

PHILIP BRANNON, 1817-1890

By AMY MARKWICK

ABSTRACT

Philip Brannon was born at Newport, Isle of Wight, in 1817, the third son of George Brannon, printer and engraver, author of Vectis Scenery. Philip set up his own business in Southampton about 1845, and produced The Picture of Southampton, as well as Guides to Netley Abbey, Bournemouth, Poole, Swanage and Corfe Castle. He widened his business to include architecture and engineering, where he experimented with new materials and methods in coastal protection and development, in building and in road and bridge construction. In 1863 he moved to Shanklin, but by 1874 he was settled in London. While there he developed ideas for a navigable balloon and for a flying machine. He moved to Walton-on-the-Naze in 1882, and died in 1890.

The span of Philip Brannon's life, from twenty years before Victoria's accession to eleven before her death, covers a vast and varied number of developments, above all in industry and transport. The story of his own almost equally varied activities may be said in some measure to reflect these, and to demonstrate their effect on a talented, energetic, over-optimistic and socially sensitive individual.

His father, George Brannon, is said to have come from Antrim to London, where he is registered in 1822 as having a printing press at Clerkenwell. He married and settled on the Isle of Wight where he set up as printer, engraver and publisher. By 1820-21 he had begun to publish *Vectis Scenery*, a guide to the Island, illustrated by himself, 'a self-taught artist', as he says. It ran for some sixty years. Philip was the third son among eight (or perhaps nine) children, and his birth was registered at the Unitarian church in Newport (he was baptised in the parish church, St Thomas). Unitarian ideas were to have a marked influence on him, after the arrival in Newport in 1853 of Edmund Kell, a Unitarian of strong personality and considerable intell-

ectual power, to take up his first charge. Kell had been brought up in the dissenting tradition, and supported many of the causes to be associated then or later with the Chartists, such as manhood suffrage, municipal reform, temperance and education of the working classes. His wife started a Ragged School in Newport.

Philip went into his father's business; and began to contribute to *Vectis Scenery*. He followed the ideals of the Kells and worked in Ragged Schools. A letter from his last surviving child, Emma, written to C F Carr of the *Southampton Echo* in 1939, says that as a young man 'he started Ragged Schools for boys and afterwards girls too', for which he was ridiculed. He was helped by Emma Kemp, a girl several years older whom he married in 1845 in the Unitarian church at Newport.

They moved to Southampton, where he set up his own business (see Fig 1). The heading of a receipted bill dated 1852 describes him as General Artist, Engraver, Printer, Publisher etc, and offers to supply views from Nature, drawings in watercolour, sepia, pencil etc, perspectives for architects, designs for manufacturers and carvers, engraving and original designs for cards, bills and labels, maps, charts, seals, stamps in relief etc, the preparation and publication of new works, and printing of every description. The heading displays a considerable variety of types, and there are many examples of the different kinds of work here offered. An outstanding one is *The Picture of Southampton* (1850) which he wrote and illustrated (some of the engravings being reproduced in British Archaeological Association 1855, pl 27-9). He recommends it to visitors for its healthful climate and spa waters, but he also speaks of its docks and railway; the spa period was in fact beginning to fade out, and



Fig 1. Brannon's Southampton trade-card, showing his own shop front in Above Bar, docks and shipping, views of the Bargate, South Gate and West Gate, together with various artists', draughtsmen's and printers' tools.

the railway and docks periods were opening. The lines of the London and South Western Railway (first known as the London and Southampton) were completed by 1840, in time to receive in 1842 passengers on two ships of the Peninsular and Oriental Line using the newly opened tidal dock, then the largest in England.

There was now industrial and semi-industrial growth, leading to increased population, overcrowded housing, neglect of hygiene and lack of adequate sanitary arrangements. By the standards of the time Southampton had a good water supply, and the cholera epidemic it suffered in 1849 was not amongst the very worst in the country. Nevertheless it was bad enough to give rise to a petition to the Central Board of Health and a devastating report prepared on the spot by its

inspector William Ranger. Philip Brannon's commendation needs to be read in this context.

