April 24, 1934. F. E. BAKER 1,956,265

CONVERTIBLE LAUNDERING AND KITCHEN TABLE

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FIG. 1.

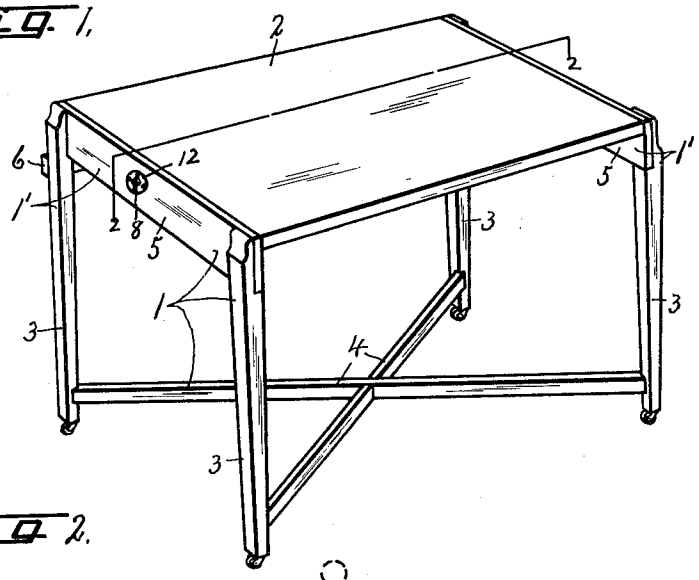


FIG. 2.

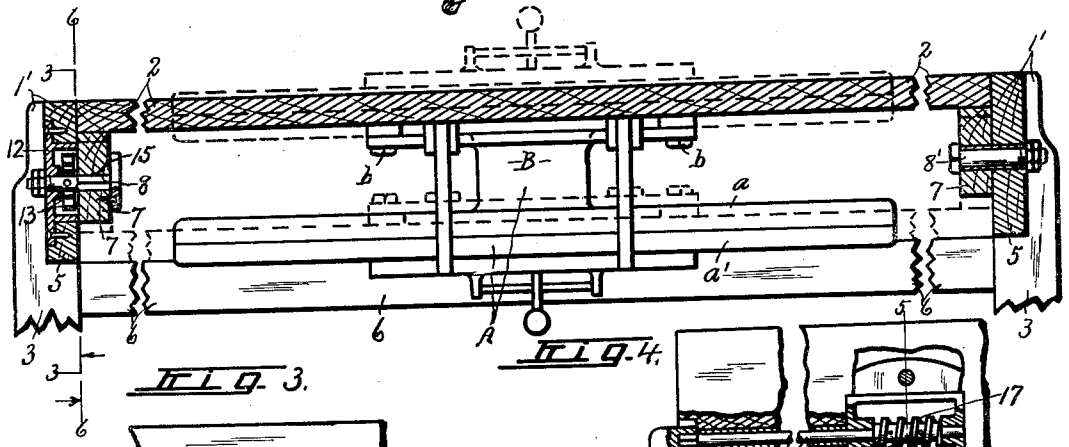


FIG. 3.

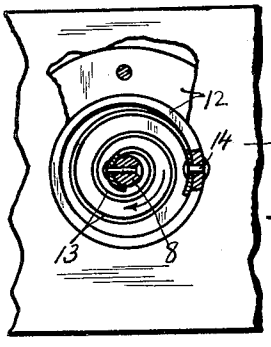


FIG. 4.

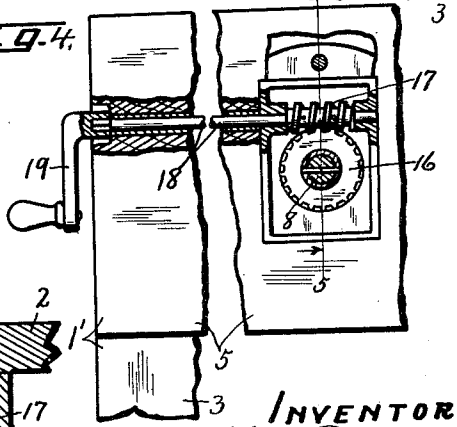
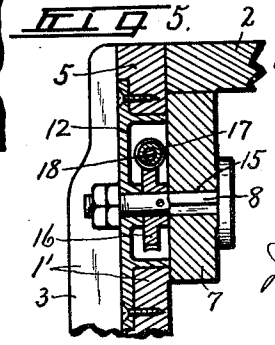


FIG. 5.



