

freezing to my fingers, which, in consequence of my ablutions, were not perfectly dry.

Notwithstanding, however, this intensity of cold, the powerful circulation of the blood of large quadrupeds keeps the red fluid, like the movement of the waters in the great lakes, from freezing; but the human frame not being gifted with this power, many people lose their limbs, and occasionally their lives, from cold. I one day inquired of a fine, ruddy, honest-looking man, who called upon me, and whose toes and instep of each foot had been truncated, how the accident happened? He told me that the first winter he came from England he lost his way in the forest, and that after walking for some hours, feeling pain in his feet, he took off his boots, and from the flesh immediately swelling, he was unable to put them on again.

His stockings, which were very old ones, soon wore into holes; and as rising on his insteps he was hurriedly proceeding he knew not where, he saw with alarm, but without feeling the slightest pain, first one toe and then another break off, as if they had been pieces of brittle stick, and in this mutilated state he continued to advance till he reached a path which led him to an inhabited log house, where he remained suffering great pain till his cure was effected.

Although the sun, from the latitude, has considerable power, it appears only to illuminate the sparkling snow, which, like the sugar on a bridal cake, conceals the whole surface. The instant, however, the fire of heaven sinks below the horizon, the cold descends from the upper regions of the atmosphere with a feeling as if it were poured down upon the head and shoulders from a jug.

SIR FRANCIS HEAD.

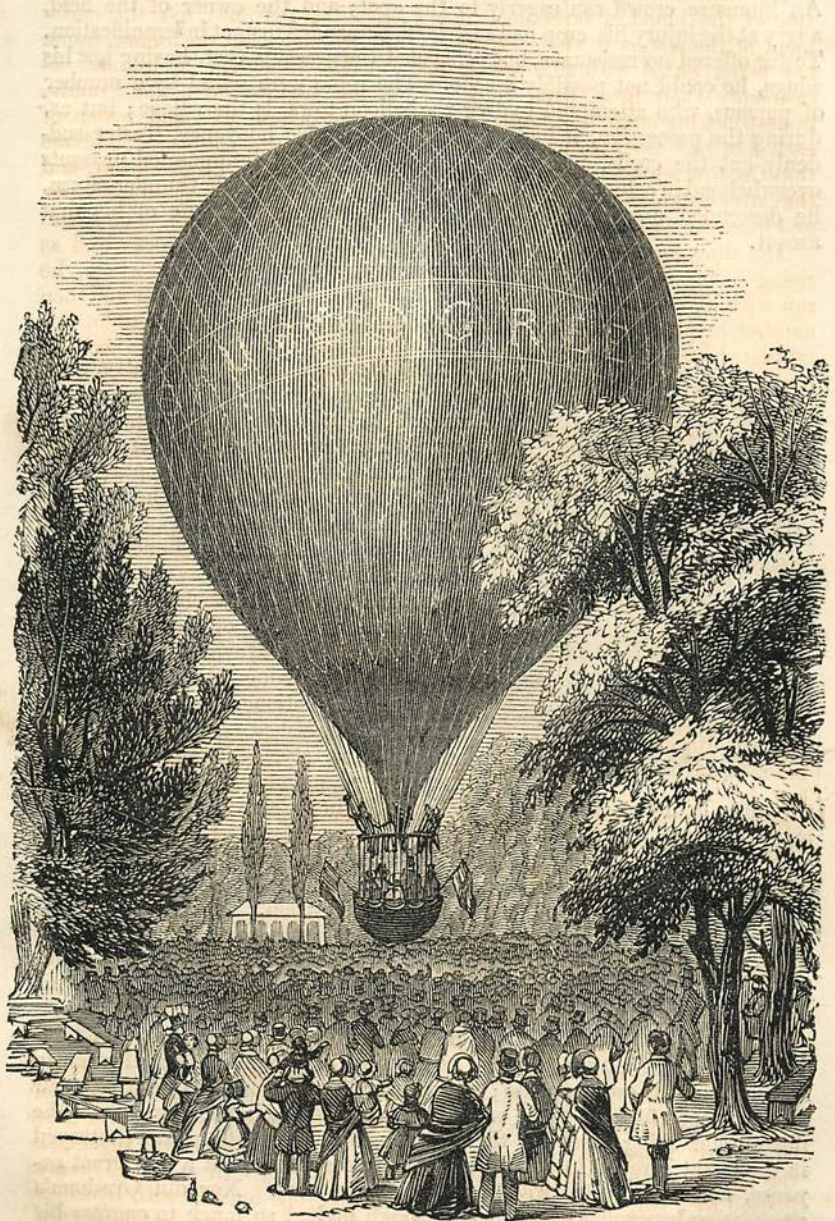
BALLOONS.