His wife died of phthisis, that is tuberculosis, in 1852. According to the above-mentioned correspondence between C F Carr and Emma Brannon, she had four children, but only one, Alfred, is mentioned in any census list. In 1853 he married another girl from the Isle of Wight, Emma Mary Pedder, some years younger than himself, and a cousin of the first wife. This time the marriage took place in the Register Office in Southampton. Her daughter Emma says she had eleven children, all born in Southampton except the youngest. Of these only five appear in census lists.

At the time when Philip settled in Southampton the Conservative ascendancy on the

Town Council was being strongly challenged by the Liberals, who gained a majority in 1847, under the energetic leadership of the coach-builder Richard Andrews. He was Mayor five times in the next eight years. Philip supported this party with the enthusiasm he showed throughout his life for new ideas in technical development as well as in social progress. This was in accord with the Unitarian principles to which he adhered. When he came to Southampton there was no Unitarian chapel, and a small group met in his rooms in Carlton Crescent. Later they used the former Wesleyan chapel in Canal Walk, when the Wesleys moved to their new building in East Street. In 1853 important changes began with the arrival of Edmund Kell, who organised the building of the Unitarian Church of the Saviour in London Road, opened in 1860. Southampton offered Kell a wider field for the promotion of his ideals, and he found a loyal and energetic helper in Philip Brannon, who supported him in public debate, and assisted his archaeological researches by providing diagrams and engravings (e.g. Kell 1855, pl 24). He had already published in 1851 a *Guide to Netley Abbey* as well the guide to Southampton, and was probably preparing the series on Poole, Bournemouth, Swanage and Corfe Castle (Brannon 1856-60).

He too was trying to find a wider field for himself. In Craven's Directory of 1857 he appears not only as Engraver but also as Architect and Engineer. There is no evidence that he had any strictly professional qualifications for this work, but he was appointed architect for Kell's new church. He was still very active in printing, engraving and painting. Some of his large works include imaginary scenes such as 'Southampton during Roman occupation', 'Southampton in the time of Henry VIII' and 'The Landing of Philip II of Spain'. These might be displayed, reproduced and sold at 'penny plain, twopence coloured'. By 1860 however he had acquired considerable knowledge of building materials and methods, and had ideas of his own for Southampton, as, for example, his design for Fremantle Church, Schools and parsonage; his proposed plan for

Southampton Parks; and his scheme for Public Library, Museum and School of Art, at God's House Tower.

The Unitarian Church was described at the opening ceremony (*HI* 1860 March 24) as 'this elegant structure' and also as 'the cheapest church in Great Britain'. His own engravings (Fig 2) show an impressive west front and entrance and an interior that appears much more spacious than its dimensions would suggest. The vote of thanks described his work as 'a labour of love, to which he had devoted his professional talents and his personal superintendence with an energy and a forgetfulness of his individual interests' that entitled him to the warm expression of their gratitude. It was no part of the Unitarian creed to neglect one's own business interests, and these words inevitably come to mind when reading the notice of his bankruptcy in 1862 (*HI* 1862 August 8 & September 24), which declares debts to unsecured creditors of £746, bad debts of £313 and doubtful debts of £100.

The last known Southampton address was in the 1861 census, and after the bankruptcy he moved back to the Isle of Wight. There tourist business was growing, and by 1860 Sandown was expanding. In 1863 Shanklin had its own Local Board of Health, and at its inaugural meeting Philip Brannon was appointed Surveyor. Later he was also appointed Inspector of Nuisances, at a combined salary of £20 a year (Parker 1977, 17). In the fashionable list of the *Isle of Wight Observer* in 1865 Mr and Mrs Brannon and family are in residence at Prospect House, Shanklin. The building survives with its twelve chimneys.

