United States Patent [19]

Busby

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[54] **SWIMMING AID**

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[52] **U.S. Cl.** ..... **9/342**; 9/310 J

[51] **Int. Cl.**[2] **B63C 9/08**

[58] **Field of Search** ..... 9/342, 345, 333, 336, 338, 9/339, 310 J

[56] **References Cited**

UNITED STATES PATENTS

1,252,842	1/1918	Richardson	9/338
1,301,831	4/1919	Gain	9/339
1,552,603	9/1925	Hawks	9/338 X
3,181,183	5/1965	Allen	9/333

FOREIGN PATENTS OR APPLICATIONS

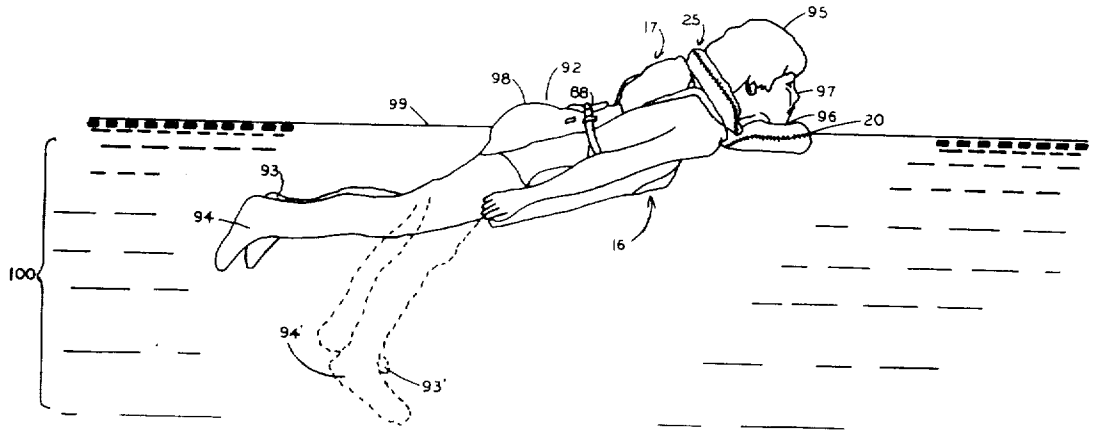
900,830	7/1962	United Kingdom	9/338

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Assistant Examiner—Gregory W. O'Connor
Attorney, Agent, or Firm—Ely Silverman

[57] **ABSTRACT**

A combination of flotation elements enveloped in front and back panels of a vest-like garment for attachment to a child to expedite learning to swim and buoyantly support such child while so doing. The flotation units and panels are arrayed to tip head of wearer while in prone position partly into water while supporting the chin of the wearer to condition and expedite learning proper prone swimming positioning. The apparatus also buoyantly supports the wearer in upright position in water and, further, the buoyant units are arranged to condition and expedite a neophyte's accommodation to the supine position in water for swimming and floating.

