

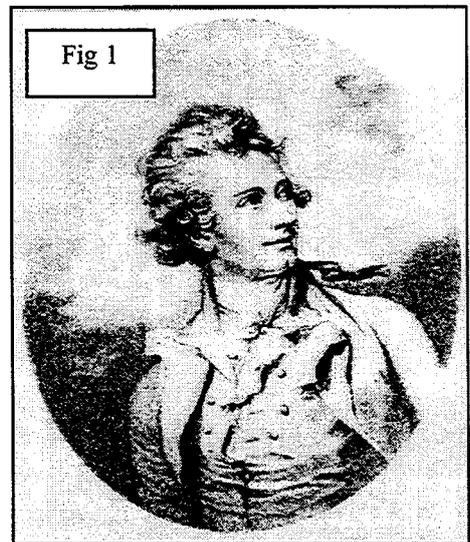
Richard Gillow and Vincent Lunardi: Early Balloon Flights and the Lancaster Balloon Mystery

S.E. Stuart and W.T.W. Potts

In April, 1784, Vincent Lunardi, made the first ascent in an air balloon from English soil, less than a year after the Montgolfier brothers had made their pioneering flight. However, recent research in the Gillow Archives has uncovered evidence of a previously unrecorded episode in Lancaster's history; namely that Lunardi also visited Lancaster in June 1785 with the intention of making an ascent in his 'Grand Balloon' at Lancaster Races. The following article has been written in two parts: the first by W.T.W. Potts will explore early balloon flights; the second by S.E. Stuart, Lunardi's visit to Lancaster organised by Richard Gillow, who also designed 'balloon back chairs' to commemorate the event.

The First Balloon Flights

Balloon ascent, or 'Aerostation' in the parlance of the time, was a new diversion. After experiments with unmanned and tethered hot air balloons, the first manned balloon ascent took place in Paris on October 15, 1783. This flight will always be associated with the name of the Montgolfier brothers, paper manufacturers, who designed and constructed the balloon. The Montgolfiers, knowing nothing of physics, believed that a hot-air balloon was lifted by smoke, rather than the lower density of hot air, so they heated their balloon with a fire of straw mixed with wool and rotten meat, suspended beneath the balloon. When the King and Queen visited the scene they retired in horror of the smell. The Montgolfiers did not make the first ascent themselves but allowed an enthusiastic friend, Rozier to take the risk and the "gloire". The balloon was tethered but reached a height of 84 ft. The first free flight took place on Nov. 21st 1783 when Rozier and the Marquis d'Arlandes flew five miles, in spite of the paper balloon catching fire several times. The fires were extinguished with the help of a wet sponge. Ten days later, on Dec. 1st 1783, two other Frenchman, Messrs Charles and Roberts, made the first ascent by hydrogen balloon, made of varnished silk, which had the advantage that it could stay aloft as long as it could retain its hydrogen.



First to fly in England: Vincent Lunardi, from the portrait miniature by Cosway

After these pioneering flights in France, Europe and America were swept by balloon mania. A balloon is at the mercy of the wind. Navigable lighter than air vessels, "airships", only became practicable with the development of machine power but efforts were immediately made to propel balloons by large oars. The first experiment with oars, by another Frenchman Blanchard, on March 2nd 1784, was wrecked when an uninvited passenger, armed with a sword, leapt aboard his hydrogen balloon as he was about to ascend. In the ensuing scuffle the delicate apparatus was destroyed. Never-the-less, having evicted his unwanted passenger, he travelled 27 miles and reached 9000 ft. Although hydrogen balloons required large quantities of expensive oil of vitriol, (sulphuric acid) and iron filings to generate the hydrogen, the dangers and short range of the hot air balloon soon led to their replacement by hydrogen balloons but not before a giant hot air balloon 100 ft. in diameter and carrying seven passengers made a successful voyage. The hydrogen balloon improved so rapidly that on January

7th, 1785 Blanchard and Jeffries made the first flight across the Channel, from England to France.

