

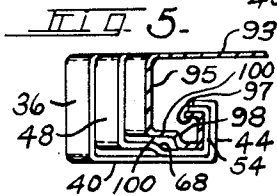
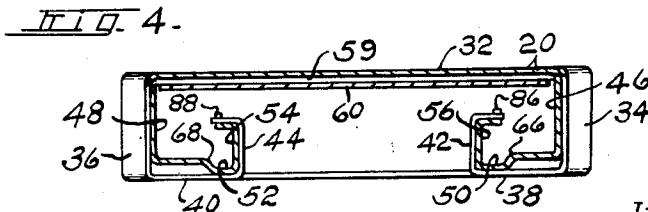
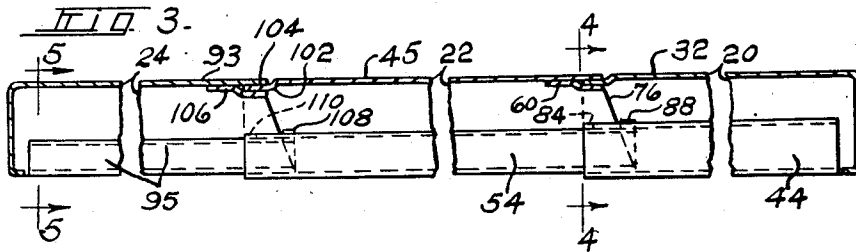
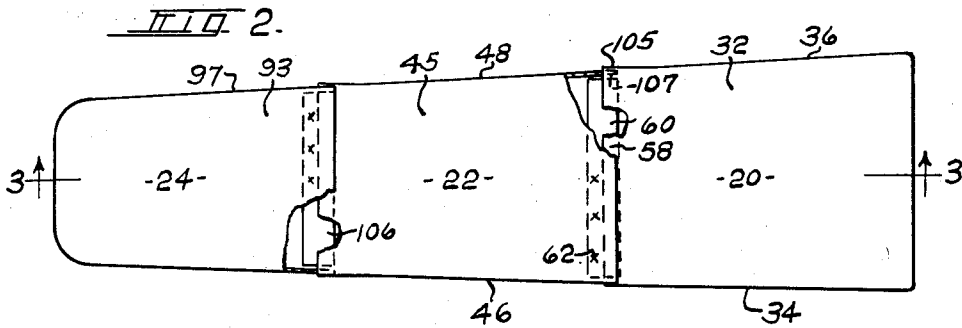
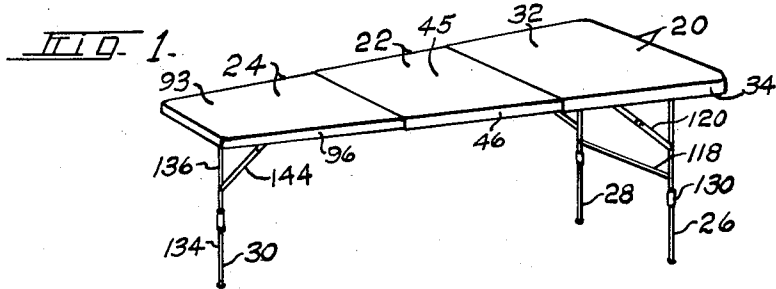
April 9, 1957

