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EDITORIAL

GOSPORT Regatta, the most important event of the model yachtsman's year, is over, and, looking back, one must regret the 1938 event as falling somewhat flat after the regattas of the last three or four years. There were fewer entries for the British A-class Championship than for many years, and with so few starters, a week was too long for the race, as organised. And, after the magnificent Internationals of recent years, what can one say of this year's race? Five competitors in 1935 and 1936, six in 1937 (Norway, Sweden, Belgium, France, Germany and Britain), and two (Sweden and Britain) in 1938. Also our American cousins have been unrepresented since 1936!

Although one understands how this arose, it is a disappointing setback. Actually, owing to the holder of the International Cup, Norway, being uncertain as to whether a lake in Norway would be available, it was not known until very late where the race would take place, and even then the holder was unfortunately unable to defend the title. Had it not been for the extremely sporting gesture of our Swedish friends in flying over at the last moment for the race, Britain would have had a sail-over for the International Cup. We trust Mr. Abrahamson and his mate, Mr. Kleverström, realise how much British model yachtsmen appreciated their visit.

Quite candidly, we ourselves do not believe in Vane steering gear for racing on lakes, and though "Gothia" was in the prevailing weight of wind quite as fast as the British boat "Seri," she lost board after board (though very frequently by the narrowest of margins) through her inability to sail as direct a course as her opponent. Well, if Mr. Abrahamson and his mate could not win many boards, they certainly knew how to lose in the gamest and most sporting way possible. We hope to see them again next year, but equipped with Braine steering.

We have heard from our friend, Monsieur G. Suzor, that he is starting a campaign in Paris to get a proper water for models, and we are sure all model powerboat and sailing men will wish him every success.

We have been told quite frequently that very few mistakes or misprints occur in MARINE MODELS. Last month two beauties got through. In our Editorial the second and third lines were reversed, and in one sentence of "Y.Z.'s" article on "Model Sailing for Beginners" somehow "N.E." and "N.W." were also reversed. A paragraph about the latter will be found elsewhere in this issue, but at the same time this error was so obvious that it hardly needs mentioning. These errors should have been noticed when the proofs were read, and we apologise for having overlooked them. So far only one reader has written us on the subject, and his letter was no news to us as we had already noticed the slip and written a correcting paragraph!

THE NORFOLK WHERRY

By G. Colman Green, M.R.S.T.

FOR over a hundred years the sailing wherry of Norfolk has been a delight to dwellers in those marshland areas and an inspiration to visiting artists. No Broadland scene was complete without its presence, most graceful of all goods-carrying vessels on inland waterways.

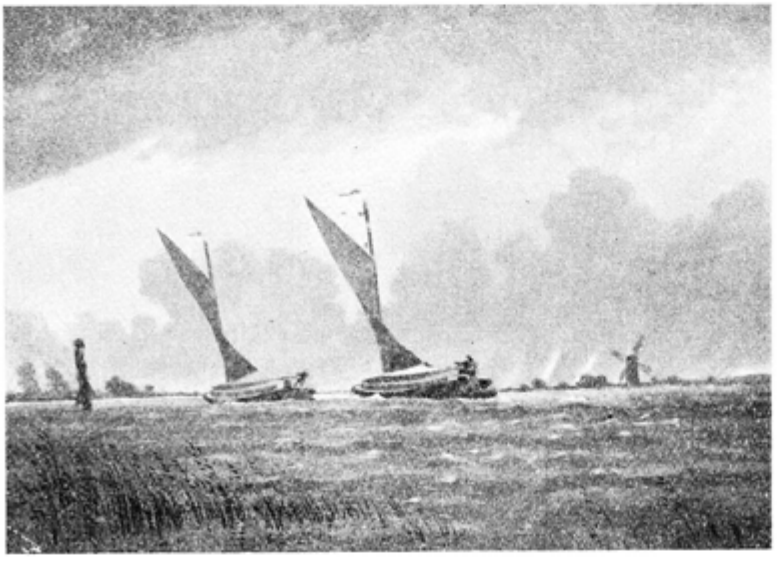
In common with other types of local sailing craft, the wherry is rapidly disappearing, and it is only rarely nowadays that one is seen under way. The present article is written in order to set on record something of their construction and characteristic features. Every feature about the wherry is the product of purpose and environment, and in many respects their construction was unorthodox, if judged by the standards of ordinary naval architecture and the practice of wooden ship construction. In addition, the wherryman had his own nomenclature, and in order to make their construction and rig intelligible to readers, I have given the usual names to the various parts in addition to the purely local ones.