Although at this time he probably continued painting, illustrating and writing, his main activity apart from his statutory duties was a fairly ambitious scheme to develop the sea-front at Shanklin, building an esplanade, roads and residences. The land in which he was interested was owned by Francis White Popham. The owners of the neighbouring Carter estate had begun in 1852 to grant 1000-year leases for development, and in 1857 Popham had already replaced some 99-year leases by 999-year leases. The records of the

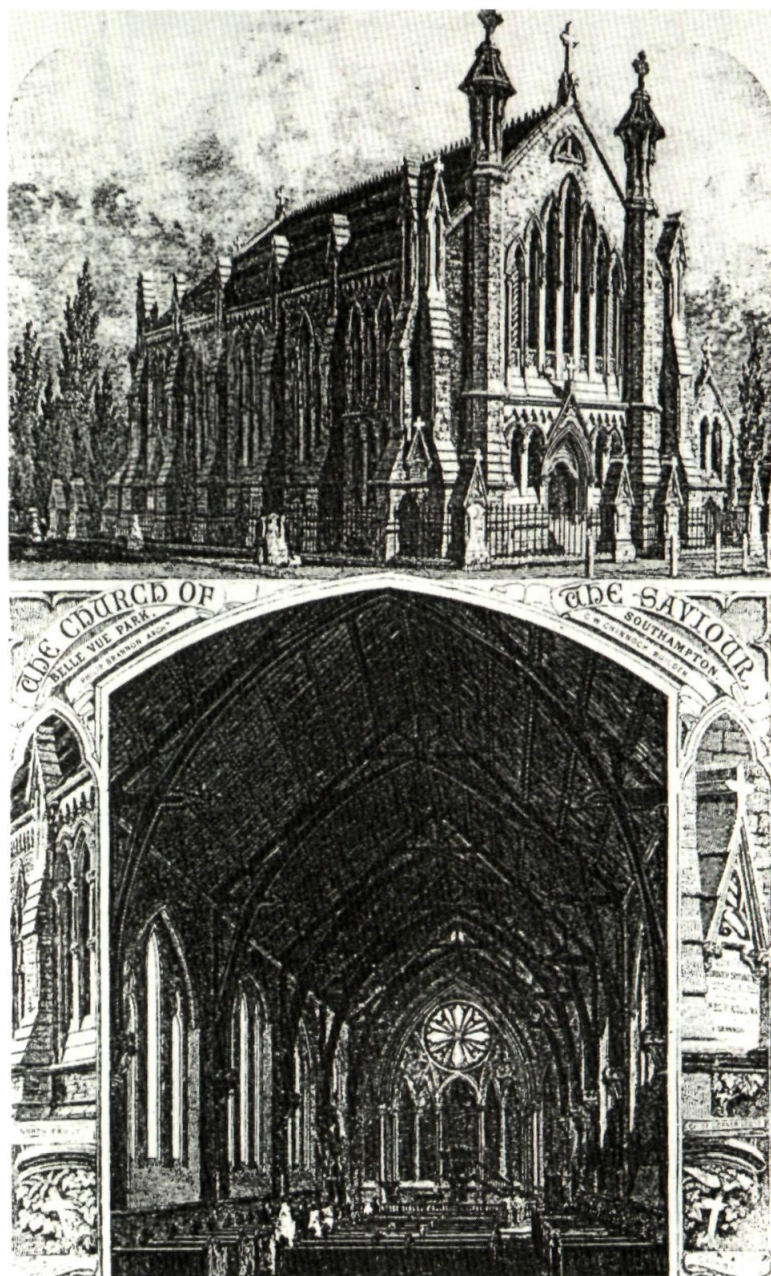


Fig 2. Church of the Saviour, London Road, Southampton: the west front and interior. In reality the building was neither so lofty nor so spacious as this illustration suggests.

Popham estate, now available at the County Record Office, Newport, provide information on Brannon's activities and methods. He obtained leases for pieces of land on which to build roads and designate building plots. The properties were to be of good residential style, and one lease of 1866 specifically excludes commercial and public buildings, and occupations ranging from pig-killing (except for family use, so presumably a pig could be kept) to 'exposing clothes for drying, airing or any other purpose.' Much of the land seems to have been re-leased by Brannon, but in some cases he might have undertaken to build the houses himself. He certainly obtained timber from merchants at Kingston and at Portsmouth. For the road-building he opened a stone quarry in a cutting in Great Woods Cliff, for which he negotiated a 15-year lease in 1864. He was to pay 1/- per load for stone used on the estate, 2/6 for stone taken off the estate and nothing for stone used on the shore. In the same year he obtained a lease of nearly one mile of the cliffs at Shanklin, for an esplanade to be built mainly in Shanklin but partly in Brading parish.

