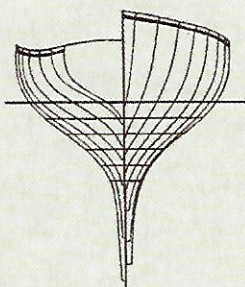


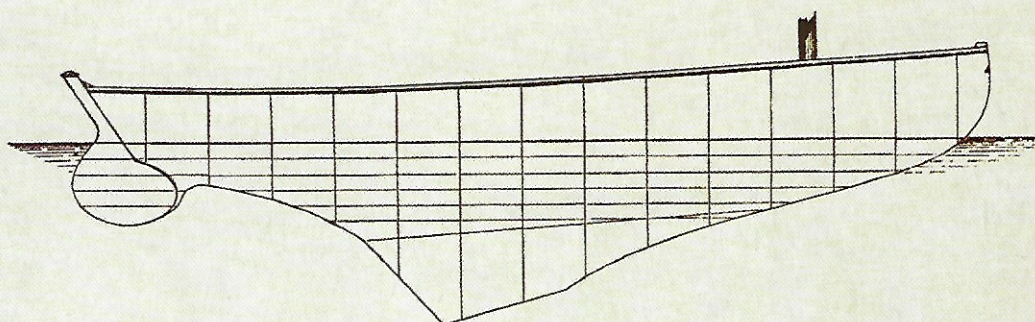
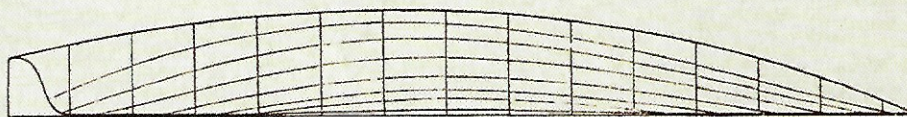
Founded by Alfred Payne in 1845, the Payne yard in Southampton designed and generations. In the first of a two-part article, John Leather traces the career of a

Paynes: Solent

**Cock-a-Whoop
2½-Rating, 1889**



Above: This Solent racer was one of many designed by Arthur E Payne for F and AC Hughes to race in this keenly contested racing class. Dimensions were



27ft 2in length overall, 25ft waterline length, 8ft 7in beam and 5ft 9in draught. The 600sqft rig of standing lug mainsail and a foresail set to a short bowsprit

was typical of the class, which was sailed with a professional skipper and a hand. The owner steered the yacht, with advice on racing tactics from the skipper.

The hull form is of the deep fin type developed in many British racers of the time and pre-dating the plate and bulb keel of the early 1890s.

THROUGHOUT THE HISTORY of yacht designing and building there have been families who have participated over several generations, sometimes with distinction. One was the Payne family of Southampton in Hampshire, whose activities and frequent successes spanned a period of over 80 years from the mid-19th century. The business was founded in 1845 by Alfred Payne, a builder and repairer of wooden yachts and boats. He established his business by the River Itchen at Belvedere Road, in a district known as Crabniton, long since swallowed up by the sprawl of Southampton.

Alfred Payne was also a competent designer. From the early 1850s a steady run of yachts built at the yard had their design credited to him. Several of his yachts were moderately sized cutters, including the 25 ton *Lolah* of 1852; *Calypto*, 20 tons, 1853; *Folly*, 12 tons, 1858; *Metis*, 19 tons, 1858; *Rowena*, 18 tons, 1859; *Mermaid*, 14 tons, 1860; *Wave*, 6 tons, 1860; *Countess*, 15 tons, 1865; and *Favourite*, 46 tons, 1866.

In 1867 he designed the 90ft (27.4m) steam yacht *Mayfly*, which was driven by a 25hp compound engine that was built by Day, Summers & Co of Southampton. The 50ft (15.2m) schooner *Will o' the Wisp* was designed in 1872, and the 70ft (21.3m) yawl *Hypatia* in 1875.

Payne was also well known for designing and building fast sailing boats for local fishermen. The boats were small cutters varying from 16 to 30ft (4.9-9.1m) length overall and were keenly raced in local regattas. Payne became recognised as perhaps the most able designer and builder of these fishing boats and was rivalled only by those built nearby at Dan Hatcher's yard, where they were designed by William

Shergold, who also acted as yard foreman, and by those built by WS Luke at the Oak Bank Yard at Itchen, across the river.