How and when these river craft originated is difficult to assess, and as the art of the early wherry-builders is practically a finished and unwritten chapter, it is increasingly difficult to gauge the steps in their evolution. Like all great craftsmen, wherry-builders seemed to hand down the secrets of the trade from father to son, and as few of the early workers could read or write, we are at a loss to know their precise methods. Even the wherrymen, whom the writer knew in his youth, were illiterate and accustomed to use the chalk tally when loading and unloading their varied and valuable cargoes.

Bane, a famous Norfolk antiquary, writing about 1820 of his own times, says: "Wherries are peculiar to the rivers of Norfolk and Suffolk, and those used on the Yare carry from 15 to 60 tons, and draw from 3ft. to 4ft. of water." This is approximate, and would probably mean when light, as a 60-ton wherry would certainly require 6ft. of water when heavily laden, or as wherrymen say, "down to the coamings."

The earliest type of wherry was known as the "Keel" or "Keel-Wherry," and goes back to about 1770. This was a square-sterned, open vessel with the crew's cabin built up on the fo'c'sle. The mast was stepped amidships in a tabernacle, and she carried a square sail on a yard slung from the middle, the rig being rather similar to that of the Humber Keel, though, of course, the hull was very different. Barrel winches were fitted forward and aft to handle lines and gear.

The Keel-Wherry was superseded by the Wherry proper about 1800. These were of two types—the square-sterned and the sharp-sterned. These were introduced almost simultaneously, and have remained unaltered until



HICKLING BROAD
"April Showers"
from a painting in oils
By G. Colman Green
First-class Award,
Royal Drawing Society,
1931

the present day. In both types the crew's cabin has been moved aft.

The square-sterned type was usually known as the "Bure" type. They had a white transom and tiller in addition to the characteristic white patch at the bows ("eyes"), to make them visible in foggy weather, and at night in narrow channels. The sharp-sterned type, on the other hand, was usually known as the "Yare" type, but except for the difference in the shape of their sterns, there was little or no difference between the two in build or rig.

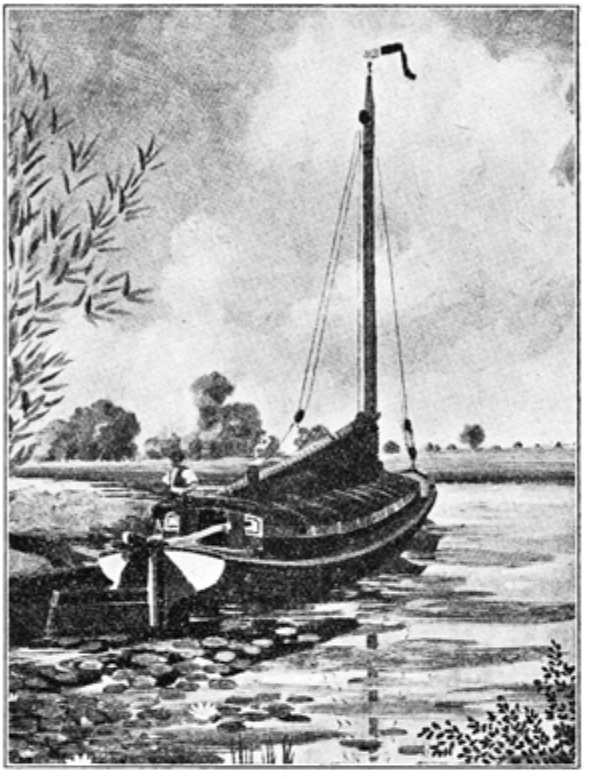
About 1880 a local genius had the idea of converting the trading wherry "Volunteer" into a pleasure wherry by building cabins into what had been the hold space of the vessel, and in the next few years quite a large number of other wherries were similarly treated.