R. M. LACEY
IRONING BOARD

2,787,849

Filed March 3, 1954

4 Sheets-Sheet 1



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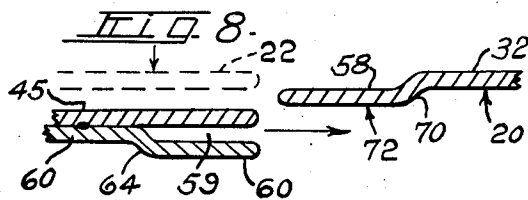
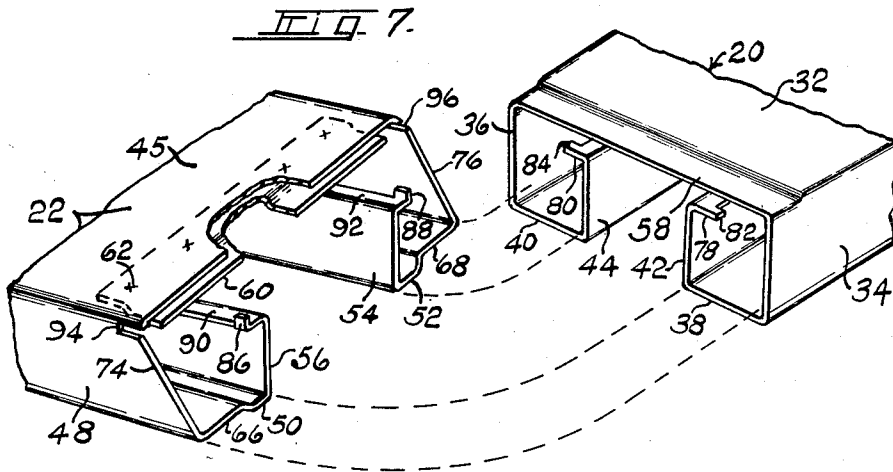
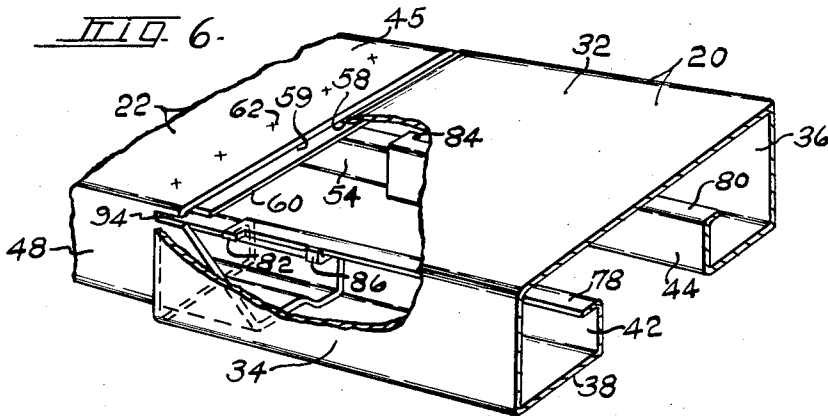
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4 Sheets-Sheet 2