7 Claims, 12 Drawing Figures



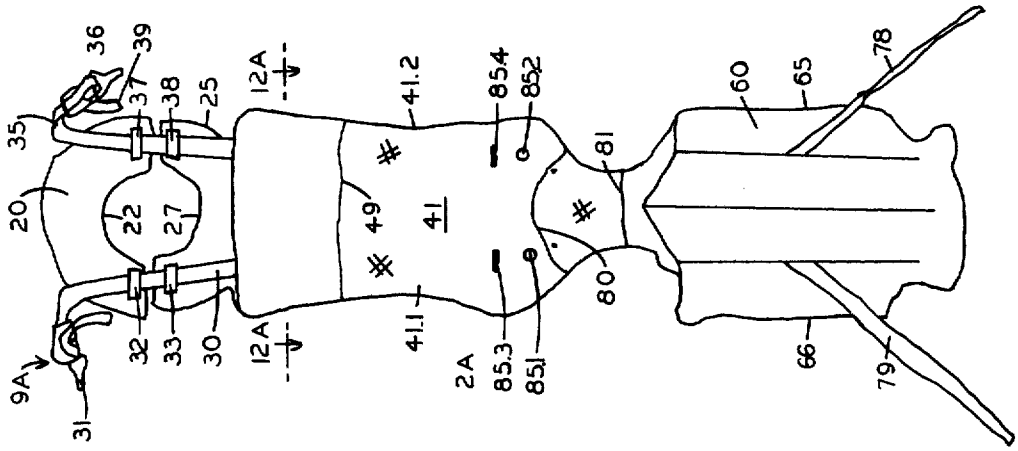


FIG.3

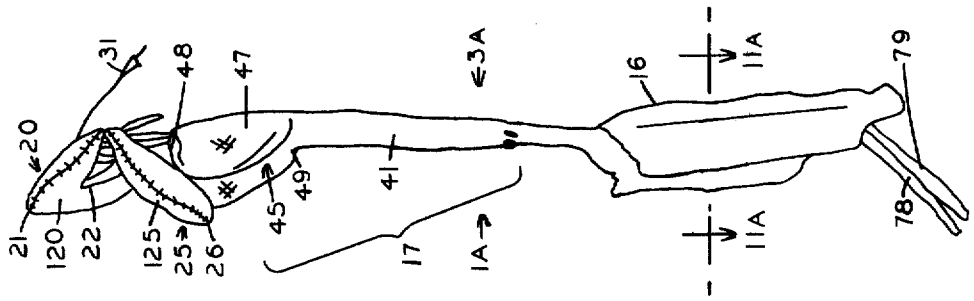


FIG.2

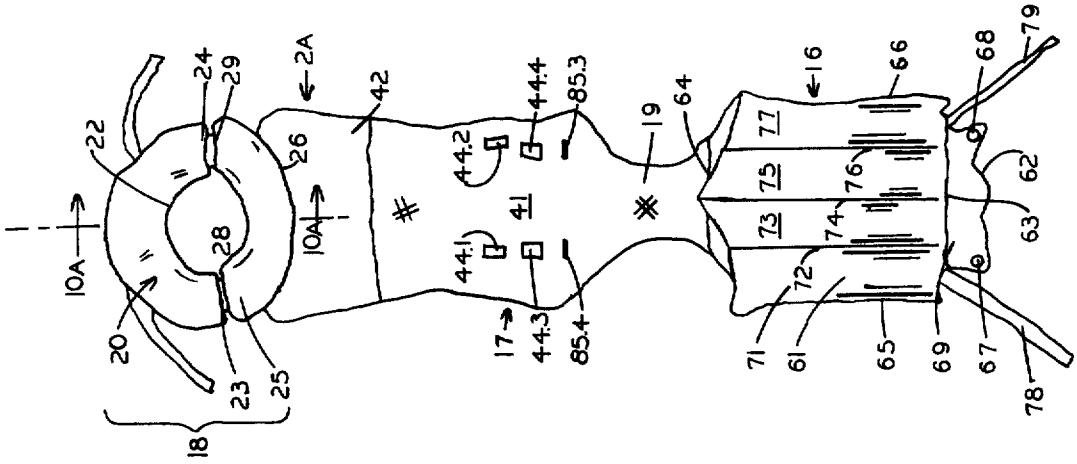


FIG.1

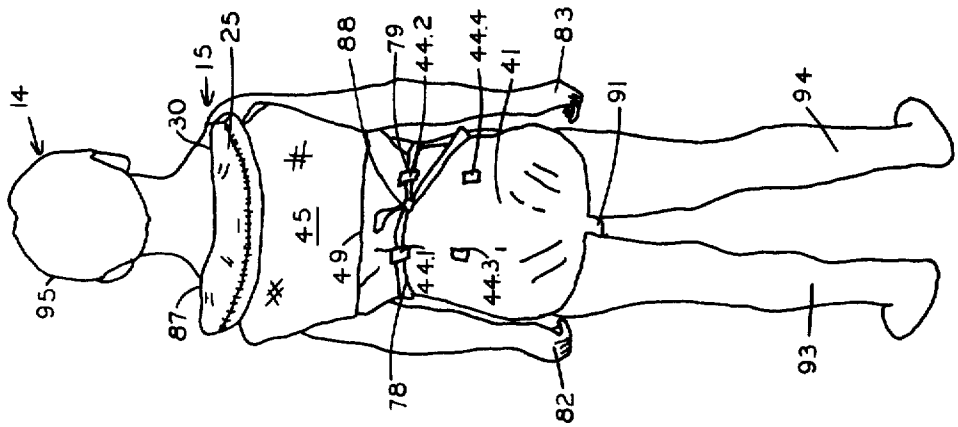


FIG6

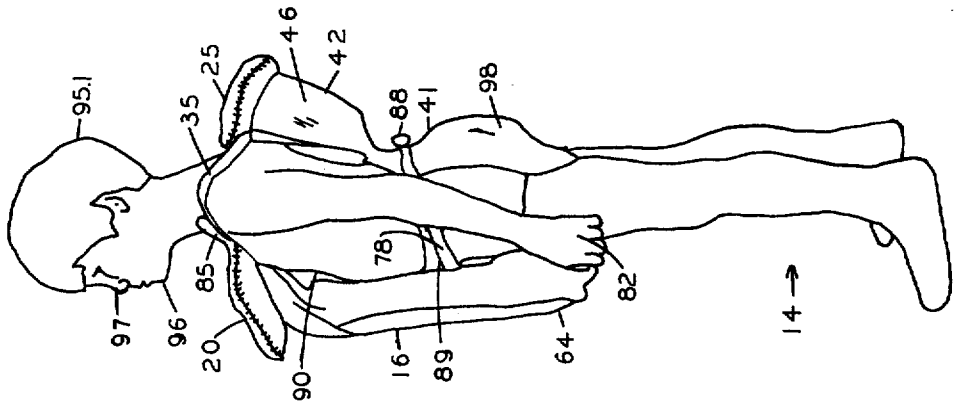


FIG.5

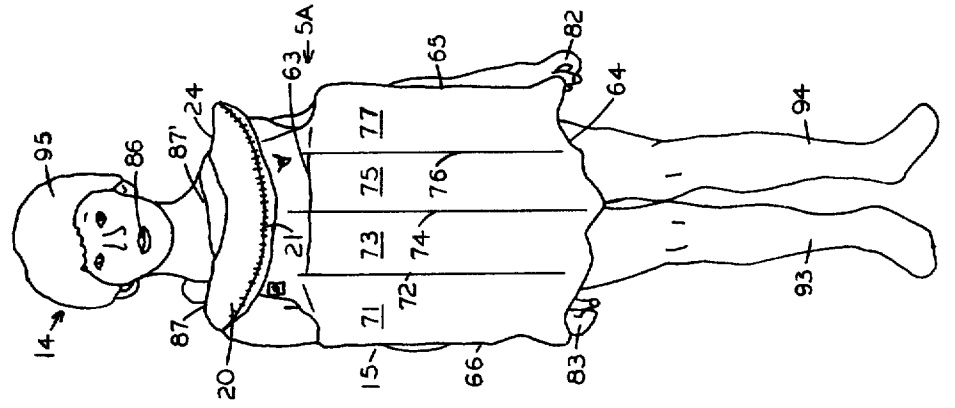


FIG.4

FIG. 12

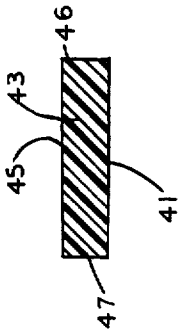


FIG. 7

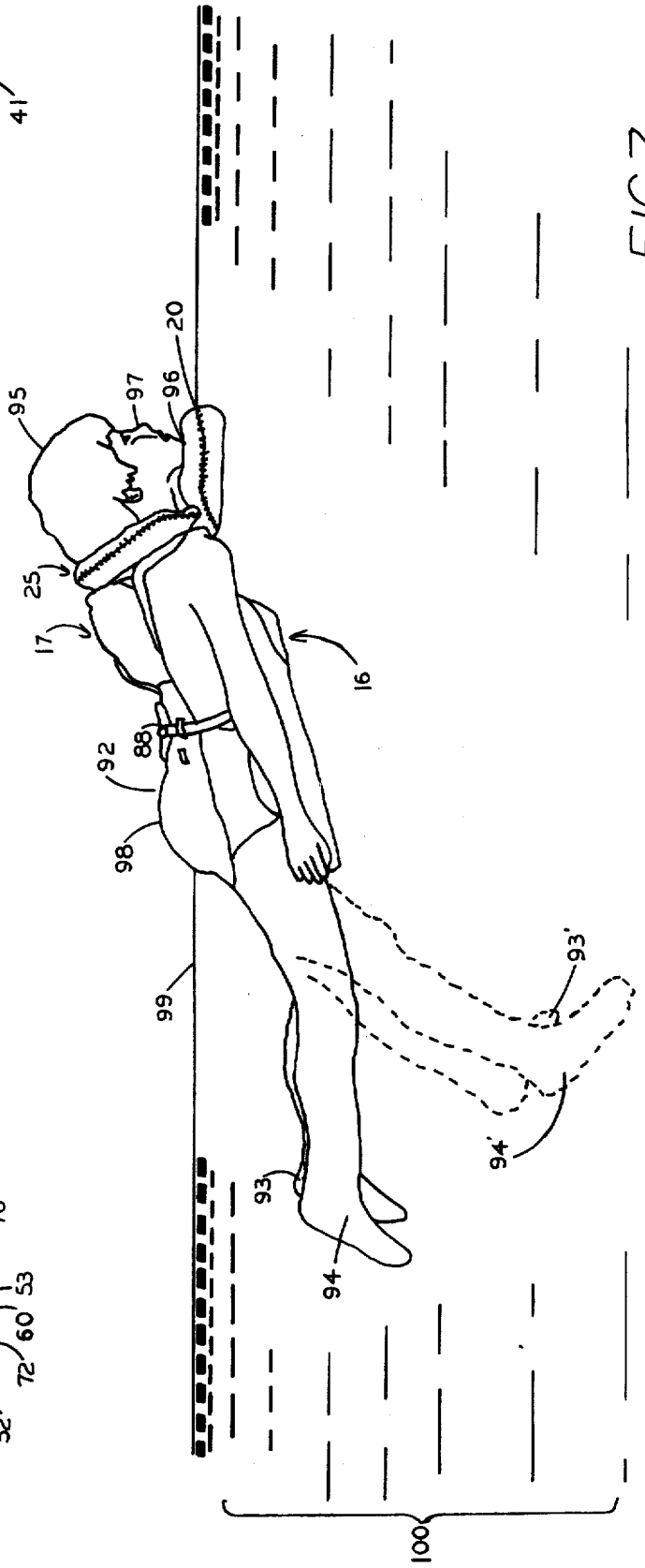


FIG. 11

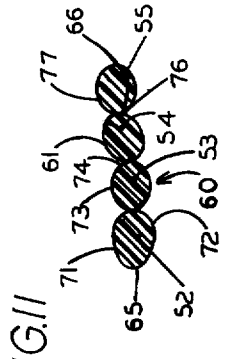


FIG. 10

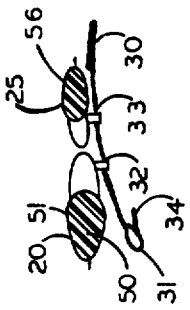


FIG. 8

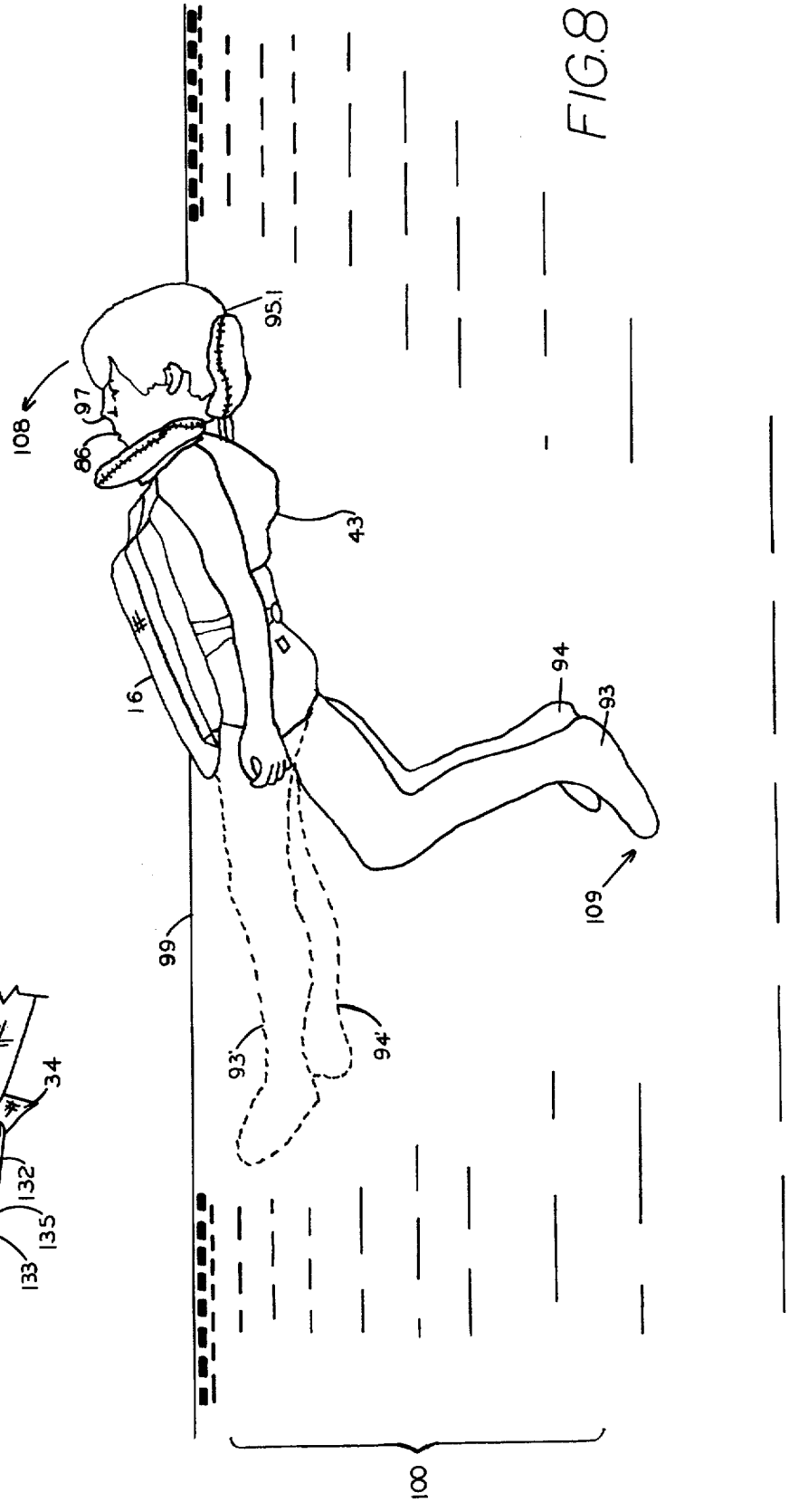
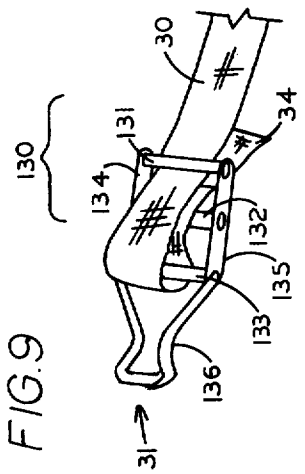


FIG. 9



SWIMMING AID

BACKGROUND OF THE INVENTION

1. The Field of the Invention

This invention relates to buoyant body supporting devices for use in swimming.

2. Description of the Prior Art

The prior art has provided many buoyant apparatuses to support a non-swimmer in the water such as conventional life-saving apparatuses; however, such apparatus have hindered the neophyte swimmer from assuming a proper position for swimming and none have provided an apparatus that, while providing buoyant support, aids in the learner readily and easily achieving and maintaining proper position for swimming in prone position and also habituates the neophyte swimmer to a supine position in the water.