Payne built many yachts of varying size up to 55ft (16.8m) into the 1860s and the yard did much repair and refitting work — always the mainstay of such businesses.

By the late 1860s Alfred Payne's son John was competent enough to design some of the yachts built by the firm, which was now called Alfred Payne & Sons. His earliest recorded yacht design was the 70ft (21.3m) yawl *Marinetta*, launched from the Payne yard in 1870 and typical of the quality yachts they built; craft liked by owners for their seakeeping qualities, reasonable speed, and ability to win handicap class races. The 55ft (16.8m) cutter *Pauline* followed in 1872.

John's design skill was tested two years later with the 122ft (37.2m) steam yacht *Zenobia* for J Tempest. This three-masted, flush-decked vessel had the modest deckhouses, open bridge and thin funnel of early yachts of the type. Her compound steam engine was built by Day, Summers & Co and developed 24 nominal horsepower, an old rating. Its power was around 100 shaft horsepower. She was at the time the largest vessel built by the Payne yard.

John designed at least 12 yachts, including the 80ft (24.4m) yawl *Nixie*, which was launched in 1877 for EC Baring. Her plumb-bowed, black hull was well formed and made good speed under a generous sail area. The similar but smaller yawl *Woodbine* was another of John's designs, launched in 1881.

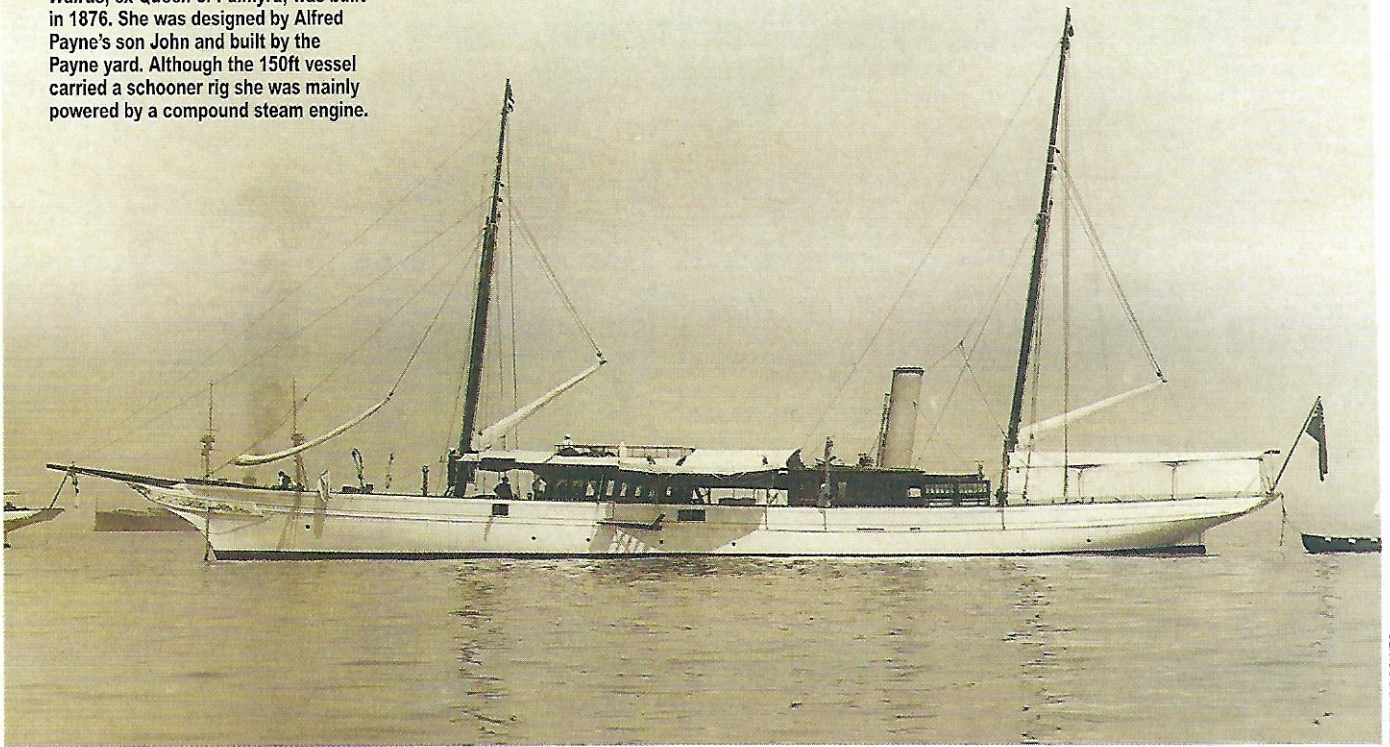
In 1876 John designed an even larger yacht to be built at Payne's yard, the 150ft (45.7m) wooden steam yacht *Queen of Palmyra* for the Marquis of Exeter. With clipper bow and sub-