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FIG. 6.

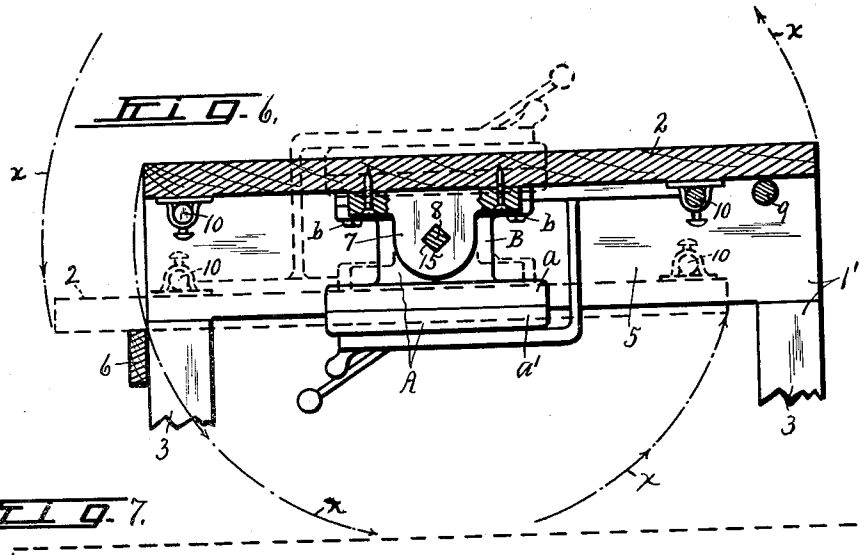
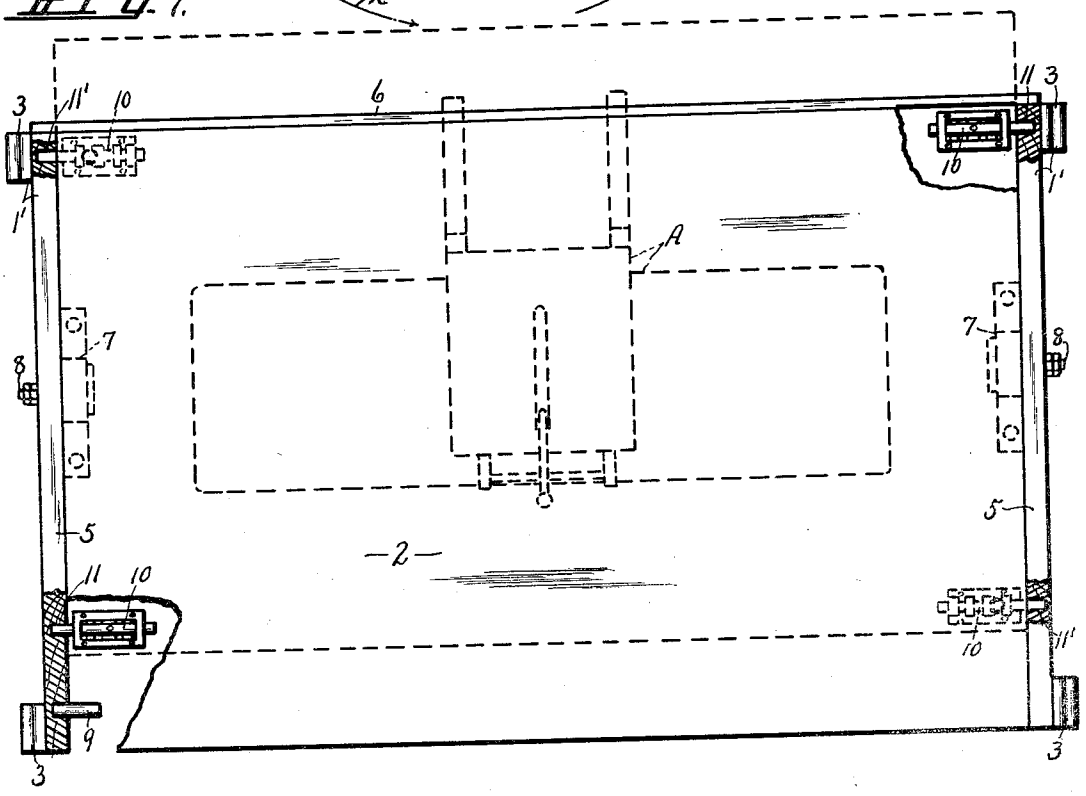