An object of this invention is to provide apparatus that not only buoyantly supports a swimmer or a non-swimmer in the water but also assists the wearer of such apparatus to achieve and maintain proper position for swimming in prone or supine position.

SUMMARY OF THE INVENTION

Buoyant elements are located in a harness to be fastened in adjustable manner at front and rear of torso of a wearer thereof to provide, in operative use of the apparatus, buoyant support to the wearer in the front of the swimmer at hips and chin; and, at his rear, above his waist and below his head. The head supporting element for use in the prone position is pivotally located so as to not interfere with the wearer in supine position and the head supporting element for use in the supine position is pivotally located so as to not interfere with the wearer in prone position. The torso supporting elements are located and held to synergistically cooperate with the buoyancy of the portions of the wearer's body to permit that, in prone position of the wearer, the wearer may control the depth to which his chin is forced into the water while supported on a buoyant element of the harness and, in supine position, the wearer may control the depth of the back of his upwardly facing head while his head is supported on other buoyant harness elements.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exterior view of the overall apparatus **15** according to this invention; arrow **1A** on FIG. **2** indicates the direction of view shown in FIG. **1.**

FIG. **2** is a view from the right side, along the direction of arrow **2A** of FIGS. **1** and **3,** of apparatus **15** of FIG. **1.**

FIG. **3** is a view of the interior view of the apparatus **15;** this view is taken along the direction of the arrow **3A** of FIG. **2.**

FIG. **4** is a front view of the apparatus **15** worn by a neophyte swimmer **14.**

FIG. **5** is a side view taken along the direction of the arrow **5A** of FIG. **4** of the apparatus **15** as worn by a swimmer **14.**

FIG. **6** is a rear view of the apparatus **15** as worn by the neophyte swimmer **14.** The directions "left" and "right" herebelow set forth refer to the directions as shown in FIG. **6,** that is, left and right as observed by the wearer **14** of the apparatus **15** except when reference is made to left and right as shown in a particular figure.

FIG. **7** shows the wearer or neophyte swimmer **14** in prone position using the apparatus **15** while in a body of water **100.** The dashed lines show an alternate position of the legs of the wearer **14.**

FIG. **8** shows the same swimmer **14** wearing the apparatus **15** in an upwardly facing position in a body of water **100** and indicates in dashed lines an alternate extended position of the legs of the wearer.