built some of the most beautiful yachts to grace the waters of the Solent for three talented family of designers who created boats for rich men and fishermen alike

design dynasty

Walrus

Walrus, ex *Queen of Palmyra*, was built in 1876. She was designed by Alfred Payne's son John and built by the Payne yard. Although the 150ft vessel carried a schooner rig she was mainly powered by a compound steam engine.



BEKEN OF COWIES

stantial bowsprit, she carried a topsail schooner rig and, with a draught of 10ft (3m), could sail fairly well, though the main propulsion was a compound steam engine built by Day, Summers & Co. She was sold to WC Blatspiel Stamp in 1886 and was renamed *Walrus*.

In 1887 John designed the 36ft (11m) waterline cutter *Gertrude*, which was built by the now forgotten Southampton yard of G Widger. She seems to have been the last of his designs to be built and by then the design work of the yard seems to have passed to his younger brother Arthur Edward Payne (AEP).

AEP was born in 1858, one of three sons of Alfred Payne. He was a quiet and sensitive youth who was plagued by poor health throughout his life. On leaving school he worked in the family yard and also studied naval architecture. He sailed whenever possible and became a good helmsman. By the early 1880s the small yachts and fishing boats he designed were equalling his father's creations and he was beginning to gain recognition.

During the 1870s the small Solent racing classes were emerging, rated by waterline length as 21-, 25- and 30-footers (6.4, 7.6 & 9.1m). These broadly resembled the fishing cutters built for many years by the yards of Payne, Luke and Hatcher, having plumb stems, transom stern and a cutter rig, often without the weight and windage of a topmast but setting a yard topsail at the masthead. Small ballast keels were then fitted to new boats and by 1886 heavy

lead ballast keels and overhanging ends were introduced under a new rating rule. Before that, some of the boats made useful fishing craft when their yacht racing days ended. Occasionally, a fast fishing boat which fitted the rating length was taken up as a 'yacht'. One vessel which later became a cruiser was *Bluejacket*.

After 1878 development in the Solent small classes was rapid and young AEP was involved in the design of many boats for them. He became a keen small-boat sailor and, growing up by the River Itchen, was familiar with the racing between local fishing cutters and also with the boats from local villages. Many people sailing these boats had successful craft built by Alfred Payne, and Arthur was at best tolerated when he entered his own small boat. However, he often won a prize and 'young Mr Arthur' was soon on the way to gaining the confidence of the professional yachting fraternity, which was useful as these were the men who would handle many of the craft he would design.

In 1880, the 22-year-old AEP designed a boat for the local 13ft (4m) class which had the characteristics of contemporary racing yacht hull form and a large sloop rig. *Vril* had a 5ft 2in beam and drew 3ft 3in (1.6 x 1m). The narrow wood keel was ballasted with 1,512lb (686kg) of lead, and the total sail area of 276sqft (25.6m²) included a mainsail of 190sqft (17.7m²) spread by a 16ft (4.9m) boom. The bowsprit was 8ft (2.4m) outboard. *Vril* went on to dominate the class.

L'Esperance

Designed in 1891 for the Earl of Dunraven, a keen racing yachtsman who also owned *Valkyrie*, *L'Esperance* was built at Camper & Nicholson at Gosport. After a successful racing career, she was sold to Prince Henry of Russia. Sadly, she has ended her days as a houseboat in the mud at West Mersea, Essex.