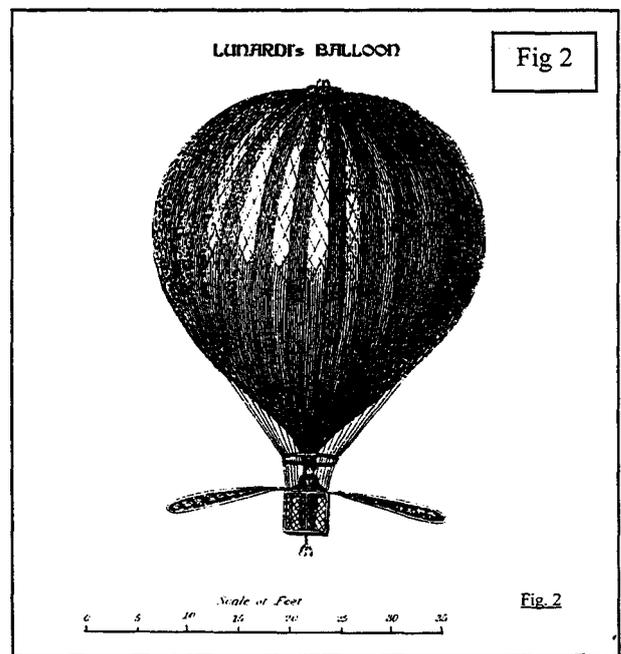
The first ascent from English soil took place on Sept. 15th 1784, when an Italian, Vincenzo Lunardi, having made his will, took off from the Royal Artillery grounds in Woolwich, with a cat, a dog and a pigeon for company. He touched down at North Mimms in Hertfordshire, where he handed the cat, which had been feeling the cold, to an astonished country woman. Lightening the balloon by throwing out the last of the ballast, his wine bottle and his corkscrew, he took off again, finally landing at Standon Green in northern Herts, thirty miles from his starting point. A monument there still records his feat. The inscription conveys the excitement of the times. It begins,

“Let posterity know and be astonished! that on the 15th day of September, 1784 Vincent Lunardi of Lucca in Tuscany the First Aerial Traveller in Britain Mounting from the Artillery Ground in London and traversing the Regions of the Air for two hours and fifteen Minutes on this spot Revisited the Earth.”

The excitement cannot be exaggerated. The King broke off a meeting with Pitt and his ministers to watch the aeronaut through a telescope, while a jury about to find a prisoner guilty of a capital offence, hastily agreed to acquit the accused in order to save time, and the entire court adjourned outside to see the wonder. Priority for the first flight in Britain however, must go to a Scot, Tytler, who flew a short distance near Edinburgh on 24th. July 1784 in a Montgolfier balloon. His fire basket weighed no less than 300lbs and when the contraption failed to take off the crowd, who had no doubt paid towards the flight, began to riot and destroyed the gallery around the balloon on which the aeronaut intended to stand. In desperation Tytler cut away the fire basket and flew clinging “like a log” to the ropes. Tytler reached over 350 ft. but in his poem, the only record of the ascent, he refers to his “misfortunes” and he never repeated the experiment. Lunardi however went on to make a series of remarkable, not to say foolhardy, voyages.

On the 14th. of May the following year, 1785, he ascended again from Woolwich, before a vast crowd, of whom four perished when a stand collapsed. In addition a young woman died of shock, thinking that Lunardi had fallen out, after one of his oars broke off and fell to the ground. He landed near a pub in the Tottenham Court Road. Six weeks later he flew from Liverpool. Unfortunately the wooden ring, from which the basket was suspended, broke and slightly punctured the fabric. Lunardi touched down but on attempting to alight, became entangled in a rope. The balloon then rose again and he was carried for a mile or more suspended upside down beneath the basket. After “bumping into a mountain” he fell to the ground but managed to walk to the nearest house. He later flew from Chester, then Edinburgh, when he landed in the Firth of Forth and was rescued by fishing boat, and from Glasgow and Kelso. Remarkably he died in his bed, in Genoa, in 1806, in penury.

Lunardi was not the only balloonist in Britain by this time. Before the novelty wore off, The Daily Register, the predecessor of The Times, recorded flights all over Europe and America. On October the 16th. 1784, Mr. Blanchard flew from Little Chelsea to Romney Marsh. In October and