It is sad that much of the material about Brannon relates to debt and default on his part. His bankruptcy had not taught him a lesson. By 1868, although he was still negotiating fresh leases, the situation was serious, and much of the trouble was connected with the quarry. He would make payments, but not in full; or roads were not completed in time. Accounts seem to have been either lacking or inadequate. Doubts were cast on the legality of the signed memorandum of the agreement about the quarry. At this Brannon protested indignantly, in a badly written note, that he looked on 'a conversational statement' as others did on 'judicial oaths'. By 1869 his business was suspended, he had moved from Prospect House to Lucerne Villa, St Johns Road, Ryde, and he was in very great need. A letter to Francis White Popham begins by thanking him for 'a little contribution to my present necessities', and, assuring him of his devotion to his interests, denies that any stone from the quarry has not been accounted for.

The sorry tale is attested by the proceedings in the London Bankruptcy Court, which dragged on from the first petition in January to the discharge a year later (*LG* 1869 January, 1870 January). *The Isle of Wight Times* reported the hearings in some detail (*IWT* 1869 January 14 & 28, March 11, May 13, November 25). Protection from arrest was granted throughout. At first there was disagreement amongst the creditors as to who should be assignee, and eventually T N Rawlings, a timber merchant of Portsmouth, was chosen. When goods, cash and deficiency accounts were requested in addition to the ordinary accounts, and Brannon handed a paper to the Commissioner, it was found not to contain the statutory accounts, so there had to be an adjournment. Brannon asked for an allowance, but this was refused on the grounds that he had withdrawn about £300 from the bank shortly before his failure. At a meeting in May the total amount of debts was said to be £1,300 and the principal creditors were Messrs Bishop and Co, timber merchants, Kingston, £280, the Provincial Banking Corporation, Portsea, £87 and Mr Howard, grocer, of Shanklin, £330. As the accounts were still lacking, there was a further adjournment till June, and an allowance was again refused. The next report in the *Isle of Wight Times* is of a meeting in November, when the assignees asked for time to examine the additional accounts. Francis White Popham's 'contribution' seems to have been made in December. The final discharge was early in January 1870.

In December 1870 the *Isle of Wight Times* is reporting again on 'our townsman, Mr Philip Brannon', who has 'made a gallant proposal to victual Paris' by means of 'large and safe balloons' to be constructed by 'the firm of which he is the senior'. By this time or soon after Brannon had a London office. In the 1871 census the head of the household at Lucerne Villa is his wife Emma Mary, but the first known London address is in Patent No 2033, for 'underbed, cushion bed and surfacing for roads' taken out in 1874. In the 1881 census he is at Victoria Park, Middlesex, but in 1882 he moved to Walton-on-the-Naze, keeping chambers in London.