BEKEN OF COWES

AEP had designed many small boats by 1886, when the rating rule changed and so did the Solent classes rated on length, which had led to plumb stems and plumb transoms for maximum waterline length, large cockpits and cutter rigs with a yard topsail set above the mainsail. These small racing yachts, which had evolved out of the local fishing cutter type, were

fairly fast and were sufficiently seaworthy for Solent daysailing. New boats were allowed to have overhangs, as in 1888 several Solent yacht clubs promoted the 2½-, 5- and 10-Rating classes under the new rule of:

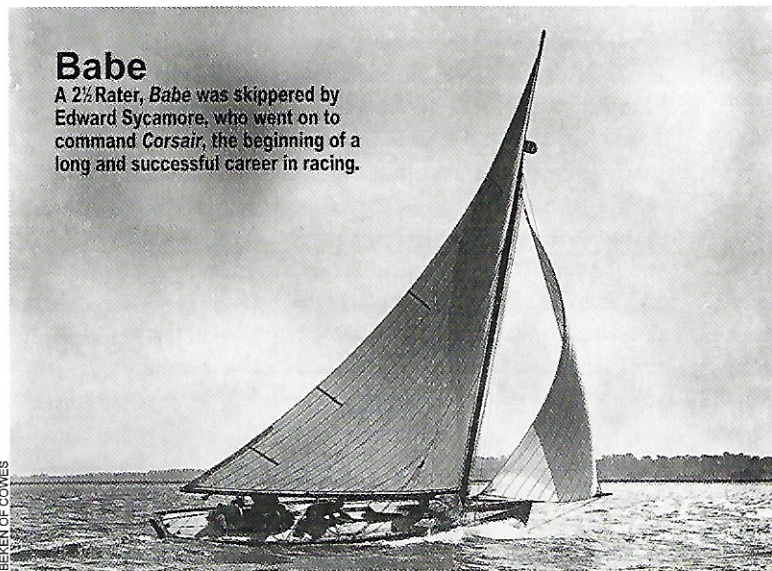
$$\frac{\text{Length waterline} \times \text{sail area}}{6000} = \text{rating}$$

A period of rapid development of design for these boats began and young AEP was well placed to play an important part.

Racing in the 2½-Rating class was especially keen. New boats were rapidly built and older ones, sometimes launched only months before, discarded. A transom stern and rounded bow profile above water were normal features, but in the quaintly named *Cock-a-Whoop*, designed in 1889 AEP brought the immersed profile to a point and the lower body sections were fined down into a narrow fin with the lead at its bottom, foreshadowing the bulb-fin designs soon to follow. The fine sport in the class attracted several owners of much larger yachts, wealthy enough to afford to add a 2½-Rater to their yacht 'fleet'. AEP produced the *Humming Bird* for JW Hughes, which dominated the class. But change was constant and Arthur Payne and the Solent 'Raters' entered a new decade of development.

Babe

A 2½-Rater, *Babe* was skippered by Edward Sycamore, who went on to command *Corsair*, the beginning of a long and successful career in racing.