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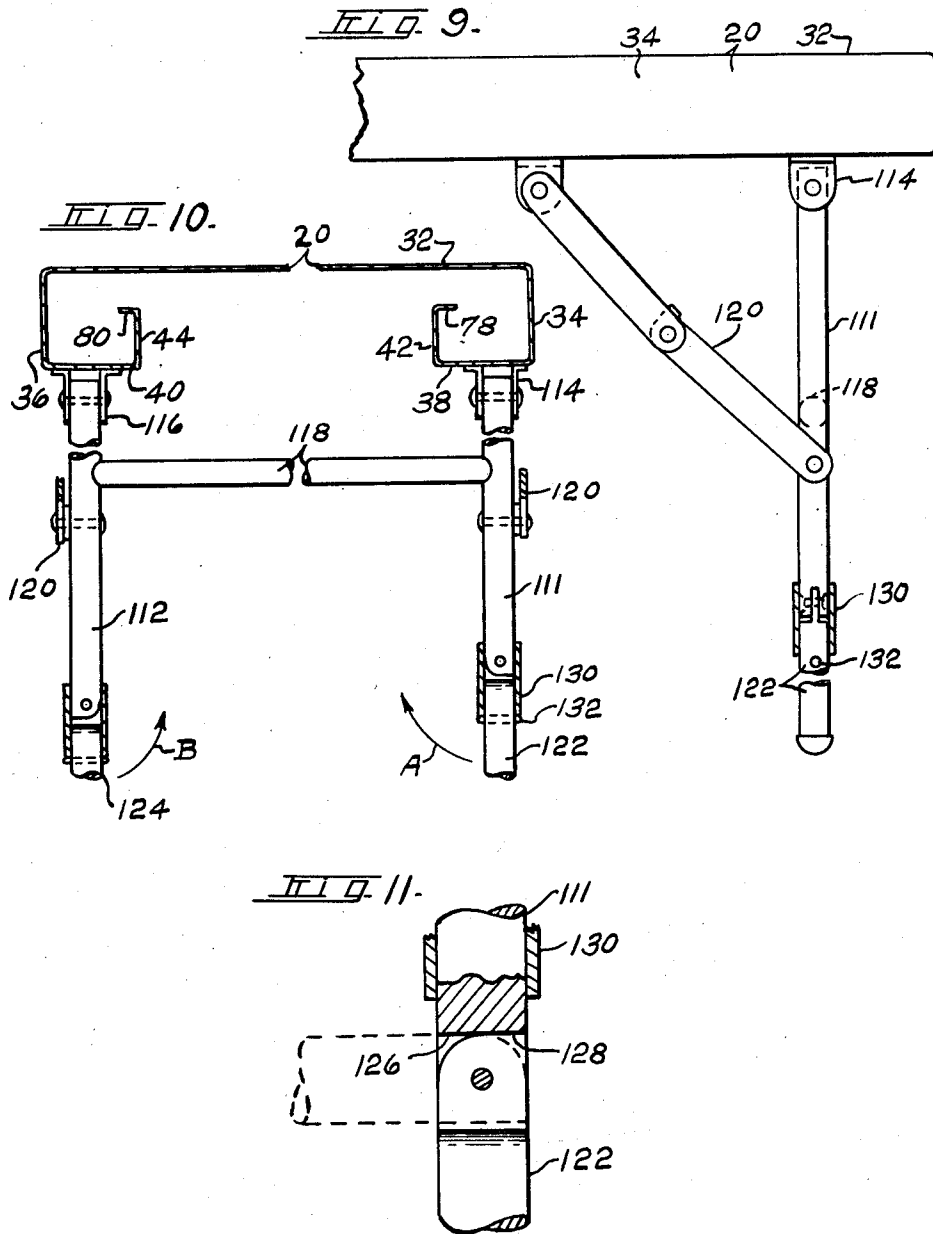
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4 Sheets-Sheet 3



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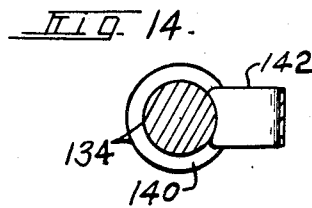
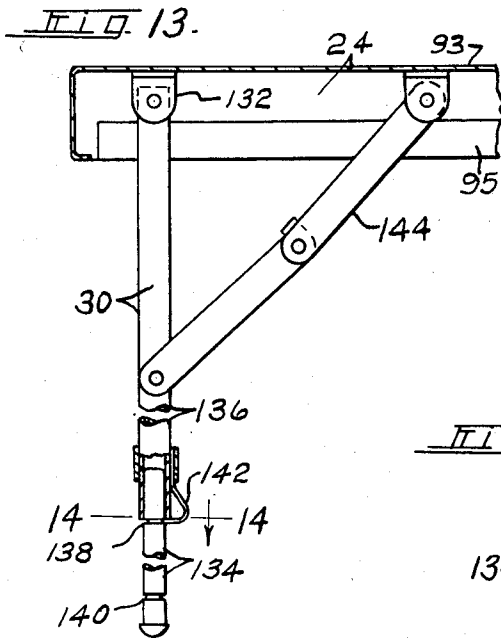
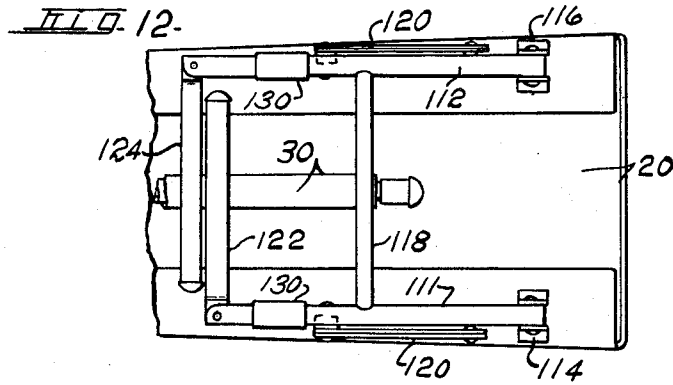
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4 Sheets-Sheet 4



