This invention relates to improvements in swimming suits.

Among the objects of the invention are to provide a buoyant swimming suit that can be inflated by the wearer, that will keep the wearer afloat and act as an aid to swimming by reducing frictional resistance; that will snugly form fitting and susceptible to artistic finish and pleasing effects.

Other objects and advantages will appear as the description progresses.

In this specification the invention is disclosed in the form considered to be the best, but I do not wish to be understood as confining it to this form because it may be embodied in other forms, and it is also to be understood that in and by the claim following the description it is desired to cover the invention in whatever form it may be embodied.

In the accompanying one sheet of drawings: Fig. 1 is a front elevation of a buoyant swimming suit constructed in accordance with this invention.

Fig. 2 is a diagrammatic rear view of the same.

In detail the construction illustrated in the drawings comprises a composite swimming suit, composed of two sheets of impervious material, such as sheet rubber, rubberized cloth or the like.

Sheet rubber is preferred because of its elasticity; its form fitting qualities; its imperviousness and its susceptibility to color and artistic effects.

The suit is fashioned on any conventional pattern, such as “one piece” and “two piece” suits, for men, women and children.

If sheet rubber is used, two sheets of un-vulcanized or semi-vulcanized rubber are superimposed and trimmed to the proper outline. This blank is then placed between dies to compress the two sheets so that they will adhere together around the margins of the outline of the suit. These dies will form the shoulder yoke 1, shoulder straps 2 and 3, the skirt 4, the midriff 5 and the sides 6, of double thickness.

The uncompressed portions such as the chambers 7—7, form air pockets between the compressed portions 1, 2, 3, 4, 5 and 6. These chambers are confined between the impervious walls 8 and 9. The sheet 8 comprises the form contacting portion with the external sheet 9 superimposed thereon, see broken away portion in the drawing.

These chambers 7—7 are duplicated on the back of the suit, preferably three or four major air chambers to the suit. The air chambers are intercommunicating by means of passages such as 10.

At any convenient place, such as the front center of the yoke, the inflation tube 11 is attached to the suit, opening into the bypass 12 between the chambers 7—7. The end of this tube is provided with the check valve 13, within reach of the mouth of the wearer. This tube being flexible can be unobtrusively coiled within the suit when not being used. The stem 14 of the check valve is extended so that the valve may be unseated for deflation.

The suit is provided with the trunks 15, attached to the hip line 16 in the usual fashion, and serve to hold the suit snugly in place upon the wearer.

The air chambers can be anatomically distributed in the suit, and are preferably so shaped that greater volume of air is concentrated about the upper torso and tapering toward the waist as shown.

There is no necessity to inflate the air chambers up to balloon like proportions, but merely enough to assure a buoyant confidence in the wearer that he cannot sink. It is the purpose of the invention to aid the swimmer, not to impede him with a needless margin of safety.

To prevent ballooning or the air content shifting about, the walls 8 and 9 can be “spotted” together at intervals, or joined by the chaplets 17.
The side margins are of sufficient width to allow free arm play at the sides of the swimmer without chafing against the air chambers 7—7.

The midriff section 5, follows stream line contours consistent with easy progress through the water in swimming and diving. The air chamber or chambers 18 on the back portion could be arranged over the spine as suggested in Fig. 2. The chamber being thickest over the depression of the spine and extending laterally under the shoulder blades and down to the lumbar region in a diminishing point.

Arranged as suggested the human body is given a pleasing fullness by filling the natural hollows and not exaggerating the high points by the addition of the air chambers.

For women's suits the chambers can outline the busts, as suggested for the shoulder blades, at the back, so as not to exaggerate these organs. In fact the invention is adaptable to the correction of physical deficiencies in outline, by designing suits to meet individual requirements, without sacrificing any of the advantages of or departing from the spirit of the invention.

The present embodiment of the invention may be worn beneath the conventional swimming suit. For such purposes the skirt and trunks 4 and 15 could be omitted. It will also serve as a life preserver in the event of shipwreck when worn beneath ordinary clothing and inflated if required.

The present invention, is essentially a swimming suit and is not to be confused with inflatable life preservers that do not conform snugly to the human form, as suggested herein.

The impervious material of the suit offers little or no frictional impedance to the speed of the swimmer and has all the advantages of nudity that modesty will permit, with the added advantages of buoyancy and air insulation in cold water. Clad in such a suit swimming in cold water loses much of its discomfort and danger.

The inner surface of the inner wall 8, may be coated with a suitable fiber to assist in the removal of the suit, and prevent sweating.

If constructed of sheet rubber the suit can be locked in a suitable form, such as the dies suggested, the air chambers inflated and the suit vulcanized or cured by the usual process.

If made of impervious cloth the two sheets 8 and 9 can be stitched together and the air chambers outlined by stitching and the stitching properly impregnated to prevent air leakage.

Having thus described this invention what I claim and desire to secure by Letters Patent is:

A buoyant swimming suit comprising two superimposed sheets of impervious material fashioned to snugly fit the torso of the wearer, said sheets adhering to each other to form thin yoke, sides, skirt and midriff portions, and a plurality of air chambers between said sheets, one of said chambers overlying the spinal region and laterally tapered upwardly between the shoulder blade region and communicating with a pair of frontal chambers overlying the chest and rib regions of the wearer on opposite sides of said midriff, and means for inflating said chambers.

In testimony whereof I have hereunto affixed my signature.

FRANK M. NUNEZ.