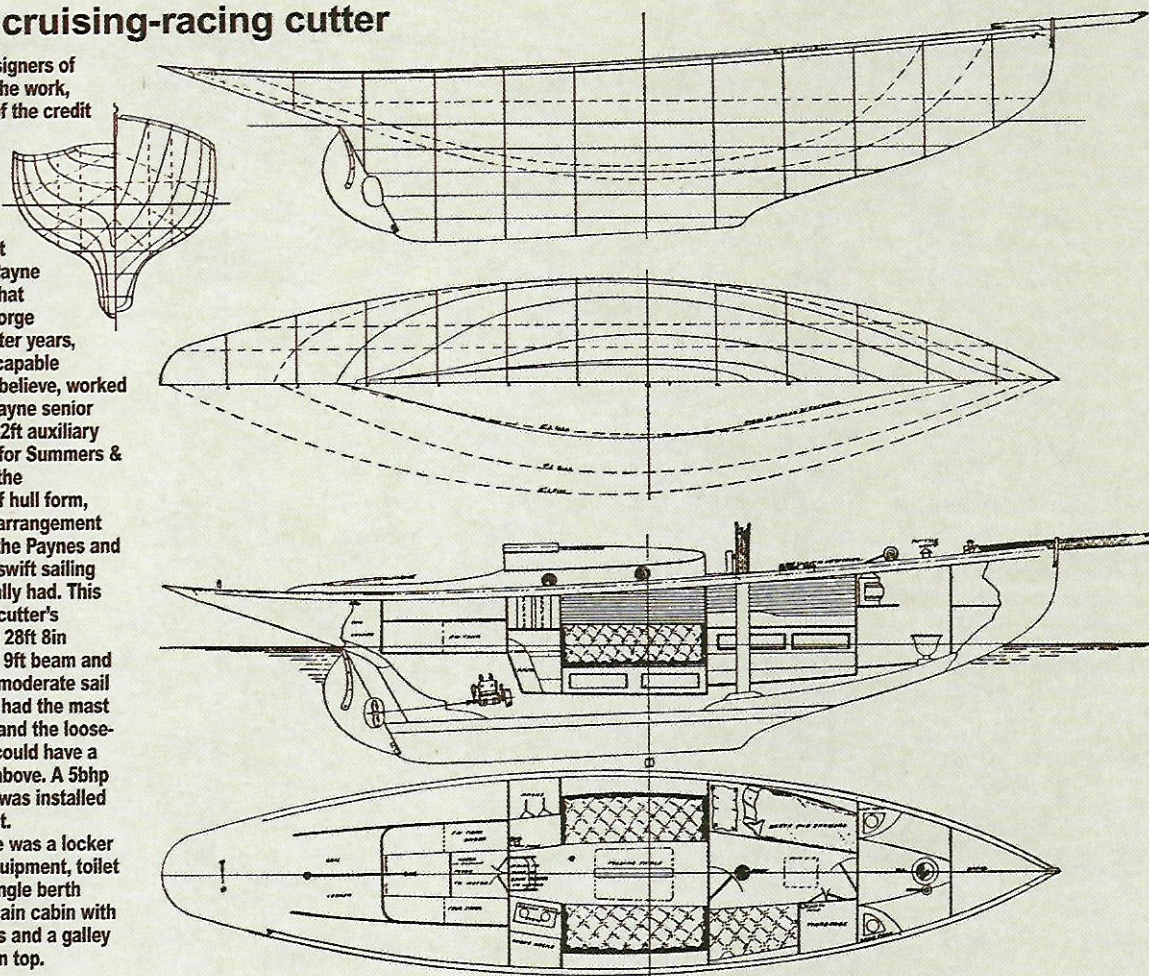


BEKEN OF COWES

38ft 6in cruising-racing cutter

As with many designers of yachts, much of the work, and often much of the credit for success, was due to the work of the now-forgotten draughtsmen they employed. At the Summers & Payne yard the men in that position were George Cozens and, in later years, GA Heal — both capable designers who, I believe, worked for both Arthur Payne senior and junior. This 32ft auxiliary cutter by G Heal for Summers & Payne shows all the characteristics of hull form, proportions and arrangement associated with the Paynes and the potential for swift sailing their yachts usually had. This counter-sterned cutter's dimensions were 28ft 8in waterline length, 9ft beam and 5ft draught. The moderate sail area for cruising had the mast stepped well aft and the loose-footed mainsail could have a yard topsail set above. A 5bhp auxiliary engine was installed under the cockpit.

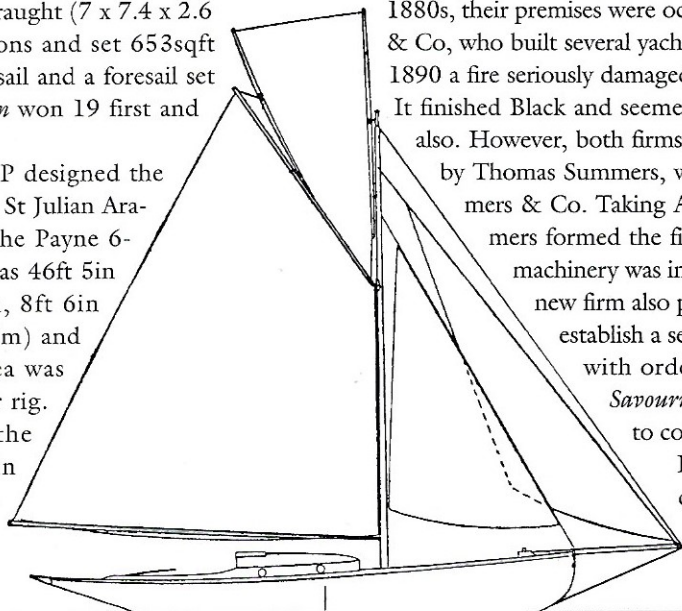
Forward, there was a locker for lamps and equipment, toilet compartment, single berth owner's cabin, main cabin with two settee berths and a galley under a low cabin top.