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2,787,849

IRONING BOARD

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Application March 3, 1954, Serial No. 413,830

8 Claims. (Cl. 38—138)

This invention relates to ironing boards, and more particularly to an extensible ironing board capable of being stored in compact form.

Ironing boards in general are bulky and difficult to store. The tapered shape has generally presented a problem necessitating hinged sections where it has been found desirable to provide a collapsible board capable of storage in close quarters.

The present invention is directed to a sectional ironing board of generally conventional taper shape, in which the board is divided in sections, and provision made for telescopic action, whereby the smaller end sections may be nested within the larger end section. The invention is further directed to the provision of parallel telescopic guides for ironing board sections of a generally tapered shape whereby smooth telescopic nesting of the sections is possible. A further feature of the invention has to do with interlocking means for joining the sections into a smooth standard size board, and at the same time, providing means whereby the sections may be separated and telescoped compactly for storage.

The above and other novel features of the invention will appear more fully hereinafter from the following detailed description when taken in conjunction with the accompanying drawings. It is expressly understood that the drawings are employed for purposes of illustration only and are not designed as a definition of the limits of the invention, reference being had for this purpose to the appended claims.

In the drawings, wherein like reference characters indicate like parts:

Figure 1 is a perspective view of the ironing board showing the same fully extended to full length operative position;

Figure 2 is a top plan view of the ironing board in extended position, and with parts broken away showing the interlock between adjoining sections;

Figure 3 is a somewhat enlarged longitudinal sectional view taken along the line 3—3 of Figure 2, the view being broken and compressed;

Figure 4 is a transverse sectional view taken on the line 4—4 of Figure 3;

Figure 5 is a transverse fragmentary sectional view taken on the line 5—5 of Figure 3;

Figure 6 is a perspective view of a typical connection between adjoining sections showing parts thereof broken away;

Figure 7 is an exploded fragmentary perspective view of adjacent section ends shown prior to assembly;

Figure 8 is an enlarged sectional fragmentary detail, with the adjacent ends of adjoining sections pulled apart and positioned for telescopic nesting;

Figure 9 is a fragmentary side elevation, partly in section, of a support leg;

Figure 10 is an end elevational view of the leg structure of Figure 9, with parts shown in section;

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Figure 11 is an enlarged fragmentary detail of the leg hinge of Figure 9, with parts shown in section;

Figure 12 is a bottom plan view of the leg assembly folded against the under side of the larger end section of the ironing board;

Figure 13 is a side elevational view with parts in section, of a single end leg for the small end of the ironing board; and

Figure 14 is a transverse sectional view of the leg taken substantially on the line 14—14 of Figure 13.

Referring to the drawings, and particularly Figures 1—3, there is shown an ironing board comprising three sections, a large end section 20, an intermediate section 22, and a small end section 24. The large end may be supported on a pair of spaced legs 26 and 28, while the small end is supported on a single leg 30. The section 22 is adapted to be nested beneath the section 20 by a telescopic action, and the section 24 is adapted to be similarly nested within the section 22 by corresponding telescopic action.