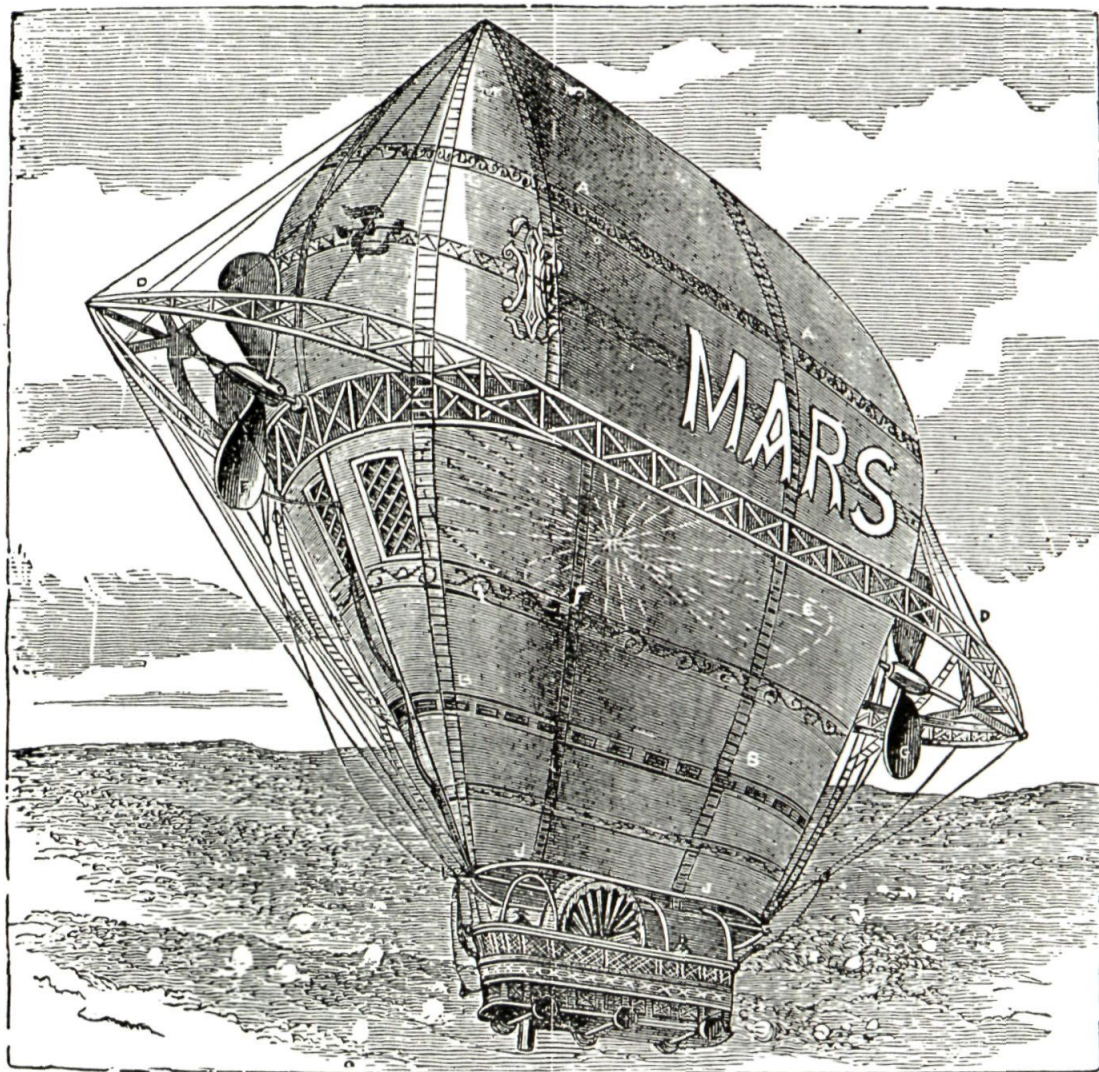


Fig 3. MARS, the air-ship designed for the French government to relieve the siege of Paris.

Experiments had been going on with balloons ever since Montgolfier's first flight in 1783, and in the siege of Paris in 1870 a balloon post was established. They could be made to ascend, but once up they were at the mercy of the winds. What Brannon offered the French government was a navigable balloon or Air-Ship, which he christened *Mars* (Fig 3). It

was a hot-air balloon, not round but ship-shape, with propellers at either end, or possibly a 'wind-wheel' amidships. A letter published in the *Daily Graphic* and quoted in an obituary (*IWT* 1890 June 28) states that 'his plans, though not accepted, gained him great praise from the French government, and also considerable notoriety in the scientific world.'

In fact by the time he submitted them the siege was practically over.