A further development was the North River Barge, which was a specially built wherry-rigged yacht with a white sail. Not more than a couple of dozen of these lovely craft were built in all, and some of the later ones, built about 1890, had counter sterns, while most of them, contrary to wherry practice, were carvel built.

However, the "Yare" type of trading wherry was by far the most numerous and characteristic, and except for the Keel-Wherry from which it was evolved, the other types can be considered as variants of it. Therefore, as space does not permit of our dealing at length with all types of wherries, the present survey is more or less confined to the "Yare" type.

Until the end of the nineteenth century the Norfolk wherries held their own against the growing competition of the river steamboats. The latter were at first for passenger traffic chiefly, but the knell of the trading wherries was sounded when local brewers and maltsters began to build steamers, and there was a further marked decline with the advent of the Diesel engine, and by about 1910 the triumph of the motor-boat was complete. Since then no new trading wherries have been built, and only one or two quasi-wherries.

The wherry was evolved to meet local conditions and circumstances. Their purpose was to carry cargo on rivers that are often shallow, tortuous and narrow. Great cargo-carrying capacity on shallow draught was essential, and as the surrounding country is flat and open to the strong breezes of the North Sea, good sailing qualities were necessary. Not



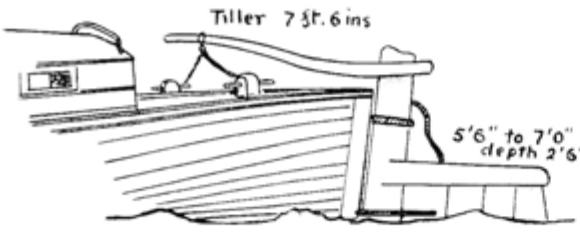
WHERRY "RACHEL" ON ROCKLAND BROAD. 1907

From a sketch in Oils by G. Colman Green

N.B.—This Wherry is of the "Bure" (or square stern) type.

only were wherries good off the wind, but were also marvellously close-winded, and the consummate skill with which the wherryman sailed his vessel to windward is hard to realise in these days when the ubiquitous, time-saving motor-boat does the work. But the old wherries were by no means slow, and it was not uncommon for them to complete the 20 tortuous miles between Norwich and Yarmouth in under four hours.

As an example of a typical Yare type wherry, I am giving the lines of "Gleaner," which are reproduced by the courtesy of the Director of the Science Museum, South Kensington, London. With these before us we can make a detailed examination of the way in which wherries were built, but before starting, may I emphasise that these graceful vessels were built by the heart for the eye, without rule, and entirely without working drawings. The scantlings and construction given on the plans apply to this particular wherry, and though they are quite typical,



"John Henry" 32 tons.