FIG. 7.



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CONVERTIBLE LAUNDERING AND KITCHEN TABLE

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Application March 10, 1932, Serial No. 598,079

2 Claims. (Cl. 68—9)

This invention relates to a convertible laundering and kitchen table comprising a frame and an elongated table top journaled thereon to swing about a horizontal axis between its opposite longitudinal edges and parallel with its longitudinal center from one horizontal position to an inverted horizontal position and adapted to receive and support upon one of its surfaces an ironing press of the class shown in my pending application Serial No. 367,380, filed May 31st, 1929, whereby when turned to one horizontal position the ironing press will be entirely exposed above the table top ready for use or when turned to the other position the upper face of the table top will be flush with the top of the frame for use as a kitchen table while the ironing press will be concealed below the table top in an inverted inoperative position.

The main object is to provide a simple and comparatively inexpensive table of this character which may be easily and quickly converted to either use without displacing any of the essential parts of the ironing press from the table.

Another object is to provide simple and efficient means for counterbalancing any eccentric weight of the press-supporting table top during its rotation about its axis from one to the other of its extreme positions.

One of the specific objects is to counterbalance the table top by means of a spring coiled about its axis and connected to the frame and top in such manner as to yieldingly hold the table top in one horizontal position and to gradually increase the tension of the spring as the table top with the press thereon is turned to its other horizontal position and also to utilize this increased tension of the spring for returning the table top and ironing press to its starting position.

Other objects and uses relating to specific parts of the table will be brought out in the following description.

In the drawings:—

Figure 1 is a perspective view of a table embodying the various features of my invention in which the table top is adjusted to bring its upper surface into the same horizontal plane as that of the frame for use as a kitchen table with the laundering machine supported from the underside thereof.

Figure 2 is an enlarged longitudinal vertical sectional view, partly broken away, taken on line 2—2, Figure 1, showing the manner of pivoting the table top upon the upper portion of the frame, the dotted lines indicating the reversed position of the table top to bring the laundering machine at the upper side thereof.

Figure 3 is an enlarged detail vertical sectional view taken in the plane of line 3—3, Figure 3, showing more particularly the coil spring for counterbalancing the table top when turned from one to the other of its extreme positions.

Figure 4 is an enlarged detail sectional view similar to Figure 3, partly broken away, showing a modified means for adjusting the table top about its axis.

Figure 5 is a vertical sectional view taken on line 5—5, Figure 4.

Figure 6 is an enlarged detail vertical sectional view taken on line 6—6, Figure 2, the lower portions of the legs of the frame being broken away.

Figure 7 is a top plan of the machine shown in Figure 1 except that parts of the diagonal corners are broken away to show the means for locking the table top in one or the other of its extreme horizontal positions, the dotted lines indicating the position of the underlying laundering machine.

As illustrated in Figures 1 to 3 inclusive and Figures 5 and 7, this machine comprises a main supporting frame 1 and a table top 2, both of which are substantially rectangular in top plan and elongated laterally relatively to the position of the operator so that the length is considerably greater than the transverse width, the frame consisting in this instance of upright standards 1′ having supporting legs 3 which are rigidly connected near their lower ends by diagonal brace bars 4, as shown more clearly in Figure 1.