November there were flights by a Mr. Sadler in Oxford and on January the 4th. 1785 a Mr. Harper flew 50 miles from Birmingham to Newcastle-u-Lyme. On May the 3rd. 1785 Mr. Blanchard, with a fifteen year old companion, Miss Simonet, made a flight of eight miles. It is noteworthy that many of these early pioneers were French, but Lunardi was Italian, secretary to the Neopolitan Ambassador. On the day of Blanchard's ascent a "British balloon" failed to take off from the Lyceum in London and the disappointed crowds rioted and tore the balloon to shreds. A little earlier, on April the 8th the first American flight took place in Boston while on May 19th. a Mr. Crosbie flew the first Irish Balloon. On May the 9th Blanchard and Simonet flew again in London. Vast crowds assembled and the pickpockets had a field day. Edmund Burke was amongst those who lost their watches. On the 5th of June Rozier perished while attempting to cross the Channel from France to England, in a hazardous combination of a hydrogen balloon and a hot air balloon. While dangerous the principle was sound and the recent circumnavigation of the world was achieved by a combination of a helium balloon and a hot air balloon. On the day that Rozier died Blanchard made a flight accompanied by a sheep and a month later he dropped a dog overboard on a parachute. Unfortunately the parachute failed to open. About this time a Frenchman made several ascents on horseback but when he attempted this feat in England, our respect for horses caused the attempt to be banned.

Constructing a balloon out of oiled silk and then filling it with hydrogen was a costly business and the ascents were organised like circuses to cover the costs. Money was collected from the crowd and if the balloon failed to take off the disappointed spectators enjoyed a riot instead. One of the few Lunardi records to survive is a promise to spectators to refund their money when a flight had to be aborted on the 9th of July 1788. A wealthy patron would be necessary before a balloonist could risk a visit to a town of moderate size, like Lancaster. Lunardi had lost money on his visit to Liverpool. It is clear that Richard Gillow was a balloon enthusiast. The firm's letter books demonstrate that he arranged for Lunardi to visit Lancaster in 1785 to ascend in his balloon as the star attraction during the Lancaster Races. The Lancaster Races were the high point of the Lancaster season when the wealthier county families moved from their country houses to their town houses and danced and partied with their friends. Gillow wrote to an unknown lady in June, 1785: "Mr. Lunardi is expected down here to exhibit & ascend in his grand balloon next week as he has wrote to us - to advertise the same wch. we have directed to be done in both the Liverpool & Whitehaven papers & expect it will draw a great deal of company to Lancaster Races'.¹ One of the advertisements mentioned above was placed in the 'Whitehaven paper' known as the 'Cumberland Pacquet', by Richard Gillow. It read as follows:

Mr. Lunardi's Balloon

The Public are respectfully informed, that Mr. Lunardi, the gentleman whose aerial Excursions have rendered him so much the Subject of Fashion and Applause, has written to a Friend at LANCASTER, that he intends to EXHIBIT and ASCEND with his Grand BALLOON, in that town, during the ensuing Races, which commence of Tuesday the 7th of June. Inst....!²

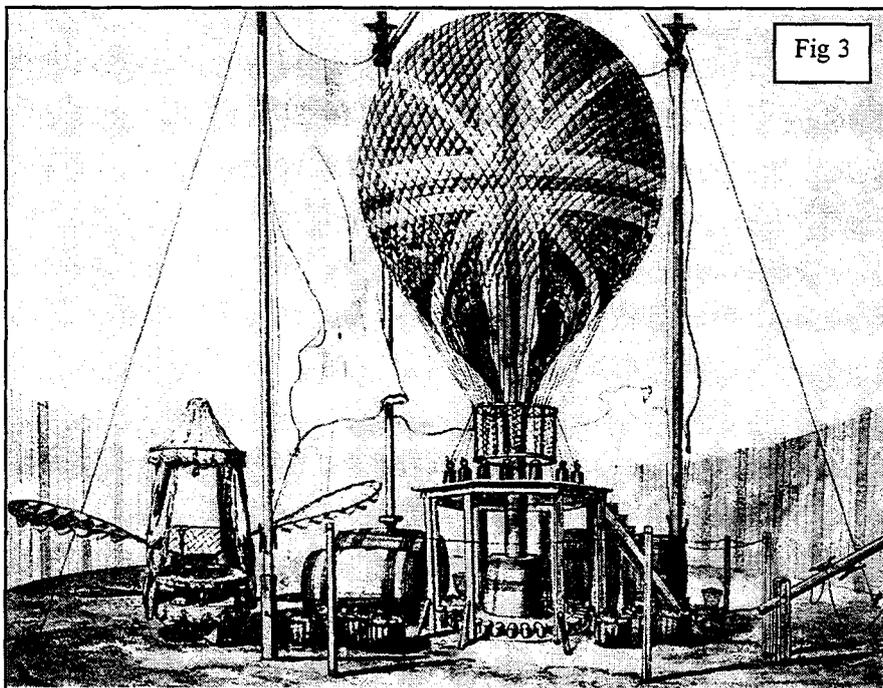
The following week an extract from a letter describing the balloon was published in the same paper;