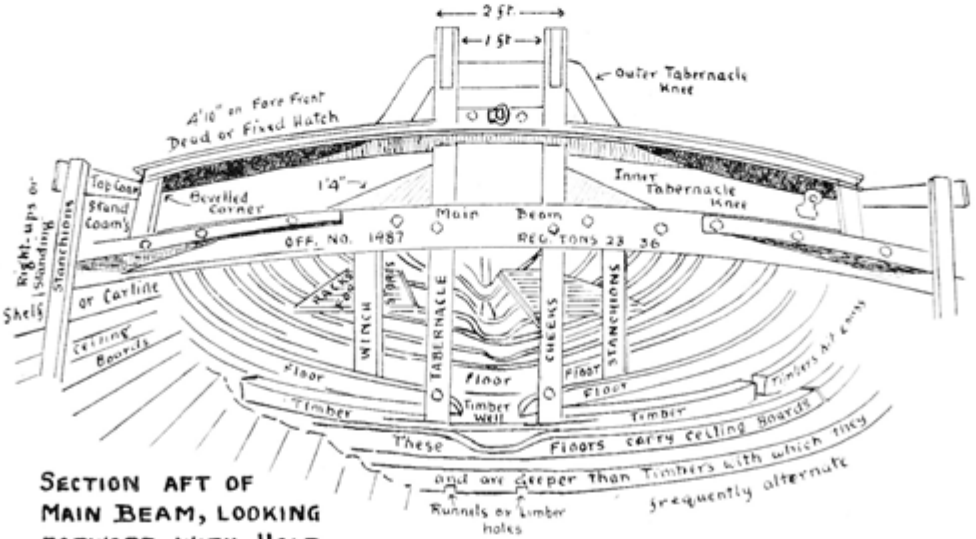
every individual builder had his own ideas, and, consequently, every wherry differed from her sisters in some minor detail. Similarly, the other drawings given in this article are correct to the vessel whose name is given, and though some variations are found between different wherries, the drawings can be taken throughout as being typical of wherry practice.

The lines of "Gleaner" reproduced here are, of course, not original working drawings, but taken off the vessel. One point worthy of mention is that, when building, very few moulds were used. A wherry builder's son once told me that his father only used "a frame for the big section (midships, or master section) to start her off." He added that at first his father found the forward hollow sections difficult and he used a mould, but soon got the knack of it, and did without. This method of building without many frames would allow the planks to assume the natural curves of the wood, and in part account for the sweeping, graceful lines of the hull.

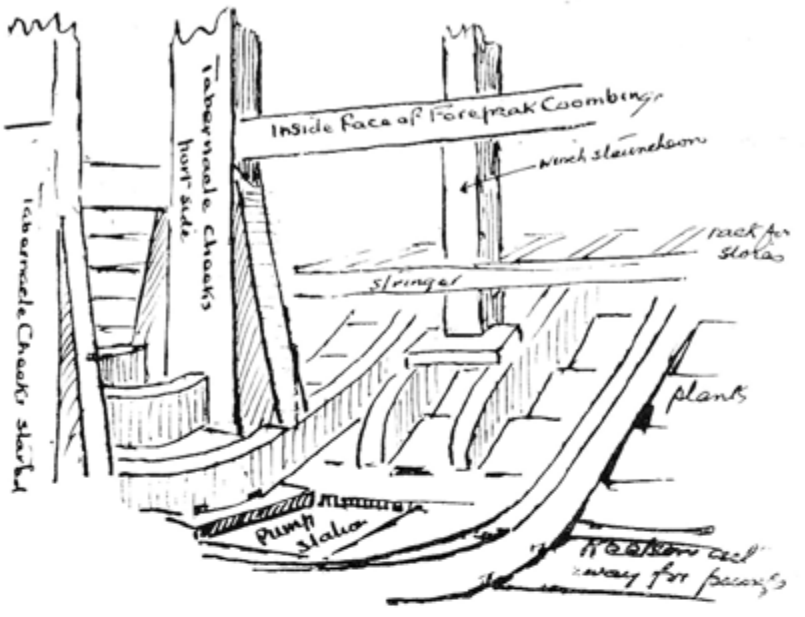
The Norfolk wherry was a clinker-built ship, and by that I mean her planks were fastened by "Clinks" (i.e., bolts with the head outside, hammered home, the inner end being nipped off and burred over a washer). These clinks are spaced about 10 or 11 inches apart between the timbers (or frames), and not on them. Each plank was bevelled along the lower edge so as to lay fair over the proceeding one. There were 11 or 12 of these planks on each side of the keel, measuring 10 or 11 inches amidships and tapering with a peculiar twist, characteristic to wherries, to about 5 inches at the aprons.