The upper ends of the posts of each standard 1′ are connected by cross bars or plates 5 forming parts of the ends of the frame and having their upper edges disposed in substantially the same horizontal plane, the frame being of standard height for use as a kitchen table.

The rear legs 3 of the frame are also connected by a lengthwise bar 6 rigidly secured thereto for additionally bracing the frame and also to form a stop adapted to be engaged by the lower face of the rear side of the table top when the latter is adjusted to bring the laundering machine uppermost or in position for use as will be hereinafter more fully described.

The opposite ends of the table top 2 are provided with similar flanges 7 projecting in the same direction from one of the faces thereof or from the same face to which the ironing press is secured, leaving the opposite face of the table

top substantially smooth and flat throughout its area.

This table top is preferably rectangular and of approximately the same length from end to end as the distance between the inner faces of the plates 5 of the end standards 1' while the width from front to rear is substantially equal to the width of the upper portion of the frame in which the table top is mounted.

The ends of the table top are journaled upon the adjacent side plates 5 by means of pivotal bolts 8 which are passed through registering openings in the corresponding flanges 7 and side plates 5, as shown more clearly in Figure 2, said pivotal bolts being coaxial and disposed in a horizontal plane some distance below the upper edges of the side plates and a corresponding distance from the surface of the table top so that when the table top is adjusted for use as a kitchen table, its upper surface will be disposed in the same plane as the corresponding upper surfaces of the standards 1', but when the table top is inverted or rocked a half turn about its axis it will assume a horizontal position the same distance below the pivotal bolts 8, thus bringing the center of gravity of the ironing press in approximate alinement with the turning axis of the table top for balancing purposes and also to enable the table top with the ironing press thereon to be more easily turned from one extreme horizontal position to the other with a minimum of power.

That is, the table top 2 is adapted to receive and support an ironing press A consisting, in this instance, of a padded buck *a* and an electrically heated presser head *a'*, the buck *a* being mounted upon a relatively short pedestal B which is secured to one of the faces of the table top by bolts *b* or equivalent fastening means while the presser head *a'* is slidable forwardly and rearwardly at right angles to the turning axis of the table top to and from a position across the adjacent surface of the buck in the manner shown in my pending application previously referred to.

It will be noted upon reference to Figures 2 and 7 that the entire ironing press is supported upon the table top at one side thereof midway between the opposite ends thereof and also midway between the upright standards 1' and that the axis of the pivots 8 is disposed substantially midway between the table top 2 and meeting faces of the buck *a* and presser head *a'* so that the table top with the ironing press thereon will be substantially balanced with reference to the turning axis to further facilitate the turning movement of the table top with the ironing press thereon by hand or otherwise about said axis.

The pivotal studs or trunnions 8 of the table top 2 are relatively short for the purpose of leaving a clear open space between their inner ends through which the table with the ironing press thereon is free to rotate, said pivots being disposed in a vertical plane some distance to the rear of the longitudinal center of the frame 1 while the transverse width of the table top is substantially equal to the corresponding width of the frame and it, therefore, follows that when the table top is in one position with the ironing press at the underside thereof for use as a kitchen table its front and rear edges will be disposed in the vertical planes of the corresponding front and rear edges of the frame as shown by full lines in Figures 1, 2, 6 and 7.

On the other hand when the table top is reversed with the ironing press at the upper side thereof, the rear edge of said table top will be extended rearwardly beyond the corresponding side of the frame while the front edge will be disposed in a vertical plane some distance to the rear of the front edge of the frame as shown by dotted lines in Figure 7, thus permitting the operator to take a position closer to the front of the ironing press without obstructions from the frame 1.