All figures are drawn to scale and are drawn to the same scale for the apparatus shown in FIGS. **1–3,** for the erect figure to demonstrate the relations of the parts of the apparatus in FIGS. **4–6,** and in FIGS. **7** and **8** to demonstrate the operation and use of the apparatus.

FIG. **9** is an enlarged detail of the overall buckle shown in zone **9A** of FIG. **3.**

FIG. **10** is an enlarged cross-section along section **10A—10A** of FIG. **1.**

FIG. **11** is a horizontal transverse cross-section along section **11A—11A** of FIG. **2.**

FIG. **12** is a transverse section along section **12A—12A** of FIG. **3.**

Dimensions of the exemplary embodiment **15** are set out in Table I.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The overall apparatus **15** comprises a front assembly **16,** a rear assembly **17,** a neck assembly **18** and a crotch section **19** in operative combination.

The collar assembly **18** comprises a front C-shaped unit **20** and a rear C-shaped unit **25.** The front C-shaped unit **20** has a circularly curved peripheral edge **21** and an interior circularly curved portion **22** concentric with edge **21** and a straight diametral left edge **23** and a straight diametral right edge **24.** The rear unit **25** has a circularly curved outer or peripheral edge **26** and a circularly curved inner edge **27** concentric therewith and a straight diametral left edge **28** and a straight diametral right edge **29.**

Each of units **20** and **25** is ovoid in transverse cross-section as along section **10A—10A** of FIG. **1** and is composed of a central flotation body core (**50** in **20, 56** in **25**) of water-proof material such as rigid closed cell urethane foam of low density (of about **17** ounces per cubic foot) and a denim fabric cover as is used for panels **41, 42, 60** and **61.** The shape of the core is stable with the foam being of negligible water absorption and tough, not brittle, with the denim fabric providing necessary surface wear resistance and flexible connection between enclosed foam bodies.

The rear assembly **17** comprises a sturdy, water-stable flexible rear fabric panel **41** and a rear float compartment **42** firmly attached thereto. The panel **41** is rectangular in shape and flexible. The compartment **42** is trapezoidal in transverse vertical section with outline as shown in FIG. **5** and FIG. **2.** Compartment **42** is composed of an outer or rear compartment fabric panel **45** and left and right side compartment fabric panels **46** and **47** and a top fabric panel **48.** The bottom edge of the rear panel **45** is attached to the panel **41** along a seam **49.** A float element **43** — a closed cell foam like **50,** is held within the compartment **42.** The left and right edges of the side panels (**46** and **47**) are firmly attached at their rear to the left and right side edges of the rear panel **45** and to the side edges of the front panel **41** of the rear assembly **17.** The top of the

panel 41 is attached to the front edge of the top panel 48; the rear edge of panel 48 and the top edge of the rear panel 45 are firmly sewn to each other.

Belt loops 44.1 and 44.2 are provided on exterior surface of panel 41 below seam 49 and at a distance from crotch equal to distance of straps 78 and 79 therefrom. Loops 44.1 and 44.2 provide for locating the belts 78 and 79 and additional belt loops 44.3 and 44.4 are provided below the loops 44.1 and 44.2 on either side of a center line of the panel 41.

A right neck strap 30 is firmly attached at one fixed end thereof to the top of the right-hand edge of the panel 41 generally near to the right-hand edge thereof, as shown in FIG. 3, i.e., spaced away from such right-hand edge by about one-fourth the distance from the right-hand edge 41.1 to the left-hand edge 41.2 of the panel 41. The strap 30 has an adjustable overall buckle clasp 31 attached thereto near to the free end thereof and movable up and down along the length thereof. A front right loop 32 is attached to the cover of front collar unit 20 near to the right edge thereof and the strap 30 passes through that loop. A rear right loop 33 is attached to the cover of collar unit 25 of the neck assembly 18 near to the right edge 28 of that rear collar unit 25.

A left neck strap 35 is firmly attached at one fixed end thereof to the top of the left-hand edge of the panel 41 generally near to the left-hand edge thereof, as shown in FIG. 3, i.e., spaced away from such left-hand edge by about one-fourth the distance from the left-hand edge 41.2 to the right-hand edge 41.1 of the panel 41. The strap 35 has an adjustable overall buckle clasp 36 attached thereto near to the free end thereof and movable up and down along the length thereof. A front left loop 37 is attached to the cover of front collar unit 20 near to the left edge thereof and the strap 35 passes through that loop. A rear left loop 38 is attached to the cover of collar unit 25 of the neck assembly 18 near to the left edge 29 of that rear collar unit 25. Straps 30 and 35 are sturdy cotton bands.

The front assembly 16 comprises an inner front panel 60 and an outer front panel 61. Panels 60 and 61 are flexible, strong cotton fabric as denim from which jeans are made, 8 ounces per yard, 45 inches wide. Panels 60 and 61 are joined at the top edge 63 of the front panel and at the bottom edge 64 of the front panel and at the left and right edges (65 and 66) of the front panel by strong sewn seams. The front panel 60 extends beyond and above (above in the position of the wearer, as 14, shown in FIGS. 4–6, although shown as below in FIGS. 1–3) the upper edge 62 of the panel 60. A spacer panel zone 69 between the upper edge 63 of the outer front panel 61 and the inner front panel 60 provides a base for location of left strap button 67 and right strap button 68 to which the left clasp 36 and right clasp 31 are respectively attached.

