof and at one end of the same are mounted in suitable threaded openings 25 in the bars 9 and 10 of such end of the frame and the said screws are provided at their inner ends with circular or semi-spherical heads 26 which are arranged in suitable bearings or sockets 27 located at the centers of the slidable press plates 13 and preferably formed by enlargements at the outer faces of the press plates 13. The outer ends of the screws are provided with suitable operating means for enabling the screws to be manually rotated for applying pressure to the slabs of bacon. The operating means may consist of bars 28 preferably tapered and wedged in suitable slots or openings in the outer end portions 29 of the screws and extending laterally from opposite sides of the screws to form lever arms. Any other suitable means may, of course, be provided. When the screws are rotated the press plates 13 are forced inwardly and pressure is applied to the slabs of bacon and curl is removed therefrom. A slab may be subjected to pressure for any desired length of time, but it has been found by practice that one hour is sufficient for removing the curl from bacon.

The hanger bars 2 and 3 are provided at their upper ends with hooks 30 and 31 for engaging the supporting rail and the intermediate hanger bars 3 have offset upper and lower portions which are connected by substantially U-shaped portions 32 extending laterally from the upper suspension rail 22 and also spacing the upper portions of the intermediate hanger bars from the said rail 22, as clearly illustrated in Figs. 1 and 5 of the drawings.

This provides clearance for the hangers of the slabs of bacon and the bacon separating and flattening plates 18. The lower ends of the offset lower portions of the intermediate hanger bars are connected with the lower suspension rails 7 by means of arms 33 which are secured to the lower suspension rail 7 at the lower edge thereof so as not to interfere with the sliding of the hangers of the slabs of bacon and the plates 18 along the said horizontal suspension rail 7.

The various parts of the press are designed to be constructed of galvanized metal and the hanging of the press from the overhead supporting rail will enable the press to be removed bodily therefrom and also to be moved along the supporting rail for transferring the press and its contents bodily from one point or place to another and also removing the press for cleaning or other purposes. Also the suspension of the bacon from the horizontal rails 7 and 22 will enable the product to be handled separately from the press after being subjected to pressure.

What is claimed is:

1. A belly press of the class described including a frame having spaced upper and lower horizontal guide rails arranged in pairs, fixed and movable press plates arranged vertically between the guide rails at the ends of the frame, movable press plates being slidably supported by the said guide rails, upper and lower suspension rails located above the press plates and adapted to receive hangers to permit the product to be pressed to be suspended between the upper and lower press plates, vertical bacon separating and flattening plates provided with hangers for engaging the suspension rails and adapted to be interposed between slabs of bacon or other product to be pressed, and means for sliding the movable press plates along the guide bars for applying pressure to the product.

2. A press of the class described including a frame having upper and lower horizontal guide rails arranged in pairs, relatively movable press plates arranged between the guide rails, upper and lower horizontal suspension rails located above the press plates and adapted to receive hangers for suspending the product to be pressed between the press plates, and intermediate and end hanger bars extending upwardly from the frame and having terminal hooks, the intermediate hanger bars being provided with offset upper and lower portions and connected with the horizontal suspension rails.

3. A belly press of the class described including a frame provided with end members having side recesses with vertical and horizontal slots and angle bars slidably interlocked with the said slots and having inwardly extending guide flanges, and relatively movable press plates located between the guide flanges, one of the press plates being slidably supported by the same.

4. A belly press including a frame provided with a horizontal suspension rail to receive hangers of the product to be pressed, said frame having at opposite sides horizontal guide rails spaced apart and also from the suspension rail, the frame being open at both sides above and below the guide rails, relatively movable pressure plates arranged vertically between the guide rails and extending above and below the same and supported by the said suspension rail, and means for applying pressure to the product through the pressure plates.

5. A belly press comprising a frame provided with a plurality of horizontal suspension rails located midway between the sides of the frame to receive hangers of the product to be pressed, said frame being provided with a plurality of pairs of guide rails, each pair being associated with a suspension rail and the members of each pair being located at opposite sides of the frame and spaced from each other and from the suspension rails, relatively movable pressure plates arranged vertically between the guide rails and extending above and below the same and supported by the suspension rails, and means for

applying pressure to the product through said pressure plates.

6. A belly press comprising a frame provided with a plurality of horizontal suspension rails located midway between the sides of the frame to receive hangers of the product to be pressed, said frame being provided with a plurality of pairs of guide rails, each pair being associated with a suspension rail and the members of each pair being located at opposite sides of the frame and spaced from each other and from the suspension rails, relatively movable pressure plates arranged vertically between the guide rails and extending above and below the same and supported by the suspension rails, and means for applying pressure to the product through said pressure plates including vertically disposed press plates slidably supported between the guide rails and extending above and below the same, and means for moving the press plates along the guide rails.

JOHN H. WASHBURN.