



FÉDÉRATION AÉRONAUTIQUE
INTERNATIONALE
Ballooning Commission

Hall of Fame

CHARLES GREEN, 1785-1870
Inducted 1999



M^r CHARLES GREEN, AERONAUT.

Born Jan^r 31st 1785.

First ascended on the 29th July 1821, at the Coronation
of King George the 4th since which he has made up to
his date July 9th 1859 Two hundred and sixty six ascents.

Chas Green

Engr^d July 9th 1859 by G.T. Harding, Engraver Dublin &c. London
No 2 Regent, 208th St. the press

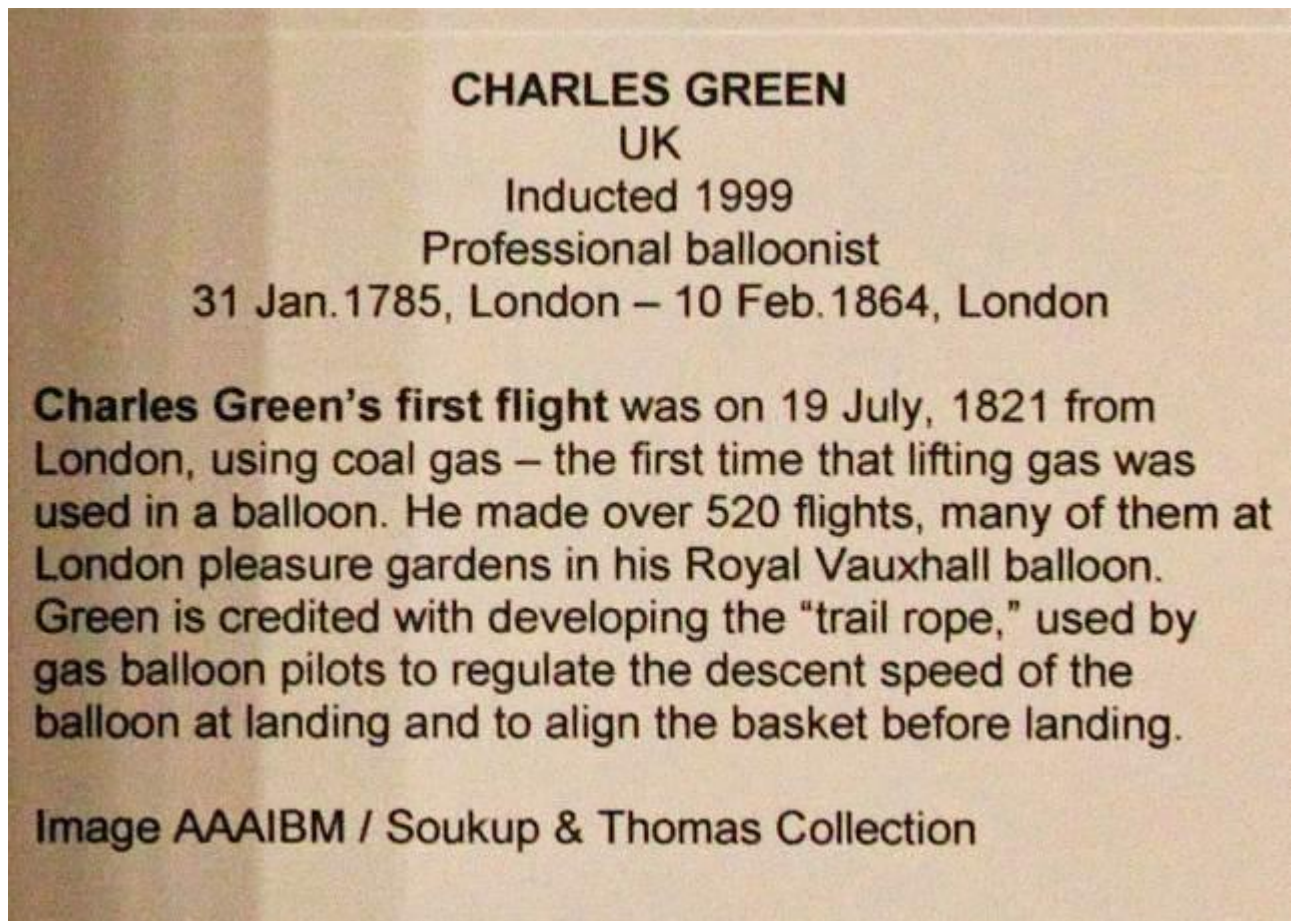


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Green's record of over 500 ascents accomplished between 1821 and 1852 (in the course of which he must have travelled between 10 000 and 15 000 miles through the air) won for him a unique place in the history of ballooning.

Charles Green was born in Goswell Road, London, on January 31, 1785. He was the son of a fruiterer, which business the future aeronaut joined on leaving school. It is said that Green's attention was first directed to aerostation as the outcome of experiments he tried with an apparatus for making gas, by means of which he proposed to light his own premises. He observed that the first distillation gave the best result for illumination, and that towards the end of the process the flame was scarcely visible. Suspecting that, in the end it was almost pure hydrogen, he inflated some small balloons with the gas obtained at various stages of distillation. The results proved his suspicions. This fact, later in his aeronautical career, he usually impressed upon the managers of the gas works where his balloons were inflated.

