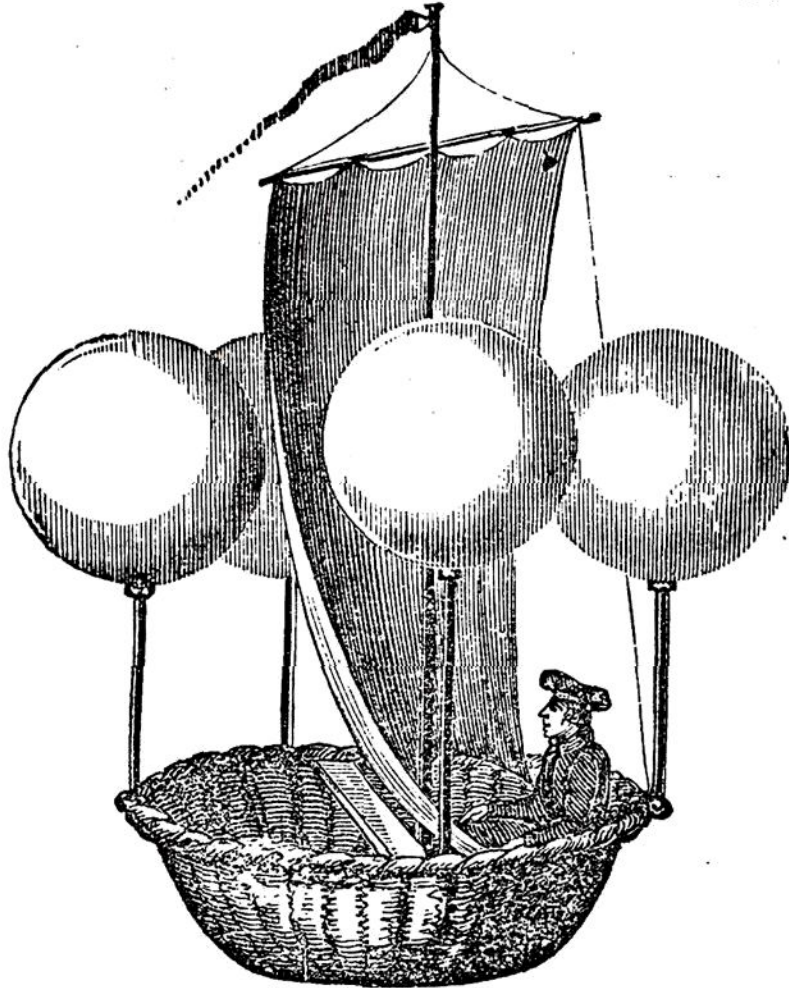


In the year 1676, Cavendish investigated the properties of hydrogen gas, the levity of which made it exceedingly proba-



Lana's Balloon.

ble that a thin substance filled with it would float in the air. Cavallo made some experiments in 1782, but apparently gave up the subject in despair. In the same year Stephen and Joseph Montgolfier succeeded in constructing an apparatus which was lighter than the same bulk of atmospheric air, and consequently floated in it. After having made a number of experiments upon a small scale, they made public their discovery, and sent up a large balloon at Annonay on the 5th of June, 1783. It consisted of a large linen bag, lined with paper, 117 feet in circumference, and weighing 430 pounds. To the open end was attached a light wire basket, in which combustible substances were placed and inflamed, the heat so rarefying the enclosed air as to render it lighter than an equal bulk of the atmosphere. The machine ascended, and