In other words, when the table top with the ironing press thereon is rocked rearwardly and downwardly or inverted from the position shown by full lines to the position shown by dotted lines in Figure 6, the portion of the shelf of greatest width from its turning axis will be brought into engagement with and extend rearwardly some distance beyond the stop bar 6 and it, therefore, follows that the narrower portion of the shelf will be brought to a horizontal position some distance to the rear of the front portion of the frame in which case the ironing press will be above the table top with its handles facing the front of the frame within convenient reaching distance of the operator positioned in the space between the front edge of the table and front edge of the frame.

The main object of the cross bar 6 is to brace the upper rear portion of the frame but is utilized as a stop to assist in holding the table top and ironing press in a substantially horizontal position when adjusted to bring the ironing press above the table ready for use in which case the wider half of the table top would extend rearwardly beyond the rear portion of the frame, as shown by dotted lines in Figure 6, to rest upon the bar 6.

A stop shoulder 9 is secured to one or both of the plates 5 near the upper front edge thereof as shown in Figures 6 and 7 for limiting the swinging movement of the table top and ironing press thereon from the position shown by dotted lines in Figure 6 to the position shown by full lines, the stops 6 and 9 being located equal distances from the axis of the pivotal bolts 8 but at opposite sides thereof, both stops being arranged in the path of movement of the wider half of the table top.

Suitable means is provided for locking the table top in each of its horizontal positions and for this purpose the table top 2 is provided with a pair of diagonally opposite locking bolts 10 of the sliding type near opposite ends thereof and adapted to engage in sockets 11 in the adjacent portions of the side plates 5 when the table top is moved to the position shown by full lines in Figures 1, 2, 6 and 7 with the ironing machine on the underside thereof.

On the other hand, when the table top is inverted from the position shown by dotted lines in Figures 2 and 6 with the ironing press at the upper side thereof, the same locking bolts 10 are adapted to engage in additional sockets 11' in the opposite end plates 5 as shown in Figure 7.

Suitable means is provided for counterbalancing the table top and ironing press mounted thereon and for this purpose a motor case 12 is secured by screws or other fastening means to the outer face of at least one of the side plates 5 to extend through an opening therein coaxial with the axis of the adjacent pivotal bolt as 8.

Within this motor case is mounted a spring 13 coiled around the adjacent pivotal pin 8 and having one end attached thereto and its other end attached at 14 to the housing so that when the table top with the ironing press thereon is

turned in one direction or from the position shown by dotted lines in Figure 6 to the position shown by full lines, the shaft 8 will be correspondingly rotated to cause the spring to wind around the same and thereby to increase its tension during such turning movement.

The flange or lug 7 may be made of cast iron or other suitable strong and durable material, one of the pivotal bolts 8, as for example, that to which the spring motor 3 is secured is provided with a square shank entering a corresponding square opening 15 in the adjacent lug 7 to cause the pivotal bolt to turn with the table top when the latter is adjusted from one position to the other.

That is, when the table top is adjusted to the position shown by full lines in Figures 1, 2, 6 and 7 for use as a kitchen table, the spring 13 will be placed under its maximum tension at which time the table top will be locked against return movement by the locking bolts 10.

Then, when it is desired to use the ironing press, the locking bolts 10 will be released by hand and the table top 2 with the ironing press A thereon will then be turned by hand in the direction indicated by arrow X, Figure 6, aided by the spring 13 through its connection with the pivotal bolt 8 which is locked thereto until the table top is brought to an inverted horizontal position into engagement with the stop bar 6 with the ironing press at the upper side thereof as shown by dotted lines in Figures 2, 6 and 7 in which position the table top would be locked by means of the bolts 10 engaging in the sockets 11'.

After the laundering work has been completed and it is desired to use the table top as a kitchen table the ironing head *a'* will be slidably adjusted to a position directly over the buck *a* so that the center gravity of the ironing press will be approximately in the axis of the pivots 8.

The locking bolts 10 will then be withdrawn from the sockets 11' whereupon the table top with the ironing press thereon will be rocked in a clockwise direction, from its dotted position shown in Figure 6 to its full line horizontal position until limited by the stop 9 to be again locked by the engagement of the bolts 10 in the sockets 11.