'Mr. Lunardi arrived here on Monday evening, with his new Balloon .-Early on Tuesday morning, he threw out an advertisement, acquainting the public, that he was expected to ascend in the course of a few days: that having bound himself in honour to return to London immediately, to make an aerial excursion with a gentleman and lady, he was under the necessity of postponing his flight from Lancaster, till that event had taken place; but pledged himself to return and ascend from the Castle Yard, with all convenient expedition.'

The account continued by describing the scene in Lancaster Castle yard:

*"The balloon is now filled with Atmospheric Air, suspended in an inclosure in the Castle Yard, and shown to the public for one shilling each person, which, after deducting his expences, Mr. Lunardi will distribute amongst prisoners."*³

Why Lunardi should abandon his ascent the morning after arriving in Lancaster with his balloon, rather than refusing to travel to Lancaster in the first place remains a mystery. The Italian balloonist appears to have been making excuses since the pressing ascent '...with a gentleman and lady' was apparently not due to take place until early July, 1785, several weeks later, so there was no need for him to have abandoned his flight from Lancaster Castle with such haste. It must have given some of Lancaster's disappointed inhabitants some satisfaction to read the Cumberland Pacquet's account of the London flight a few weeks later as being '...a gratuitous exhibition of three people ascending with a balloon'...and to hear that he '...did not take more than two thousand half crowns from those who chose a closer view'.⁴ Lunardi was perhaps trying to make amends for disappointing the citizens of Lancaster, by sharing his spoils with the prisoners. Despite Lunardi's cavalier behaviour Richard Gillow continued to support the Italian's venture. On 17th June, 1785 he wrote to a Mr. Fielding, of Catteral near Garstang, to enquire if he could supply Mr. Lunardi with:



Inflation of Linardi's second balloon in St. George's Fields, 1785

'...at least thirty bottles of oil of vitriol as he says he shall want about that to fill his balloon before he ascends' he added '... We suppose it will be some weeks before he can want it...'.⁵

The oil of vitriol, or sulphuric acid, would have been mixed with metal filings in order to make hydrogen. As can be seen in the following extract, Gillows received a letter from Lunardi on 16th August 1785, probably requesting money from the citizens of Lancaster to pay for the oil of vitriol. However, perhaps smarting from Vincent Lunardi's snub of the previous June; the gentry of Lancaster refused to raise the money for the oil of vitriol as Gillows wrote to Lunardi in Liverpool on 18th August, 1785:

'We duly received your favour of the 16th inst. & communicated the contents to several persons of the first consequence in the town who are all of the opinion that a sufficient sum cannot be raised here to defray the expense of filling the balloon etc.as it is much greater than expected as you are so very much out of pocket by ascending from the extensive & wealthy town of Liverpool'. He added tartly 'what can you expect from such a small place as Lancaster'.⁶

Lunardi would probably have been 'out of pocket' because he had recently made two ascents from Liverpool. The first in July, 1785, from the New Battery when he flew for one and a quarter hours before landing near Prescot; the second was in mid-August when he landed at Tarporley in Cheshire.⁷

However, there Lancaster's part in the story of early ballooning might have ended, but for two invoices from Gillows to Lunardi. Both documents are transcribed in full in the appendix. One invoice evidently refers to the events of 1785, the other is dated 13th September 1786, and may refer to events which took place in 1786.⁸ These documents list services carried out by Gillows and others and indicate that Lunardi may have full filled his pledge to return as promised to Lancaster.