The front panel 61 is provided with parallel vertical seams 72, 74, 76 attached to provide for front vertical pockets 71, 73, 75 and 77 located in series — pocket 71 between the left panel edge 65 and seam 72; pocket 73 between seams 72 and 74; pocket 75 between seams 74 and 76; pocket 77 between seam 76 and the right edge of the panel 71.

Each of the pockets 71, 73, 75, 77 is filled with a rigid waterproof low density flotation body as 52, 53, 54, 55, respectively, of the same composition and physical properties as core 50 in unit 20.

Crotch portion 19 is a flexible cloth panel of denim as panels 60 and 41 and connects the bottom edge 80 of panel 41 to the bottom edge 81 of panel 61. Buttons 85.1 and 85.2 and button holes 86.1 and 86.2 provide for adjustment of length of the crotch portion 19.

When apparatus 15 is worn by its wearer, such as a neophyte swimmer 14, as shown in FIGS. 4–6, the front assembly 16 is positioned and supported on shoulders 87 of the wearer 14 by the straps 30 and 35. The straps 30 and 35 are attached by the buckles 31 and 36 to the buttons 67 and 68 of zone 69 and serve to position and support the front assembly 16 with the lower edge (in FIG. 5) 64 of panel 61 at the level of the base of the fingers of the wearer 14 while the top edge 63 of the front panel 61 extends to a level above the waist yet below the armpit of the wearer 14 and usually at bottom of the sternum 90. The rear float compartment 42 is located with its bottom — seam 49 — above the waist of the wearer and extends up to 1 to 2 inches below the level of the top of the wearer's shoulder blades but below the level of his collarbone. The bands 78 and 79 are joined at a firm knot 88 at the rear of the panel 41. The left edge 65 and the right edge 66 of the panel 61 extend to a greater width than the body of the wearer and the vertical seams 72, 74 and 76 are arranged to be positioned, as shown in FIG. 4, so that the lateral pockets, as 71 and 76, bend about the seams 72 and 76, respectively, so that the body of the wearer is cradled therebetween in the floating position shown in FIG. 7.

In the erect walking position of the wearer, as shown in FIGS. 4–6, the front collar unit 20 rests on top of the assembly 16 and the rear unit 25 rests on top of the compartment 42. This arrangement provides for freedom of motion of the wearer 14 in that he (or she) may turn his (or her) neck from one side to the other yet his (or her) area of vision is not interferred with by the apparatus and allows mobility of the wearer with this apparatus so that the neophyte swimmer may comfortably wear the apparatus not only when he (or she) is in the water but also when outside of the water and is not bothered with removal thereof between periods of time during which he (or she) is in the water. While knot 88 is manually releasable, the left body strap 78 and right body strap 79 are each attached at a fixed end thereof to the back surface of panel 60 and are formed of sturdy, wide strong cotton straps.

The straps 78 and 79 being firmly attached around the waist of the wearer prevent shifting of the front float compartment portions so that the pocketed floats 52–55 of front assembly 16 do not shift from the position thereof shown in FIGS. 4 and 5 or 7 and 8.

The length of each of pockets 71, 73, 75 and 77, as well as the width (see FIG. 11), is filled with core material thereof for flotation of the wearer. The pockets extend from their upper edge 63 located below the wearer's armpit and preferably from immediately below the bottom of the lower edge of his (or her) sternum 90 to a lower edge 64 located below the crotch 91 (or lowest portion of pubic bone of hip) by a distance which is the vertical distance past the crotch 91 at which the distal end of the wearer's palms are located when the arms of the wearer are in their extended vertical position and the wearer is standing in upright position, as shown in FIGS. 4–6. The position of the cores as 52–55 (in each of pockets 71, 73, 75 and 77) and 43 (in compartment 42) relative to the shoulders and crotch and hip bones of the wearer 14, are determined by the straps 30 and

35 in cooperation with the buckles 31 and 36 which allow for adjusting the effective length of each such strap and buckle from attachment of fixed end at panel 41 to the buttons 78 and 79.

The center of gravity and buoyancy of the buoyant material as 52–55 in the pockets 71, 73, 75, 77 is substantially at the same vertical height or level (in the position of wearer shown in FIGS. 4–6) as the anterior iliac spines of the hip bone of the wearer (89 on the left side) and slightly below the level of the navel of such wearer. The position of the buoyant material is maintained by straps 78 and 79 in the operative position of the apparatus 15 shown in FIGS. 7 and 8 with crotch 19.

As shown in FIG. 7 for the prone position of wearer 14 with apparatus 15 operatively attached thereto and in the water 100, the front collar unit 20 pivots about the connection of loops 32 and 37 to straps 30 and 31 and extends forward to a position under the chin 96 of the wearer. Such positioning of the collar unit provides for some vertical support of the chin of the wearer and, to a definite but limited degree, keeps the nose 97 and nostrils of the prone wearer 14 comfortably above the top level 99 of the body of water 100. Accordingly, apparatus 15 provides that, on the proper positioning of the legs, the wearer's nose is kept above the level 99 of the water 20 although the botton of the chin 96 may not be. While support is provided at unit 20 via the prone wearer's chin 96, the orientation of the swimmer's body 92 and location of the head 95 relative to water level 99 are properly maintained not only by the flotation action and support of the assembly 16 but also by the extension of the legs 93 and 94 which serves to orient the body 92 of the swimmer 14 while keeping his nose 97 above water level 99. Thereby, the apparatus 15 provides for the orientation of the swimmer in the position shown in FIG. 7 with head 95 in the water but with stable support of chin 96 on front collar unit 20 when the legs of the prone wearer are maintained in extended position, as shown in full lines in FIG. 7.