During his time in London Brannon continued to work on ideas for balloons and also on heavier-than-air flying machines, known at that time as aerostats, but this can hardly have been a source of income. He continued however to paint in watercolours and in oils, and to write and illustrate articles. Examples of the latter are an article on the defences of Portland harbour (Brannon 1862) and an article on the marble quarries and limestone workings on Anglesey, with a plan of the Dinorben quarries, reprinted from the *North Wales Chronicle* in 1877. In the letter mentioned above his patrons are accused of accelerating his death by beating down his prices, so that 'what he could first obtain £10 - £12 for had to be sold perhaps for £2 - £3, which preyed on his mind.' During this same period in London he was working on roads and buildings, introducing new ideas for improving safety by fireproofing, and new materials and methods in construction and decoration. He left a record of these ideas, and took out some fifteen patents.

He was particularly interested in the use of concrete, and in methods of strengthening it by what is now called reinforcement. Historians of science and engineering credit him with the earliest use of reinforced concrete for pile foundations, but not with the original theory of reinforcement. His work was known much more widely than in London, and one example has a special interest. When Sir W C Trevelyan, Lord of the Manor of Seaton, Devon, decided to build a bridge over the River Axe for the convenience of residents in Axmouth, he chose Philip Brannon as his architect, according to the *Seaton Guide* of 1885, as being 'a well-known advocate of the use of concrete in every kind of edifice'. In this three-arched structure, opened in 1877, he had used some original ideas, described by him as 'cup base or centricating foundations' in which 'an unyielding concave soffit' would receive the thrust of the arch. Unfortunately the new methods proved to be in error, and there had been misjudgment of the strength of the silt under the west pier. Separate steel beams had to be installed at a higher level than the road

surface to carry the traffic load. A new bridge is now to be built upstream to meet present requirements, and Brannon's bridge, now an Ancient Monument and Grade 2* listed building, will be restored to its original appearance, it is hoped, and reserved for pedestrians. It is regarded as the earliest surviving concrete bridge.

Like many others, Brannon was fascinated by the idea of flying machines. In 1878 he published his book called *The Arcustat*. This was what he called his design for an aerostat, the main features of which seem to have been 1) parachuting effects, navigation through the air in a way different from the navigation of balloons; 2) suction draft - a kind of jet effect; kiting - the use of sails; and the development of special fabrics and metals to give strength with lightness. The last was particularly necessary for the propellers and for 'steam, gas, atmospheric, electric or other engine, or other means of producing prime motal power.' Besides the descriptions and diagrams of this machine (Fig 4), the book contains a list of 187 inventions 'the original discovery and contrivance of Philip Brannon', and a number of advertisements; for his series of lectures on aerial navigation, for his services as consultant on his engineering and building designs, and for a prospective Aeronavigation Company to construct vessels and run passenger lines and pleasure trips.

He had evidently submitted his design to the Royal Society for Aeronautical Research, founded in 1866, for he complains bitterly that the 'Magnates of "Royal Societies"' had thought proper to drown his discoveries with 'the cold water of their sublime disregard'. There is in the library of that society a copy of *The Arcustat*, bearing on the fly-leaf a recognisable sketch of Philip Brannon and some pencilled notes by B Baden-Powell. The gist of the criticisms they make is that there have been no trials or experimental models. He has made one large model, but 'not large enough to go'. There are no exact dimensions, weights, etc and no explanation of how the machine could take off. 'He certainly seems to know a good lot about it' says the note, 'but has not tried much practically . . . cannot do more for want of funds.' Baden-Powell himself experimented in flying,