The invoices give a unique insight into balloon handling in those pioneer days. The import of the various items may have been as follows. Gillows supplied some of the materials and the supporting man-power necessary to prepare for the balloon flight. With their usual efficiency Gillows co-ordinated the venture and hired other equipment and workmen as necessary. The balloon was first inflated with atmospheric air, using bellows, and tethered with packing line (supplied by Gillows) probably to the twenty four 'polls'. The one large 'poll' may have been used to support the top of the balloon as at this time it would not have been buoyant, and the silk fabric was fragile and in need of support. The 'door' may have been part of a temporary 'shed' in the enclosure in the Castle yard, which was erected possibly to house equipment, or perhaps protect the balloon from curious and excited crowds of Lancastrians. Part of the Castle yard was evidently paved by Gillow's men for the occasion. Watchmen were employed to guard the balloon for four nights, whilst two workmen were each paid 4s 6d to 'attend' for two days. The balloon was probably exhibited for one day when Lunardi would have charged people to view the balloon prior to an ascent the following day. Gillows also undertook to advertise the event by arranging the printing of two batches of five hundred 'bills' or handouts by Walmesley, a Lancaster printer. One batch was for 'the balloon to be run', the other for 'an appology' [sic]. The apology probably referred to the cancelled flight of June 1785, when Lunardi declared his intention to return unexpectedly to London. However, the fact that preparations were made and damage to the balloon, polls, and loss of packing line occurred, in the summer of 1785 or 1786, suggests that Lunardi had honoured his pledge to return to Lancaster and at least attempted to ascend in his Grand Balloon, even if he was not successful. However, the cost of repairs to his balloon was only 9s 5d, plus the cost of five men's wages for one day each (total 11s 3d); amounted to the comparatively modest sum of just over one pound, so the damage was probably slight. Some kind of damage was probably inevitable in early balloon ascents, because the materials used were so fragile, and certainly Vincent Lunardi continued to make other flights in Scotland. The boatswain rigger would have the appropriate skills to handle a balloon with all its rigging. The sail was used to protect the delicate balloon from the winds on the top of the hill. Figure three shows Lunardi's balloon while being inflated. The basket and oars await attachment to the left and the poles and a sail are clearly illustrated. Mr. Vincent Lunardi must have made a grand entrance to the Castle yard in his chaise attended by chaise boys.

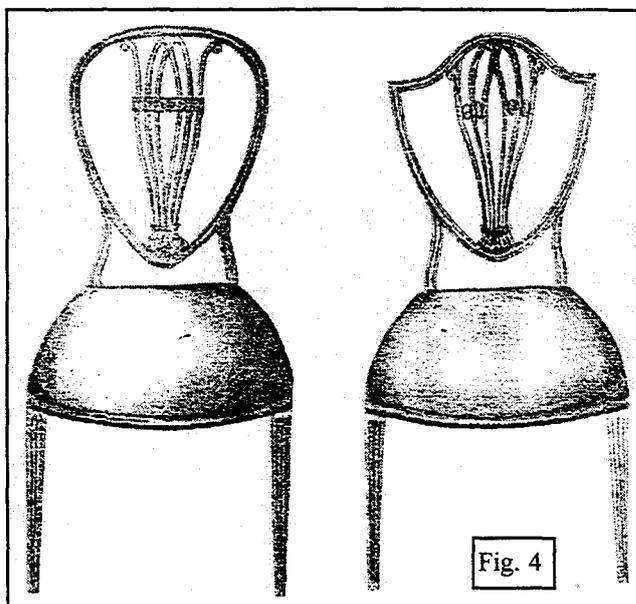
If he returned in 1786 it would probably have been, once again, during the race season in June. It is difficult to trace all of Lunardi's movements during that year but he was certainly in the north of England during the summer. On the 23rd of August he was in York when those restraining the balloon let go prematurely and a young man became entangled in the ropes and fell to his death. Although Lunardi was not to blame public opinion turned against him and he left England and never returned. He made more memorable flights on the Continent, on one occasion, landing in a remote part of Spain. The villagers assumed that he was a saint descending from Heaven and he was carried in triumph to the church.

'Balloon Pattern' Chairs

During the 18th and 19th centuries Gillows of Lancaster often named chair patterns after a customer, historical personage or event. Chairs such as 'Rigby pattern'; 'Bonaparte'; or 'Trafalgar'

pattern immediately spring to mind. So it is not surprising that Gillows chose to commemorate, this 'lost' or previously unrecorded event in Lancaster's history. If Vincenzo Lunardi's grand balloon did not 'take off', Richard Gillow's 'Balloon Pattern' chairs certainly did. Seventy-four chairs were produced during the last quarter of 1785; in 1786 it was the most popular pattern chair design produced by the firm; and in 1787 another one hundred and forty-nine were made; and they were still being made in 1810.⁹ Gillows were not the only tradesmen to seize the opportunity to promote their goods on a wave of balloon mania. Delf plates were made commemorating Lunardi's first flight over London; and balloon bonnets became the height of fashion; whilst provocative white balloon garters were worn by daring ladies. Not even water sports were immune from balloon mania. The 'first balloon vessel' was sunk at Keswick Regatta in September, 1785, having 'struck against a large timber before she got clear of the harbour'.¹⁰

