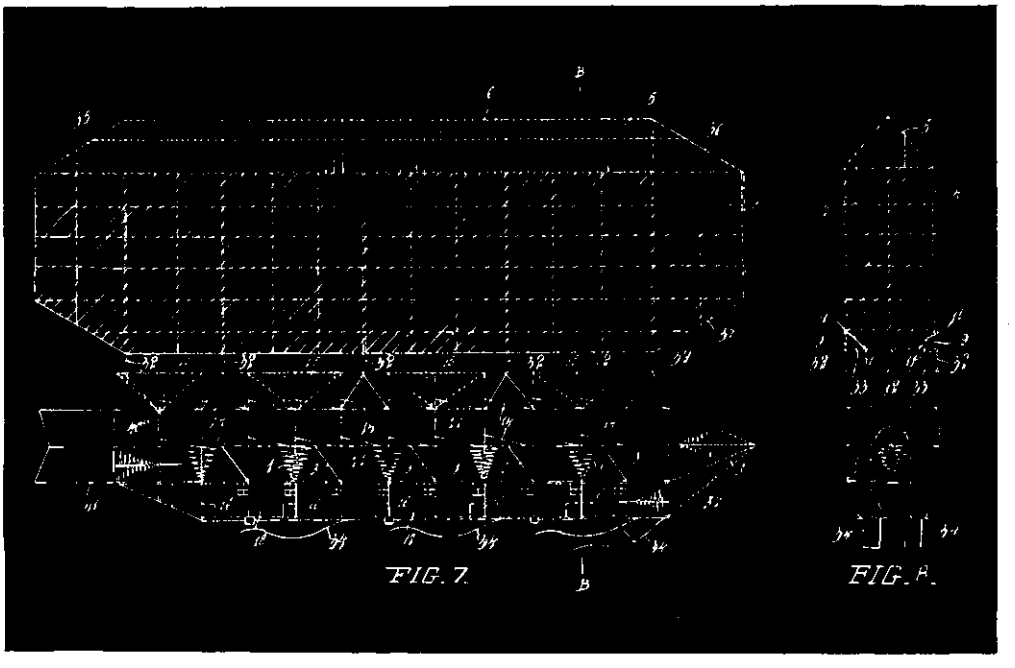
fall suddenly; (3) augmentors enable it to go without engines working when once up in the air, thus economising fuel; (4) it could not sink if dropped on water; (5) by means of its gas and locomotion screws, it can rise or descend vertically; (6) or it can stop, hang, glide and reverse while in the air; (7) as the gas does not quite lift the whole weight, complete control is secured; (8) being metallic throughout, it cannot catch fire; (9) augemtors can be attached to outside as well as to planes inside, and their angle can be adjusted during actual flight; (10) no existing aeroplane can effectively utilise these augmentors, which help to lift as well as to accelerate speed; (11) it is designed for useful purposes rather than sport; (12) has large carrying capacity and is capable of indefinite expansion; (13) drivers and passengers may travel in comfort; (14) the aviators are relieved from nerve strain; materially influence the weight of the airship; (2) the augmenters act from under side as well as the upper, and assist in elevating as well as in propelling; (30) steering and stability are facilitated by the general shape as well as by the special vertical wings, and by the vertical and horizontal rudders; (31) the whole machine with its various modifications is simple to design and construct, and it would be comparatively inexpensive and easy to maintain and manipulate, without any need for trailing guide ropes, and without the use of sand or other artificial ballast."

A brief examination of the illustrations given (which are not all that Mr. Taylor has designed) will suffice to show that even in respect to outward appearance there is something very strikingly original in Mr. Taylor's invention; and great credit



No. 4—Fig. 7, Side Elevation of Combination Airship, showing a different method of attaching upper and lower parts; Fig. 8, Cross Section of same

(15) it is homogeneous in structure and can therefore utilise all power that is generated; (16) it can be fitted with wireless telegraph, and can be adapted to generate its own electric light; (17) it is simple in design and free from complication; (18) it can be checked or reversed in the air; (19) can alight on water for repairs; (20) it is multiple in all its parts and functions, thus obviating dependence upon any particular part; (21) any kind of aviation engine or motive power can be used; (22) there is little or no risk of spilling petrol, or by fire, especially when solid petrol is used; (23) a centre-board can be used to facilitate steering and stabilising; (24) either wheels with springs or springs without wheels may be used; (25) it would be of unique convenience and value for military purposes; (26) it could not be seriously disabled by bullets; (27) gas chambers would never need deflating, thus gas would be economised; (28) rain and snow cannot must be accorded to the designer whether his plans and designs are practically feasible or otherwise. That they were true in theory at the date of the patent has since been practically demonstrated in other countries by actual construction, at least in respect to some of Mr. Taylor's special features. Among these are the four following, any one of which is sufficient to stamp the invention as one of great importance:—(1) the hydroplane principle, for enabling a flying machine to alight and travel on water as well as in the air; (2) the augmenter, for utilising of contrary air current for the purpose of propelling forward, and for accelerating speed whilst up in the air, without the use of engines; (3) the idea of constructing an airship, or a flying-machine entirely of metal, so as to prevent the possibility of catching fire; (4) adaptation to automatic electric lighting and wireless telegraphy.

When Mr. Taylor first suggested these improve-