It would be tedious to attempt to evaluate all the craft AEP designed for the classes up to 10-Rating, though many were interesting. So keen was the racing that designers sought every possible advantage in reducing weights of hull and rig, the displacement and, consequently, hull scantlings and weights. They also strove to reduce wetted surface. A few examples will give an impression of his success against other talented designers such as George Watson, William Fife III, Charles Sibbick, Harold Clayton, Joseph Soper and others.

The 2½-Rating class *Lady Nan*, designed and built in 1888, was very successful at 23ft waterline length, 24ft 3in length overall, 8ft 4in beam and 5ft 9in draught (7 x 7.4 x 2.6 x 1.8m). She displaced 4.7 tons and set 653sqft (61m²) in a standing lug mainsail and a foresail set to a short bowsprit. *Lady Nan* won 19 first and nine other prizes in 31 starts.

For the 10-Rating class AEP designed the fast and handsome *Decima* for St Julian Arabin, who had earlier owned the Payne 6-Rater *Lollypop*. The *Decima* was 46ft 5in LOA, 36ft LWL, 11ft beam, 8ft 6in draught (14 x 11 x 3.4 x 2.6m) and displaced 14.3 tons. Sail area was 1,679sqft (156m²) in a cutter rig. She was very successful in the Solent, winning 34 prizes in 1889. The *Lollypop* was champion of the 5-Rating class and the 2½-Rating *Hum-*

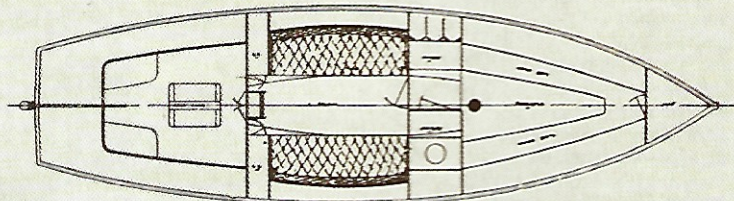
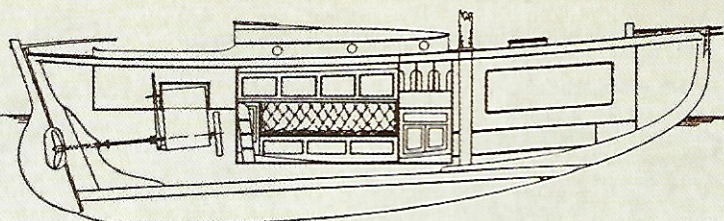
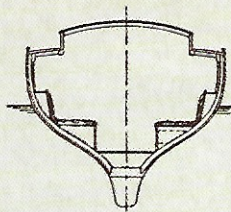
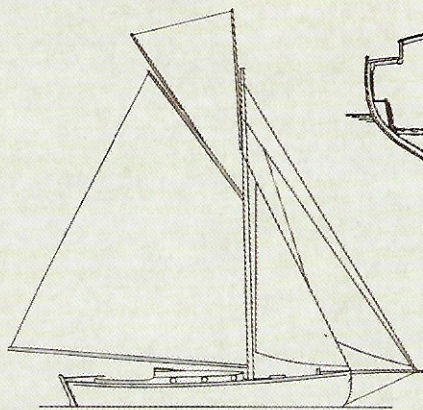


ming Bird was top of the 2½-Raters; a typically successful season of the time for AEP designs.

In 1890 AEP gained an influential client in Admiral Victor Montagu, for whom he designed the 20-Rating cutter *Siola*, one of four new yachts in the class, which finished third in the prize list with 13 flags. The Fife boat *Dragon II* was first, followed by the Watson-designed *Velzie*. The AEP-designed 5-Rating *Glyceria* was triumphant and his career as a yacht designer seemed assured, bringing much work to the family yard.