The first recorded set of Balloon back chairs were made for Sir John Brisco in August 1785, who in all probability attended Lancaster races. Sir John Brisco's chairs would have looked similar to the left hand drawing in figure 4. They were carved in the 'best manner' by Henry Gibson who was paid five shillings per chair.¹¹ Another set of eight 'handsome mahogany Balloon Pattern chairs' were made for the Reverend Mr. Rigby in the 'best way' in December 1785. In common with the majority of examples examined they had tapered legs which were 'fluted', these legs can also be seen on both the 'Old' and 'New' balloon pattern chair drawings (figure 4). Gillows charged 17s 6d for each chair plus an additional 2s 10d for the bottoms which were 'stuffed into canvas'. Rigby provided his own silk damask and the firm charged him 4d per chair for the task of covering them, making a total price of £1 0s 4d to Rigby.¹² When balloon chairs were stuffed over the rails and secured by two rows of brass nails and the seats covered with plain satin hair cloth, Gillows charged customers 11s per chair.¹³ No examples of the 'old balloon pattern', that is chairs with the outline shape in the form of a slightly pear shaped hydrogen type balloon (figure 4), have been recorded so far.

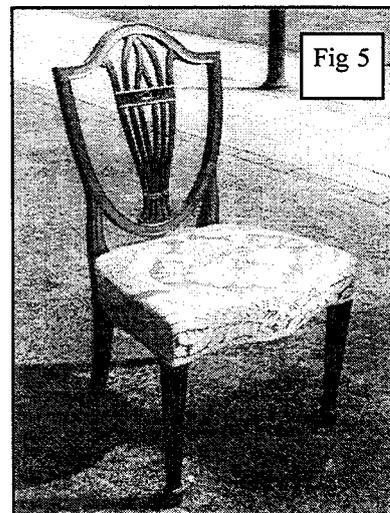


The 'New Balloon Pattern' introduced 1786

Just over a year after the first balloon pattern chairs were sold, a second or 'new' balloon pattern was introduced. Gillows merely replaced the 'balloon' or egg shaped outline to the chair back with an escutcheon or shield shaped backs, and made minor alterations to the frets. The fretted shapes and the tiny moulding at the narrowest part, could, with a little imagination, resemble the basket and rigging on a narrow balloon. Lunardi's first balloon was pear-shaped (figure 2) but the wider the balloon the greater the strain on the fabric at its widest circumference. The horizontal strengthening band across the chair back (fig. 4 & fig. 5) looks similar in outline to the belt placed around the widest circumference of early balloons (figure 3). However, since similar horizontal bands appear on other chairs of different patterns attributed to Gillows, the similarity to a device on a balloon may be merely co-incidental, especially since the band was an important strengthening feature.

One of the first sets of the second Balloon Pattern chairs were delivered in September, 1786 to

Thomas Pares Esq. of Hopewell Hall near Leicester.¹⁴ If no examples of the balloon back pattern of 1785 have been noted, several examples of the 'new' balloon back chair with a shield back, have been traced in the north of England. The new version illustrated in figure 5 is one of several sets recorded, all of which differ in detail. It is unfortunate that Gillows rarely identify which balloon pattern, the 'old' or 'new', their customers ordered. However since they were always willing to mix and match features which appeared on any of their designs, perhaps this is merely academic. Whatever type the firm were making the balloon pattern was one of the most popular designs they made. They were ordered by northern customers particularly from North Yorkshire, as well as Lancashire customers including merchants. Mr. John Thomas, merchant of Liverpool, for example ordered twelve 'handsome' balloon chairs with moulded and carved backs and the usual tapered and fluted legs (18s 6d), with bottoms stuffed into canvas and covered with satin hair cloth secured with a double row of princes metal nails made in the 'best manner' (11s).¹⁵ At 29s 6d for single chairs these would have been Gillows 'best' balloon pattern chairs. Another set of chairs made for John Birch of Manchester describes the 'best' type of carving on the arms of balloon chairs: '..stumps molded in best manner the arms sunk with water leaf upon the stump [the front arm supports] as many before...'.¹⁶



Gillows balloon pattern chairs may not have been the finest chairs made by the firm, but they were, because of their association with the celebrated balloonist Vincent Lunardi, amongst the most interesting and rare souvenirs of Lancaster's 'lost' history.