As shown in Figure 4, the section 20 has an ironing board surface 32, with side flanges 34 and 36, which flanges are inturned as at 38 and 40, and upturned to form parallel channel members or channels 42 and 44, underneath the surface 32. The adjacent section 22 is provided with an ironing surface 45 (see Figure 3) and side flanges 46 and 48, and inturned flanges 50 and 52, with parallel channel members or channels 54 and 56 slidably disposed in telescopic relation to and lying within the channels 42 and 44. When the board is extended, as shown in Figures 2 and 3, the surface portion 45 lies in a plane with the board surface 32 of section 20, and such sections are held in smooth planar relationship by the offset tongue 58 of section 20 (see Figure 8), and the transverse pocket 59 formed to receive the tongue 58, such pocket (see Figure 7) being formed by the surface portion 45 of section 22, and a transverse strip 60 secured thereto, as by welds 62, such transverse strip having an offset 64 to provide a pocket of a thickness substantially that of the tongue 58.

In Figures 4, 5, 6, 7, and 8, the telescopic relation of adjacent section ends is shown. The flanges 50 and 52 of the section 22 are provided with longitudinally extending offsets 66 and 68, the offset being an amount twice the thickness of the metal from which the section 20 is composed. The offset has sufficient resiliency to permit the side flanges 46 and 48 of section 22 to be sprung down a distance of two thicknesses of the metal forming the ironing surface 32, or the thickness of the metal of which the section 20 is composed, plus the amount of the offset 70 which is the thickness of the metal from which section 20 is composed. Thus, the surface portion 45 of section 22 may be depressed by two thicknesses of the metal of section 22, by springing the offset flanks 66 and 68, so that the surface 45 may be slid under the tongue 58 of section 20. Reference to Figure 8 will show the normal unsprung position of the surface 45 of section 22 in dotted lines, in which position the pocket 59 would be aligned with the tongue 58, and the sprung position, in which the surface 45 lies in a plane with the under surface 72 of the offset tongue 58.

In Figure 6, the sections 20 and 22 are shown in assembled relation with the tongue 58 inserted in the pocket 59 with the channels 42 and 44 in telescopic overlapping relation to the channels 46 and 48 of section 22. The side flanges 46 and 48 are extended slantwise as at 74 and 76, whereby the channels 54 and 56 may have greater overlap with channels 44 and 42 to thereby provide adequate strength to maintain the sections 20 and 22 rigid with respect to one another when the board is extended to the position shown in Figure 6.

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The upper flanges 78 and 80 of the channels 42 and 44 are provided with end stop lugs 82 and 84, which are adapted to engage the lugs 86 and 88 of the flanges 90 and 92 of the channels 56 and 54. The spacing between lug 82 and lug 86, and lug 84 and lug 88, as shown in Figure 6, is sufficient to permit pulling the sections apart sufficiently to withdraw the tongue 58 from the recess 59, whereby the section 22 may be depressed by springing the offsets 66 and 68 to permit the section 22 to be thrust within the section 20 throughout substantially its entire length.

When the sections 20 and 22 are in assembled relation as shown in Figure 6, the tongue 58 will be seen to project through slots 94 and 96 in the side flanges 46 and 48 of the section 22, so that the flanges 34 and 36 of the section 20 may embrace the side flanges 46 and 48 of section 22.

The sections 22 and 24 are similarly joined together, the section 24 having a top surface 93, channel members or channels such as 95 telescoping within the channels 54 and 56 in substantially the same manner as the channels 54 and 56 telescopically fit within the channels 44 and 42 of section 20.

The small end section 24 has side flanges such as 97, lateral flanges 98 with offset portions 100, the offset being sufficient to provide movement of the side flanges 97 downward toward the offset 68 an amount equal to twice the thickness of the metal of which the sections are composed.

Such movement, it will be understood, is for the purpose of allowing the tongue 102 of the section 22 to ride over the surface 93 of section 24, when the tongue 102 is withdrawn from the recess 104 formed by the transverse offset strip 106. The sections 24 and 22 operate in precisely the same manner as the sections 20 and 22, it being merely necessary to bear down on section 24 to spring the lateral flanges 98 when the tongue 102 is withdrawn from the recess 104, and thereafter telescope the section 24 within the section 22. Stops in the form of lugs 108 and 110 may be provided on the upper flanges of the channel members 95 and 54 respectively, such stops limiting the sections from being pulled apart more than necessary to disengage the tongue 102.