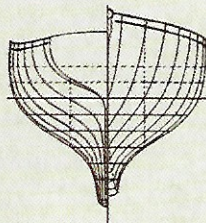
The yacht yard of Hatcher & Co was adjacent to that of Alfred Payne & Sons at Belvedere. When Hatcher's failed in the late 1880s, their premises were occupied for a short time by WA Black & Co, who built several yachts and repaired others. At the end of 1890 a fire seriously damaged both Black's and Payne's premises. It finished Black and seemed likely to close the Payne business also. However, both firms were bought by a company headed by Thomas Summers, who left a directorship at Day, Summers & Co. Taking Arthur Payne into partnership, Summers formed the firm of Summers & Payne Ltd. New machinery was installed and the premises rebuilt. The new firm also purchased a site at Millstone Point to establish a second yard. The new business started with orders for the 5-Rating *Windfall* and *Savourna*, both designed by AEP, who was to continue as the firm's designer.

In 1891 AEP received a significant commission to design the 89ft (27.1m) fast cruising cutter *L'Esperance* for the Earl of

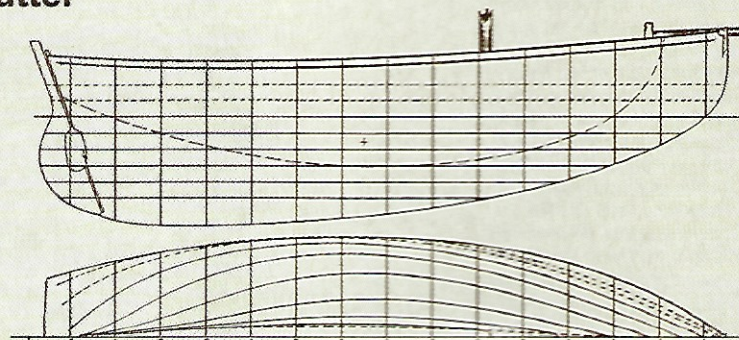


32ft auxiliary cruising-racing cutter

This attractive-looking smaller yacht was typical of many similar designs produced by Arthur Payne as part of a continuing development of the Southampton area fishing-cutter type for pleasure use. Prime examples were the still-surviving *Ayah* and the smallest, the 16ft (4.9m) cruiser *Teal*. These craft were intended for cruising short distances and daysailing, with the potential to race in handicap events and regattas. Waterline length was 29ft 9in, beam 9ft 3in and draught 5ft. The hull form promises speed and seaworthiness, and the immersed profile allows quick turning. The



rig was a conventional cutter of the time with generous area, though the designer considered she was slightly undercanvassed, the sail area was only 842sqft.



Accommodation was simple. The fo'c's'le had canvas cots for one or two hands. The galley and toilet divided it from the main cabin with its two settee berths.

These are a fast but overcanvassed type of yacht which would make a good replica-building subject for a boatbuilding college or enthusiast.

Dunraven, a keen yachtsman who owned the large class racing cutter *Valkyrie*, which had been designed by George Watson the previous year. *L'Esperance* was built by Camper & Nicholson Ltd at Gosport. She was completed in autumn 1891 and Captain William Cranfield of Rowhedge and his crew transferred to her from the *Valkyrie*, which was to be sold.

In 1892 she sailed successfully in several handicap class races and inspired the owner to order a new first class cutter to George Watson's design to challenge for the America's Cup in 1893. *L'Esperance* was sold and her captain and crew took over the new *Valkyrie II*, the Payne yacht going to Prince Henry of Prussia. Eventually *L'Esperance* became a houseboat at West Mersea, Essex, where she still lies, probably the last surviving of AEP's larger yachts.

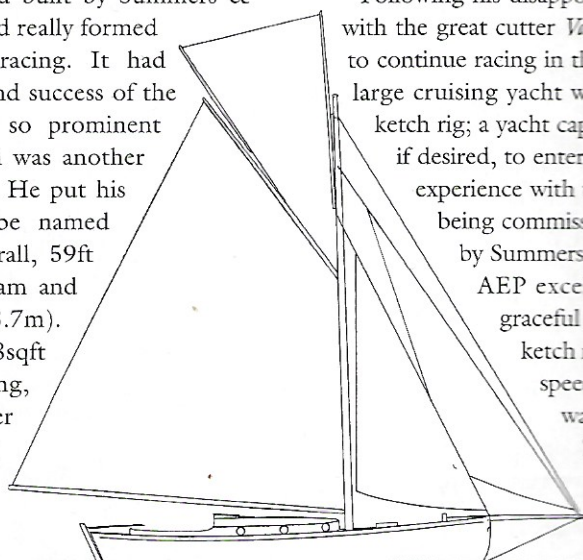
In October 1891 Admiral Montagu ordered a 40-Rating cutter to be designed by AEP and built by Summers & Payne. The class was a keen one and really formed the backbone of British yacht racing. It had continued the competitive spirit and success of the old 40-ton class racing cutters, so prominent during the 1860s and 1880s, and was another big chance for AEP and the yard. He put his best into the new design, to be named *Corsair*. She was 77ft length overall, 59ft 3in waterline length, 14ft 8in beam and 12ft draught (23.5 x 18.1 x 4.5 x 3.7m). Plain sail area was 4,098sqft (380.7m²). While she was building, the admiral was seeking a skipper for her. He chose, probably with prompting from AEP, the young Essex skipper of the little 2½-