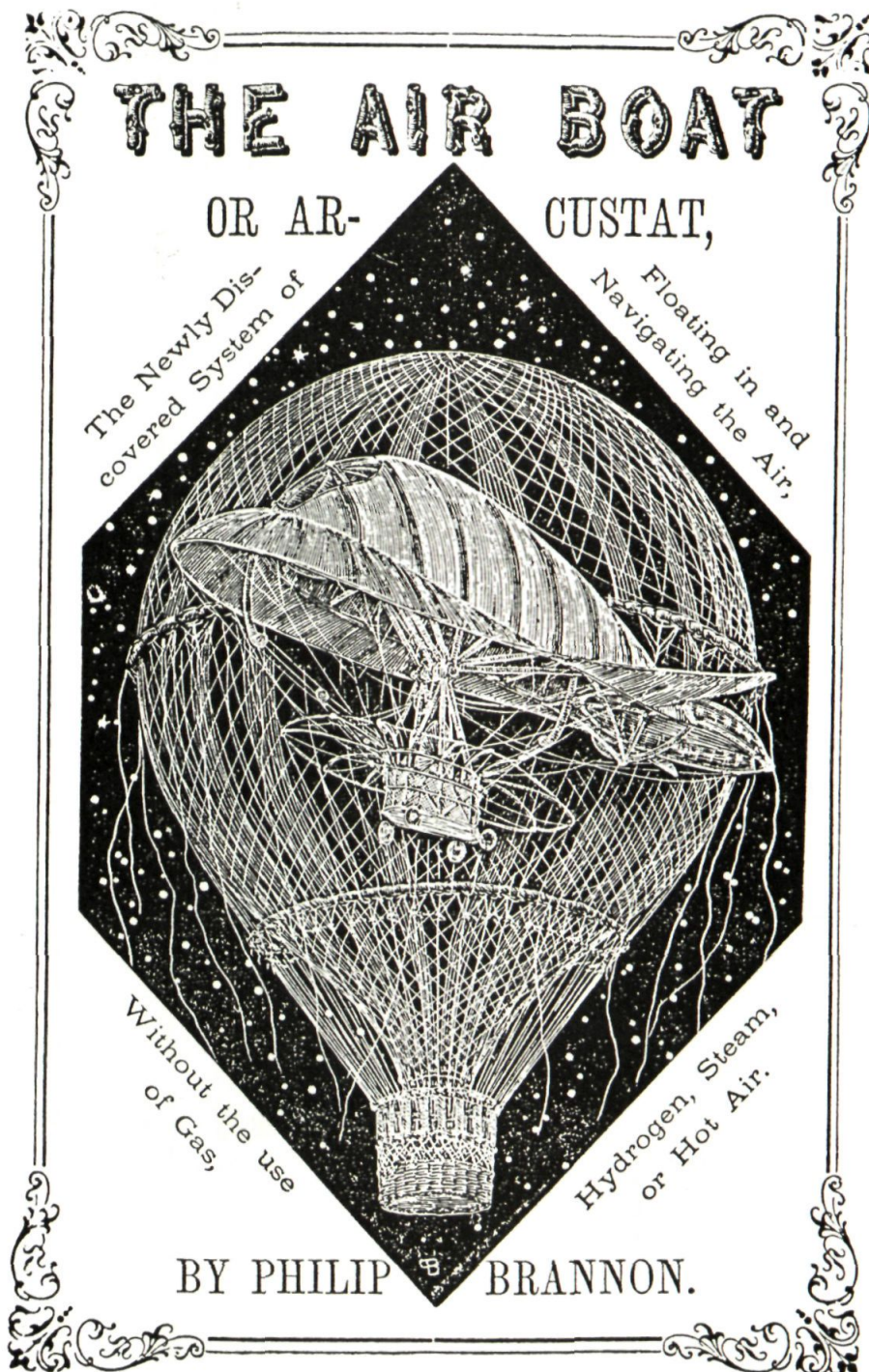


Fig 4. The Arcustat, showing the relative proportions of a gas balloon and an Arcustat for carrying four persons.

but he favoured balloons and kites rather than aerostats. An article in the *Aeronautical Journal* (Pritchard 1956) entitled 'An Appreciation', criticises Baden-Powell in much the same terms in which he himself had criticised Brannon, for 'too little trial and too much error'.

In 1882 Brannon moved to Walton-on-the-Naze, where he is entered in the *Essex Directory* of 1886 as architect, civil engineer, house and estate agent. Walton Naze Park, on the seaward side of the Naze promontory, was being laid out for building, but the development of sea defences, promenade and carriage roads did not get under way till 1890, when the Walton Sea Defence Act gave powers to raise £20,000 for repairs to the sea wall. That was the year when Brannon died of 'Angina pectoris, Bronchitis and Exhaustion', leaving his wife and two daughters practically destitute.