In the position of parts shown in FIG. 7, the wearer's chin 96 rests on upper surface 120, between edges 21 and 22, of collar unit 20. In such position (full line) of the legs 93 and 94, the wearer's torso is supported (like a lever on a fulcrum) upon the buoyant float elements in the pockets 71, 73, 75 and 77 located so as to push upward on the hip bone area of the wearer in prone position; however, if the prone wearer's legs 93 and 94 are moved to the position therefor shown in dashed lines (93' and 94' in FIG. 7), the distribution of the weight of the portions of the swimmer's body is such that the swimmer's head 95 is automatically raised from the water. This action conditions the wearer to keep his legs extended and trains the wearer to swim by stably and reliably supporting him (or her) in such a manner that avoids that he (or she) be afraid of the water by habituating the child to comfortably permit some immersion of the head while assuming a posture that expedites learning to swim.

A characteristic of this apparatus is that the rear or dorsal extremity 98 of the buttocks of the prone swimmer 14 as well as the nose 97 is maintained above the top level 99 of the body of water 100 by keeping the legs extended, as shown in FIG. 7.

In the position shown in FIG. 8, with wearer in supine position, the rear unit 25 pivots about its loops 33 and 38 and is located below the operator's head and provides support to the head of the wearer and the rear compartment 42, which is above the waist, provides a substantial buoyant support to the chest of the wearer.

The collar unit 25, in position of FIG. 8, rotates around its attachment by the loops 33 and 38 to straps 30 and 35 to position of FIG. 8 from position of FIG. 5 and surface 110 (between edges 26 and 27) of collar unit 25 then (in FIG. 8 position) extends to below the rear portion 95.1 of the wearer's head because the width of collar unit surface 125, like collar unit surface 120, is sufficiently large and properly spaced away from the shoulder of the wearer for such location by virtue of the attachment of the loops of such unit (32 and 37 for unit 20, loop 33 and 38 for unit 25) to the adjustable straps 30 and 35 and therethrough to the panels 60 and 41 and by the lengthwise extension of the lateral portions of each such C-shaped collar unit 25 to support the wearer's head with nose 97 and mouth 86 well above water level 99 in position of parts shown in FIG. 8.

Because of the position of the buoyant core 43 above (as shown in FIGS. 4–6) the waist of the wearer, the position and the weight of the wearer's legs serve to rotate the wearer's body about a horizontal axis transverse to his height. In the full line position shown in FIG. 8, the weight and position of the wearer's bent legs pivot the wearer's body about its buoyant support on mass 43 so as to slightly but definitely and controllably and gradually lower the wearer's head in the body of water 100 while stably but adequately partially supported by collar unit 25 with the wearer's face directed upwardly and with wearer's nose and mouth clearly above the water level (by about 2 inches) in the particular example herein described.

When the wearer's legs are extended into a position as in dashed lines in FIG. 8 wherein the knees are straight, and the thigh bones approximately parallel to the plane of the wearer's collarbone 85 and the anterior superior iliac spines of the hip bones, the head and shoulders of the wearer move counterclockwise (as shown by arrow 108 of FIG. 8) from the solid line position of FIG. 8 to an upright position of the wearer with the wearer's head substantially vertically above his (or her) hips and feet.

In the upright position of the wearer 14, the body of the wearer 14 is partially supported by the rigid buoyant units 43 and 52, 53, 54 and 55 held in the fabric compartments therefor (42 and pockets 71, 73, 75 and 77) which compartments are joined by the flexible crotch panel 19 therebetween and firmly yet flexibly joined thereto. This partial support by the buoyant units of the wearer 14 in the upright position in water is adequate to hold the wearer's entire head and chin above water level 99.

While, when the young swimmer has his legs extended, the entire body is rotated counterclockwise about a horizontal axis as above discussed, when the legs 93 and 94 of wearer 14 are slowly moved to the position shown in the solid line in FIG. 8, the head of the young swimmer is slowly moved clockwise into the water and extends more deeply therein. Thereby, by moving his (or her) legs in the clockwise direction, as shown by the arrow 103 in FIG. 8, the young swimmer may gradually and with confidence increase the depth of immersion of his (or her) head and is then, as shown in FIG. 8, comfortably supported in the water with eyes, chin and nose above water: by extending legs to

position shown in dashed lines, the wearer quickly achieves a substantially upright position in the water free of any concern of his (or her) head being immersed.

This action of apparatus **15** on wearer **14** thus serves to automatically condition or teach the young wearer **14** to become safely and gradually accustomed and habituated to keeping his (or her) head in water when facing upwardlly (because such wearer is readily able to easily and quickly move to a comfortably safe upright position with head and nose completely out of water) and, thereby, the wearer is conditioned to float face-up with confidence and learn backstroke as well as floating.

The denim fabric used for panels **41, 42, 60** and **61** and straps **30** and **35** is a twill with **20** × 50 threads to the inch, each thread a multifilament thread about **1/64** inch in diameter.

Other quick-drying cloth that is flexible and sufficiently soft to be not chafing to the wearer's skin and dimensionally stably in water under the light stresses applied thereto in the apparatus **15** may be used in place of the particular cloth described herein for the panels that serves as holders for the buoyant support members **50, 56, 43, 52, 53, 54** and **55.**

The buckles **31** and **36** are identical in structure so only **31** is here described. Buckle **31** comprises a frame **130** and a loop **136.** Frame **130** comprises a top bar **131,** a middle bar **132** and a bottom bar **133,** each firmly attached to side bars **134** and **135.** The bottom loop **136** is attached firmly to ends of bars **134** and **135.** Strap **30** passes under bar **131** and around bar **133** and over bar **132** and is adjustably yet firmly locked in place by friction with strap end portion **34,** as shown in FIG. **9.** This structure of buckles **31** and **36** provides for adjustment of effective length of strap **30** (as does buckle **36** for strap **35**) to locate the upper edges of panels **41** and **60** relative to waist and hip bone of wearer **14** to provide positioning action of apparatus **14** on wearer **14** as above described. Frame **130** is rigid and rigidly joined to rigid bars **131, 132, 133** and rigid loop **136.**

In a particular exemplary embodiment of apparatus **15** shown in the drawings, dimensions are as in Table I hereinbelow.