He made his first ascent July 19, 1821 from St. James Park. The balloon was decorated with the royal arms, and inscribed "George IV, Royal Coronation Balloon" and was filled from the gas-main in Piccadilly. The ascent was not remarkable save for the fact that it was inflated with coal-gas, this being the first occasion on which it was successfully used for ballooning¹.

This was an important achievement. The coal gas has much less lifting force than hydrogen but was readily available in every major city and, most important, the cost to inflate a balloon was reduced to a sixth. These two advantages made it possible for Green to use his ballooning as an attraction at a large number of occasions.

¹) Coal gas had been used for model balloons 1784 and recommended for aerostation by Cavallo in 1785.

From 1823 onwards Green's activities and reputation as a professional balloonist steadily increased, and by July 1835 he had made over two hundred ascents, a large portion of them from provincial and market towns throughout the country. He made ascents by night, sometimes letting off fireworks from beneath the car. He released small animals like monkeys in parachutes from the balloon and he ascended sitting on horses. When a new structure for the London Bridge was inaugurated he was there with his balloon.

Green returned to serious aeronautics in 1836 with a thrilling flight from England to Germany with a balloon financed by the proprietors of Vauxhall Gardens. The "Royal Vauxhall Balloon" was later called the "Nassau. The flight introduced overnight voyages and the first use of the guide rope as an automatic ballast.²⁾

Green continued to perform popular stunts at local markets but he also made a number of scientific flights to altitudes reported to be as high as 8000 meters. The object with these flights was to collect meteorological data.

For some years he was occupied with a project of a balloon crossing of the Atlantic and made detailed plans for such a balloon. He planned to extend the duration of the balloon by the use of a 2000 ft long "guide-rope" and hoped to stay in the air as long as 3 weeks.

During the last years of his ballooning career – from 1846 to 1852 – he renewed his public activity, possibly incited by a desire to complete 500 voyages. During this period he made about 200 ascents, both scientific flights and more trivial stunts.

Green was a sturdy type of Englishman. Though lacking in education and without scientific training he acquired a large fund of experience, which in combination with courage and a sound judgement, made him an excellent pilot. In the air he was taciturn and even peremptory. He was an excellent pilot and possessed a commanding personality. Returned to earth he delighted all "by his intelligence, his enterprise, his enthusiasm and his courtesy".³⁾

Green died from heart failure at the advanced age of eighty-five on March 26, 1870.

The oldest known photo of an aeronaut is of Charles Green. The photo was reproduced for the first time in HISTOIRE DE L'AERONAUTIQUE. (Page 63)

Some important dates

- 1785-01-31 Charles Green born.
- 1821-07-19 First to use coal gas for inflation.
- 1836-10-06 First flight with 10 passengers. Green's 224th ascent
- 1836-11-08 First flight over 600 km. First use of drag rope. London to Weilburg, Nassau, Germany. 608 km in 18 hours
- 1837-07-24 Robert Cocking killed in parachute descent. Balloon exceeded 23 000 ft (7 100 m)
- 1838-09-10 Altitude flight. 8 275 meters (27 149 ft)
- 1840-08 Green announces plans to fly from the New World to the old across the Atlantic
- 1852-09-13 First pilot to make 500 ascents
- 1870-03-26 Charles Green dies.

²) It is commonly said that Green was the inventor of the "guide-rope" or "trail-rope" as now termed. Baldwin described two forms of it in *Airopaidia* (1786, pp 225 & 227) from where Green very probably took the idea and was probably the first to actually use it. The object of the trail-rope (50-100 m / 165 – 330 ft long) is to economise ballast and facilitate landing.

³) Henry Mayhew, 1812-1887, passenger at Green's 500th ascension.

Note:

The exact total number of flights made by Charles Green is not known. In a letter 1852 he stated that he had made 504 ascents and had no intention of making any more “except for scientific purposes”. In the *Aeronautical Society first report* 1866, Glashier refers to Green as the hero of 500 ascents but in *Travels in the Air*, 1871, p. 30, states “nearly 1400”. In the fourth report the number is “upwards of 700”, and in the *Dictionary of National Biography* it is 526. Tissandier reports “more than 6000 aerial excursions” (*Travels in the Air*, p. 330). In *Modern English Biography*, vol i, 1892, the number is given as 527.

See also

THE HISTORY OF AERONAUTICS IN GREAT BRITAIN
From the earliest times to the latter half of the nineteenth century
J.E Hodgson
Oxford University press, London: Humphrey Milford, 1924

Pages 241 - 262

WHO'S WHO IN AVIATION HISTORY
William H. Longyard
Airlife Publishing Ltd, England, 1994

Page 82

BALLOONING 1782-1972
Roger Pineau
National Air & Space Museum, Washington DC, 1972

HISTOIRE DE L'AERONAUTIQUE
Charles Dollfus & Henri Bouche
L'Illustration, Paris, 1942

Pages 63, 65, 87, 105, 589

THE AERONAUTS
L T C Rolt
Longmans, London, 1966

Hans Åkerstedt, 1999-05-07