His bridge survives, and is an important example of the early use of concrete. The

church he successfully built in Southampton was destroyed by enemy action, and its records were badly damaged by fire. The present, much simpler building has a stone laid 'on the 10th March 1956 . . . to commemorate the re-building of this church' and also 'the re-laid original corner-stone of 1859' (Douch 1978, 12). His watercolour landscapes, judging from some examples in Brownsea Castle, can be rather dull, but he is competent with trees and very good with buildings. Two pictures of the City of London, of St Andrew Undershaft and of the Blue Boar (no longer there) are known, tantalisingly, only in black-and-white photographs taken by the Parker Gallery before sale. The originals cannot be traced. The most important watercolour is the large panoramic view of Southampton in 1861, apparently an aerial view. It is both attractive and accurate in considerable detail. Seven drawings of the Crystal Palace, lithographed, and published

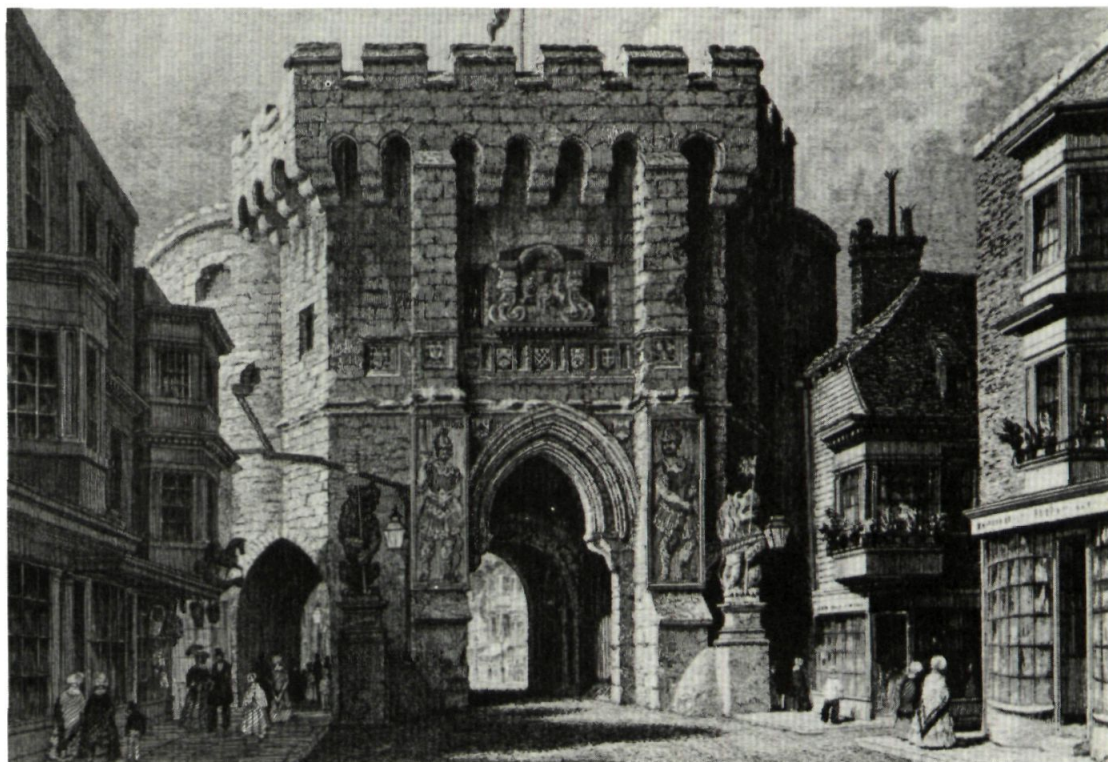


Fig 5. The Bargate, Southampton (from Brannon 1850).

by Ackermann, are very pleasing. In Hampshire and Dorset, however, he will surely be remembered mainly for the engravings in his illustrated guides (Fig 5). They are full of charm and interest arising from his skill as a draughtsman and his love for the scenes and buildings they record.

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