Rater *Babe*. It was a good choice, for *Corsair* was from the start a prize-winner and laid the foundations of Edward Sycamore's long career in racing yachts.

The combination of AEP and Sycamore made *Corsair* a close second to the Watson-designed *Queen Mab*, the season's champion of the class of seven yachts. *Corsair's* moment of glory came with the race for the Queen's Cup at the Royal Yacht Squadron regatta, which she won on time allowance, beating the German Emperor's large racing cutter *Meteor* (formerly the British *Thistle*).

But Admiral Montagu was not satisfied and, for 1893, he ordered another 40-Rater from AEP. The deliberately named *Vendetta*, with Sycamore at the tiller, had mixed success in a class of four, the champion being the new *Lais*, a Fife boat.

Following his disappointing America's Cup challenge in 1895 with the great cutter *Valkyrie III*, the Earl of Dunraven decided to continue racing in the smaller classes and also to have built a large cruising yacht with comfortable accommodation and a ketch rig; a yacht capable of facing bad weather but also able, if desired, to enter the occasional handicap race. His earlier experience with the cutter-rigged *L'Esperance* led to AEP being commissioned to design *Cariad*, which was built by Summers & Payne and launched in January 1896. AEP excelled in this design, which combined a graceful appearance — not always achieved with ketch rig — with power to carry sail, reasonable speed and handling by a crew of 15. *Cariad* was 103ft LOA, 81ft LWL, and had an 18ft 7in beam and 11ft draught (31.4 x 24.7 x 5.7 x 3.4m). Construction was composite, with steel frames.



Corsair

A prize-winner from the start, *Corsair* was designed and built by the Paynes yard in October 1891 for Admiral Montagu as a 40-Rating cutter to compete in the new class.




BEKEN OF COWIES

Command of the yacht was offered to William Cranfield, who had sailed the Earl's three *Valkyrie's*, but as she was not intended for serious racing, he declined. However, Cranfield recommended Captain Bartholomew Smith from Rowhedge for *Cariad*, and this fine seaman quickly got the new yacht in trim. *Cariad* was one of several such yachts AEP would design during the next few years and a fine type, lacking the speed of the large racers but

much more practical from an owner's viewpoint and more seaworthy. *Cariad* quickly gained a reputation in the yachting fleet as a good sport and her owner also cruised contentedly in her.

Arthur Payne designed many smaller cutter-rigged yachts for daysailing, occasional racing and short cruises. A good example was a 32ft (9.8m), transom-sterned cutter derived from many similar craft of their design such as the *Concara*, *Hawthorne*, *Maeve*, *White Kitten*, *Ayah*, *Minna Dhu* and *Cherub*. This hull form had been developed and refined since the 1880s for speed and the *Ayah*, built in 1897, remains unaltered in hull form, arrangement, rig and fittings, retaining her sail area and speed.

Payne continued to be pre-eminent in the Solent racing classes, constantly striving, with success, to improve on his last design and beat the efforts of his rivals. That he could achieve this over a period of 20 years from the early 1880s is remarkable when the volume of other design work is considered and the pressure of also being a partner in a busy yard is added.

He worked long hours, which must have left limited time for his family. Twice married, with two daughters and a son who intended following his career, his pleasures were sketching and sailing his own small boats in local racing, outside mainstream yachting. 

Ayah

One of Arthur Payne's smaller cutter-rigged yachts and built in 1897, *Ayah's* hull form was developed and refined for speed from the 1880s on.



BEKEN OF COWIES

The story of the Payne dynasty continues next month