During this latter or return rocking movement of the table top, the spring 13 will be again placed under its maximum tension ready to assist in turning the table top and ironing press in a counter-clockwise direction.

Although I have shown only one of these spring motors 13, it is evident that it may be duplicated at the opposite end of the machine if necessary.

In Figures 4 and 5 is shown a modification of the means for turning the table about the axis of its pivots 8, said means consisting, in this instance, in providing the shaft 8 adjacent the motor case 12 with a worm gear 16 adapted to be engaged by a worm 17 on a rotary shaft 18 which latter is journaled in suitable bearings upon the adjacent upright standard 3 to extend to the front of the frame where it is adapted to be engaged by a hand crank 19 for turning the shaft and thereby rotating the worm wheel 16 and its shaft 8 which, in turn, causes the rotation of the table top 2 until the latter is brought into engagement with one or the other of the stops 6 or 9 shown in Figures 6 and 7.

Although I have shown the shaft 18 as being operated through the medium of the hand crank 19, it is quite evident that any other power may be employed without departing from the spirit of this invention and for that purpose, I have shown the hand crank as removably mounted upon the adjacent end of the shaft.

When the table top is adjusted to a horizontal position with the ironing press A at the lower side thereof, its entire upper surface will be substantially flat and flush with the corresponding upper edges of the standards 1' of the main supporting frame for use as a kitchen table in which position it will be locked by the bolts 10 engaging in the sockets 11 in the plates 5.

Then, if it is desired to use the ironing press, the table top with the press thereon will be inverted or rocked in the direction indicated by the arrow X, Figure 6 to a horizontal position shown by dotted lines in Figure 6 with the ironing press at the top thereof, the rear end of the table top being then supported upon the cross bar 6 while the front portion thereof will be locked against vertical movement by the bolt 10 engaging in the sockets 11'.

During this turning movement of the table top from one position to the other, the coil spring 13 will be placed under gradually increasing tension until the table top assumes its uppermost position and it, therefore, follows that when the locking bolts 10 are released from the sockets 11, the spring 13 will automatically return the table top to bring the ironing press thereon to its ironing position when the table top will be locked by the bolts 10 engaging in the sockets 11'.

The construction and operation shown and described is particularly simple and highly efficient for supporting machines of this type, particularly when it is considered that the movement of the press head *a'* to and from a position in vertical registration with the buck is relatively high as compared with the length of the table top and also as compared with the lengths of the buck and press head, thus permitting the operator to easily move the press head forwardly and rearwardly with a minimum of power as set forth in my application previously referred to.

It will be understood that the press head will always remain substantially horizontal in all positions of sliding adjustment and that when it is moved rearwardly beyond the buck the entire area of the latter will be free from obstructions, thus permitting the work to be easily and quickly placed thereon and around the marginal edges thereof preparatory to pressing.

It is quite obvious that various changes may be made in the form of the frame 1 and also in the construction of the motor 13 without departing from the spirit of the invention.

What I claim is:

1. In a convertible laundering and kitchen table, a frame having longitudinally spaced upright end standards having their upper faces straight from front to rear and disposed in the same horizontal plane, and a table top having its opposite ends journaled upon and between said standards to swing about a horizontal axis equal distances from the upper horizontal face of the standards and upper surface of the table top to cause the upper surface of the table top to lie in the same horizontal plane as the upper face of the standards when the top is turned to one position for use as a kitchen table, said table top being of substantially the same length as the distance between the upper ends of the standards.

2. In a table of the character described, a frame provided with opposite end standards having straight top faces disposed in the same hori-

zontal plane, a reversible table top hinged to and between said standards to swing about a horizontal axis equal distances from the top faces of the standards and upper surface of the table top to cause said surface to lie in the same horizontal plane as the top faces of the standards when the table top is adjusted to one horizontal position and to lie in another horizontal plane the same distance from said axis when the table top is inverted, stops for limiting the movement of the table top to both of said positions, and releasable means for locking the table top in one of said positions.

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