TABLE I

DIMENSIONS OF EMBODIMENT 15

Assembly 16:	Side edge 65 to side edge 66	13½"
	Bottom edge 64 to top edge 63 (at pocket 73)	14"
	Pocket 71, thickness front to rear	3"
	Seams 72–74 (pocket 73 empty)	5"
	Edge 62-edge 64 along seam 74	19"
Compartment 42:	Width (panel 46 to 47) at top	12"
	Maximum thickness (41 to 45)	3"
	Height (top of panel 48 to seam 49)	6"
Collar Unit 20:	Edge 21 width (left edge 24 to right edge of unit 23) (and 25 same as 20)	12"
	Width of surface 120 (between edges 21 and 22) and surface 125 (between edges 26 and 27)	3¾"
	Thickness (surface 120 to opposite side thereof)	1½"
Wearer 14:	Height, shoulder 78 to bottom of feet	42"
	Height, top of head to bottom of feet	52"
	Height, crotch to shoulder	19"
Apparatus 15	Overall Weight	1½ lbs.

I claim:

1. A swimming apparatus comprising, in operative combination, a harness for attachment to the torso of a human wearer and an array of buoyant members, said buoyant members operatively held by said harness on the body of said wearer,

1. said array of buoyant members comprising a first lower torso buoyant support member, a second rear upper torso buoyant support member, a first rigid front buoyant head support member, and a second rigid rear buoyant head support member, said buoyant members each comprising a rigid waterproof low density flotation body;
2. said harness comprising
   a. a first front lower torso buoyant support member holder and said first front lower torso buoyant support member held thereby,
   b. a second rear upper torso buoyant support member holder and said second rear upper torso buoyant support member held thereby,
   c. a first front buoyant head support member holder with said first front buoyant head support member held thereby,
   d. a second rear buoyant head support member holder with said second rear buoyant head support member held thereby,
   e. a first lower connector member joining the bottom portions of said first front and second rear buoyant torso support member holders, and
   f. a pair of second upper connector members, each member of such pair operatively joined to a top portion of the first front lower torso buoyant support member holder and to a top portion of the second rear upper torso buoyant support member holder,
   g. said harness extending downward from said upper connector member adjacent said wearer's neck to said lower connector member adjacent the crotch of said wearer when the wearer is in an erect position, and wherein
   h. said first front buoyant head support member holder is movably yet firmly connected to both members of said pair of said second upper connector members by spaced apart front movable head support holder connecting means operatively connected to spaced apart portions of said first front buoyant head support member holder, and each said front buoyant head support member holder extends from said front movable head support holder connecting means in a direction transverse to a line connecting the said front movable head support holder connecting means where connected to said second upper connector members, whereby the front head support mem-

ber holder extends to contact and support the wearer's chin when said wearer is in prone position in water,

i. said second rear buoyant head support member holder is movably yet firmly connected to both members of said second upper connector members by spaced apart rear movable head support holder connecting means operatively connected to spaced apart portions of said second rear buoyant head support member holder, and said rear buoyant head support member holder extends from said movable rear buoyant head support holder connecting means in a direction transverse to a line connecting the said rear movable head support holder connecting means where connected to said second upper connector members, whereby the rear buoyant head support member holder extends to contact and support the rear of wearer's head when said wearer is in water in supine position; and

3. said array of buoyant members arranged so that

a. said first rigid front lower torso buoyant support member held by said first front lower torso buoyant support member holder extends from the bottom thereof for only a portion of the length of said first front lower torso buoyant support member holder from its top towards its bottom and said lower torso buoyant support member having a center of buoyancy located closer to the bottom of said first front lower torso buoyant support member holder than to its top whereby to be applied against the front of the hips of the wearer when in prone position, and

b. said second rear upper torso buoyant support member held by said second rear upper torso buoyant support member holder extends from the top thereof for only a portion of the length of said second rear upper torso buoyant support member holder towards the bottom thereof, with the lower extremity of said rear upper torso buoyant support member above the center of buoyancy of the front lower torso buoyant support member when wearer is in erect position.

2. Apparatus as in claim **1** wherein one of said movable buoyant head support member holder connecting means comprises rigid buoyant portions.

3. Apparatus as in claim **1** wherein said first front lower torso buoyant support member holder is a flexible fabric panel and comprises a plurality of adjacent pockets, each extending from bottom toward top of said holder and said plurality of pockets extends across the width of said holder.

4. Apparatus as in claim **3** comprising belt means attached to said first front lower torso buoyant support member holder and belt holder means attached to said second buoyant rear upper torso support member holder, said belt means adapted to be held by said belt holder means.

5. Apparatus as in claim **1** wherein said first lower connector member joining the bottom portions of said first front and second rear buoyant member holders is a flexible fabric panel and comprises means for adjusting the length thereof.

6. Apparatus as in claim **5** wherein each member of said pair of second upper connector members is flexible and comprises means for adjusting the length thereof and a releasable yet firm attachment means to a top portion of said first front lower torso buoyant support member holder.

7. Apparatus as in claim **6** so adjusted that the wearer's nose and the dorsal extremity of the buttocks of the wearer are supported by the front upper and front lower torso buoyant support members respectively above the level of a body of water in which such wearer is floated when the legs of said wearer are extended horizontally.

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