Appendix

Vincent Lunardi Esqr. Dr. to Stock Vizt.		Chaise hire to the Races	5s
For use of Sundry Matts & Cords also	5s	Chaise Boys	1s
Boards cut with a Door & other waste		[GA 344/10 p.1486, 13-9-1786]	£ 8 3s 8d
2 Mens Attendance each 2 days	9s	Another similar account was made out in 1785	
4 lb. Of Packing Line in Tying the Polls	2s 8d	[344/93 p.198]	
totally lost		1785 Memdm. Mr. Lunardi Dr. to Sundries	
11 lb. Nails	1s 6d	To Thos. Ralph [whitesmith]	
2 Log lines 3/6 18 lines at 7d 10/6	14s	To Tomlinson & Heaton [whitesmiths]	
Repairing the Balloon & sundries per acct.	9s 5d	To Matthew Gotts & C. Boatswain riggers 13 0 2 ¼	
5 men each 1 day	11s 3d	To Geo. Lamb [?] for sundries	
use of a pair of Bellows, 1 bolt & Lockings	10s 6d	To Henry Bamber do.	
for the Boatswain Rigger for his Attendance	13s 21/4	To Mr. Walmsley printer	
& act.		To Mr. Pennington for use of a carpet & sewing	
For Cartage per Acct.	6s 4d	[upholsterer]	
For use of a Pair of Bellows Labr. as per Acct.	2s 6d	To Geo. /Jno. Brockbank (shipbuilders) for use of a sale	
For loss in Cutting 24 Poles & a large Do.	18s	5s	
For 7 ¼ days labour & nails per Acct.	19s 3 ¾	Perhaps to Winder the taylor (sic)	
Use of Sails	5s	To Mr. Higgin for money paid for a watch & c.	
Watching 4 nights 6s Taking down a shed	2s 8s	To Jno. Brockbank for use of polls & c.	
Paving	6s 6d	Cutting some short ones	
500 Printed Bills an Appollogy [sic]	9s	For advertising in 2 Lple & 1 Whitehaven papers these	
500 Do. Balloon to be run	6s 6d	entered into our Cash Book & pd. by us- 0 12 0	
		Paid Boatswain Riggers per bill 1 12 0'	

Acknowledgements

The authors would like to thank Anne Dick, Area Archivist, Cumbria Record Office and Local Studies Library, Whitehaven, for supplying the extracts from the Cumberland Pacquet, Westminster City Archive Centre, Westminster for permission to reproduce figure 4, and the owner of the chair illustrated in figure 5.

Figures

Figure 1 Vincenzo Lunardi (1759-1806), mezzotint by F. Bartolozzi after Cosway.

Figure 2 Lunardi's first balloon

Figure 3 Lunardi's second balloon being inflated. Note the oars in the basket and the supporting poles and the sail.

Figure 4 Gillow's 'Old' Balloon Pattern Chair first made in 1785, and the 'New' Balloon Pattern Chair designed in 1786. [Published by permission of Westminster Archive Centre]

Figure 5 An example of a 'New' Balloon back chair, several other variations of this design survive. [Private Collection].

References

Part 1

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- [2] Encyclopedia Britannica, Article Aerostation. Edinburgh, 1797.
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Part 2

- [1] GA,344/170 p.673,2-6-1785.
- [2] CP,1-6-1785.
- [3] CP, 14-6-1785.
- [4] CP, 5-7-1785.
- [5] GA, 344/170 p.683,17-6-1785.
- [6] GA,344/170,p.709,18-8-1785.
- [7] CP,26-7-1785.
- [8] GA,344/10 p.148,13-9-1786
- [9] GA,344/67 18-6-1810.
- [10] CP13-9-1785.
- [11] GA 344/74 f.291,6-8-1785.
- [12] GA, 344/9 p.1227,16-12-1785.
- [13] GA 344/9 p.1191,12-11-1785.
- [14] GA 344/10 11-9-1786.
- [15] GA 344/11 p.2056,7-12-1787.
- [16] GA 344/11 p.2060,December, 1787.