As will be seen in Figure 2, the converging side flanges 34 and 36 of section 20, where they overlap the converging side flanges 46 and 48 of section 22, may extend parallel for a short distance as at 105, or the length of their overlap over the flanges 46 and 48. The ends of flanges 46 and 48, where overlapped as at 107 by the flanges 34 and 36, may also extend parallel for a short distance short of the end, so that flat contact engagement between the side flanges of one section and side flanges of the adjoining section, will be had. Similarly, the flanges 46 and 48, where they overlap flanges 97, as shown in Figure 2, may extend parallel for the length of the overlap.

The ironing board may be supported at one end by legs 26 and 28, having upper sections 111 and 112 pivoted in brackets 114 and 116 affixed to the flanges 38 and 40 of the section 20. A cross strut 118 may be provided to tie the sections 111 and 112 together, and knee braces such as 120 are adapted to hold the legs at right angles, or to permit folding.

The upper leg sections 111 and 112 have lower leg sections 122 and 124 adapted to pivot toward one another as indicated by the arrows A and B (see Figure 10). The pivot of each leg structure may be of the tongue and groove type having flats such as 126 and 128 adapted to limit the pivotal movement from that shown in full lines in Figure 11 to that shown in dotted lines. A sliding sleeve 130 on each leg may be retracted to permit folding, and when telescoped over the joint and resting on a pin 132 serves to hold the jointed leg rigidly straight.

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In Figure 12, the leg is shown folded against the under side of the section 20.

The section 24 is provided with a single leg pivoted centrally of the section as at 132, such leg being formed of a rod 134 and tube 136 telescopically arranged. The rod has two annular grooves 138 and 140 into which a lock spring 142 may project to hold the rod retracted or extended. The leg is provided with a knee brace 144. The leg, when the rod is retracted, is folded and nested between the channels of the section 24, and when all the sections are telescoped together to provide a compact board readily stored, such leg lies along the center line between the telescoped flanges of the three sections and beneath the legs 111 and 112, as indicated in Figure 12.

While a single embodiment of the invention has been illustrated and described, it is to be understood that the invention is not limited thereto. As various changes in the construction and arrangement may be made without departing from the spirit of the invention, as will be apparent to those skilled in the art, reference will be had to the appended claims for a definition of the limits of the invention.

What is claimed is:

1. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface and converging side flanges, and telescopic parallel channel members oppositely disposed with respect to one another, said channel members being located inwardly of said side flanges and being connected thereto along the lower edges of the respective flanges.

2. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface and side flanges converging in respect to each other, and telescopic parallel channel members oppositely disposed with respect to one another, said channel members being located inwardly of said side flanges and being connected thereto along the lower edges of the respective flanges, said channel members being longer than the ironing surface, and the adjacent ends of said sections having a transverse tongue and recess connection adapted to align said sections when extended to form an ironing board.

3. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface of gradually reducing width and converging side flanges, and telescopic parallel flanged channel members oppositely disposed with respect to one another, said channel members being disposed inwardly of said side flanges and being connected thereto, said channel members being connected to the lower edges of said side flanges respectively by laterally extending channel member flanges, and being of a length greater than the ironing surface of the respective sections, each of said sections being successively of lesser width and the channel members of said sections being of successively decreasing cross-section respectively.

4. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface of gradually reducing width and converging side flanges, and telescopic parallel flanged channel members oppositely disposed with respect to one another, said channel members being disposed inwardly of said side flanges, and being connected thereto, said channel members being connected to the lower edges of said side flanges respectively by laterally extending channel member flanges, and being of a length greater than the ironing surface of the respective section, each of said sections being successively of lesser width and the channel members of said sections being of successively decreasing

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ing cross-section respectively, the adjacent ends of the ironing surface portion of said sections having a tongue and recess connection, said tongue being offset by the thickness of the material of said surface portion and being on the end of the larger of the adjacent sections, and said recess being formed on the large end of the smaller section and being composed of the surface thereof and a transverse offset member, offset by the thickness of said tongue.

5. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface of gradually reducing width and converging side flanges, and telescopic parallel channel members oppositely disposed with respect to one another, said channel members being disposed inwardly of said side flanges, and being connected thereto, said channel member being connected to the lower edges of said side flanges respectively by laterally extending channel member flanges, and being of a length greater than the ironing surface of the respective section, each of said sections being successively of lesser width and the channel members of said sections being of successively decreasing cross-section respectively, the adjacent ends of the ironing surface portion of said sections having a tongue and recess connection, said tongue being offset by the thickness of the material of said surface portion and being on the end of the larger of the adjacent sections, and said recess being formed on the large end of the smaller section and being composed of the surface thereof and a transverse offset member, offset by the thickness of said tongue, said end section of greater width having spaced legs hinged to said laterally extending flanges, each of said legs being hinged intermediate of their length and each having portions foldable toward the other, and separate independent means for rigidly securing each of said legs including the foldable portions thereof in extended full length position.

6. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface of gradually reducing width and converging side flanges, and telescopic parallel channel members oppositely disposed with respect to one another, said channel members being disposed inwardly of said side flanges, and being connected thereto, said channel members being connected to the lower edges of said side flanges respectively by laterally extending channel member flanges, and being of a length greater than the ironing surface of the respective section, each of said sections being successively of lesser width and the channel members of said sections being of successively decreasing cross-section respectively, the adjacent ends of the ironing surface portion of said sections having a tongue and recess connection, said tongue being offset by the thickness of the material of said surface portion and being on the end of the larger of the adjacent sections, and said recess being formed on the large end of the smaller section and being composed of the surface thereof and a transverse offset member, offset by the thickness of said tongue, said end section of greater width having spaced legs hinged to said laterally extending flanges, each of said legs being hinged intermediate of their length and each having portions foldable toward the other, separate independent means for rigidly securing each of said legs including the foldable portions thereof in extended full length position, and a leg composed of telescopic sec-

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tions hinged to the section of lesser width and to the under side of the ironing surface for nesting between the channel members thereof.

7. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface and converging side flanges, and telescopic parallel channel members having upper and lower flanges oppositely disposed with respect to one another, said channel members being located inwardly of said side flanges and being connected thereto along the lower edges of the respective side flanges by the lower flanges of said channel members, said lower flange being of resilient material, said channel members being longer than the ironing surface, and the adjacent ends of said sections having an offset transverse tongue and the other having means forming a recess to receive said tongue, and the lower flange of each of said channel members comprising means for resiliently connecting said side flanges to the respective channel members, whereby the channel members of one of said sections may be sprung to a position closer to the ironing surface thereof, to permit the ironing surface of said section to clear beneath the ironing surface of the other section when telescoping the one section within the other.

8. An extensible ironing board comprising a plurality of ironing board sections adapted to nest in respect to one another, each of said sections having an ironing surface and converging side flanges, and telescopic parallel channel members having upper and lower flanges oppositely disposed with respect to one another, said channel members being located inwardly of said side flanges and being connected thereto along the lower edges of the respective side flanges by the lower flanges of said channel members, said lower flange being of resilient material, said channel members being longer than the ironing surface, and the adjacent ends of said sections having an offset transverse tongue and the other having means forming a recess to receive said tongue, the lower flange of each of said channel members comprising means for resiliently connecting said side flanges to the respective channel members, whereby the channel members of one of said sections may be sprung to a position closer to the ironing surface thereof, to permit the ironing surface of said section to clear beneath the ironing surface of the other section when telescoping the one section within the other, a pair of spaced legs hinged upon the connecting channel member of an end section for supporting said section, and a single leg hinged upon the other end section between said connecting channel members.

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