THE idea of constructing a machine which should enable us to rise into and sail through the air, seems often to have occupied the attention of mankind, even from remote times, but it was never realised until within the last sixty or seventy years. The first public ascent of a fire-balloon in France, in 1783, led to an experiment on the part of Joseph Mongolfier. He constructed a balloon of linen, lined with paper, which, when inflated by means of burning chopped straw and coal, was found to be capable of raising 500 pounds weight. It was inflated in front of the Palace at Versailles, in the presence of the Royal family, and a basket, containing a sheep, a duck, and a cock, was attached to it. It was then liberated, and ascended to the height of 1500 feet. It fell about two miles from Versailles; the animals were uninjured, and the sheep was found quietly feeding near the place of its descent.

Monsieur Mongolfier then constructed one of superior strength, and a M. de Rozier ventured to take his seat in the car and ascend three hundred feet, the height allowed by the ropes, which were not cut. This same person afterwards undertook an aerial voyage, descending in safety about five miles from Paris, where the balloon ascended. But this enterprising voyager in the air afterwards attempted to travel in a balloon with sails. This was formed by a singular combination of balloons—one inflated with hydrogen gas, and the other a fire-balloon. The latter, however, catching fire, the whole apparatus fell from the height of about three-quarters of a mile,

with the mangled bodies of the voyagers attached to the complicated machinery.

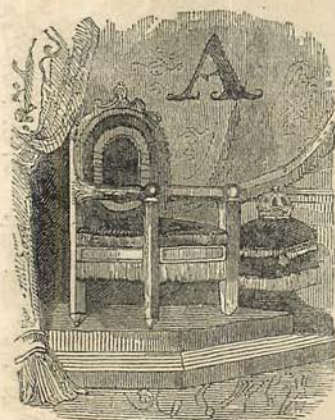
A Frenchman named Tester, in 1786, also made an excursion in a bal-



GREEN'S BALLOON, ASCENDING FROM VAUXHALL GARDENS.

loon with sails; these sails or wings aided in carrying his balloon so high, that when he had reached an elevation of 3000 feet, fearing his balloon might burst, he descended into a corn-field in the plain of Montmorency. An immense crowd ran eagerly to the spot; and the owner of the field, angry at the injury his crop had sustained, demanded instant indemnification. Tester offered no resistance, but persuaded the peasants that, having lost his wings, he could not possibly escape. The ropes were seized by a number of persons, who attempted to drag the balloon towards the village; but as, during the procession, it had acquired considerable buoyancy, Tester suddenly cut the cords, and, rising in the air, left the disappointed peasants overwhelmed in astonishment. After being out in a terrible thunder-storm, he descended uninjured, about twelve hours from the time of his first ascent.

SIR THOMAS GRESHAM.



MONG the worthies of this country, who, after a successful and honourable employment of their talent in life, have generously consulted the advantage of generations to come after them, few names appear more conspicuous than that of Sir Thomas Gresham, the founder of Gresham College, and of the Royal Exchange, London. He was born in that city about the year 1518, the second son of Sir Richard Gresham, who served the office of sheriff in 1531, and that of Lord Mayor in 1537. He received a liberal education at the University, and is mentioned in high terms as having distinguished himself at Cambridge, being styled "that noble and most learned merchant." His father at

this time held the responsible position of King's merchant, and had the management of the Royal monies at Antwerp, then the most important seat of commerce in Europe; and when his son Sir Thomas succeeded him in this responsible appointment, he not only established his fame as a merchant, but secured universal respect and esteem. After the accession of Queen Elizabeth, his good qualities attracted the peculiar notice of her Majesty, who was pleased to bestow on him the honour of knighthood; and at this time he built the noble house in Bishopsgate-street, which after his death was converted to the purposes of a College of his own foundation.

In the year 1564, Sir Thomas made an offer to the Corporation of London, that, if the City would give him a piece of ground, he would erect an Exchange at his own expense; and thus relieve the merchants from their present uncomfortable mode of transacting business in the open air. The liberal offer being accepted, the building, which was afterwards destroyed in the Great Fire of London, was speedily constructed, at a very great expense, and ornamented with a number of statues. Nor did Gresham's persevering benevolence stop here: though he had so much to engross his time and attention, he still found leisure to consider the claims of the