The hull of a wherry was built of oak throughout, and about 1880 these vessels cost from £600 to £800 to build. To-day the cost would be nearer £2,500, but it would be difficult to find craftsmen who understood the art of wherry-building.

The underwater lines of the wherry are beautifully curved and quite unlike the prosaic flat bottom of the Thames barge. The sweetness of the sections and bold rocker of the hogpiece account for the fine sailing qualities these vessels are noted for. The sharp, hollow entrance and delivery are apparent in the plans, while five or six of the upper strakes flaring out over the lower ones form bluff, rotund bows and quarters, which afford generous and comparatively dry deck space.



SECTION AFT OF MAIN BEAM, LOOKING FORWARD, WITH HOLD BULKHEAD REMOVED.



SKETCH OF FOOT OF TABERNACLE, looking aft, showing how cheeks fit over timbers and supporting knees. Also note how winch stanchion is anchored

In this connection it must not be forgotten that a heavily laden wherry's side-decks (or "side-walks," as the wherryman calls them) were generally awash, but it is worthy of remark that a wherry in cargo was easier to handle, better to steer, and probably safer than when she was light.

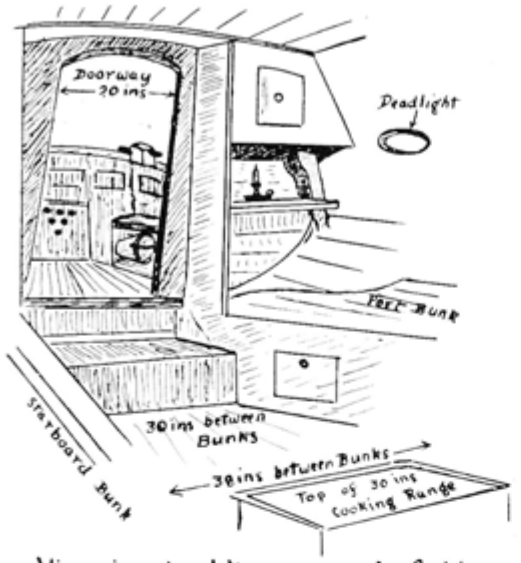
Although the slipping (or false) keel, bolted to the keel proper, was of the rocker type, it was unusual for a large wherry to draw more than about six feet of water, even when fully laden. Some wherries had no more than 3 or 4 inches of false keel, but they were generally smaller craft, such as those which went up the River Bure to Coltishall Mill, or up the River Waveney, and through Geldeston Lock to Bungay Town, to which river-borne traffic had been carried since the days when the Bigods, Earls of Norfolk, had their great castle there (1100-1356), and made it a centre of Feudal Administration.

The name "slipping" keel was used because in case of necessity this outer false keel could be slipped off to lighten the draught of the vessel. The operation was not common to all wherries, but was occasionally used when proceeding into the upper reaches where the water was shallow. The slipping keel was not bolted in position, but held by screw pins, and at the forward end by the slipping keel irons, which can be seen in the design of "Gleaner." The key for withdrawing the screw pins is shown in this drawing also. After the pins were withdrawn, plugs were inserted in the holes. When released, the slipping keel, being wood, floated to the surface.

When the keel was re-shipped, the keel iron served to locate the keel forward. The keel was then worked into position below water by ropes handled from the side-decks. When it was in position the screw pins were inserted from inside.

In common with the rest of the hull, the keel, stem and sternpost are oak. There is a massive oak knee (or angle-piece) at the junction of stem and keel. The sternpost is halved into the keel. The timbers are cut from grown oak crooks, and are often in two parts. When this is the case, the ends of the two parts are sometimes butted, but are never scarphed or jointed. Moreover, the lengths varied and the butts are arranged on a hit-and-miss or alternate method. The wherry builders held that this method of construction gave the vessel elasticity and life. The construction in general can be seen from the plans and diagrams, so we will turn for a moment to the rudder and tiller.

There is an old saying amongst wherrymen that in a scant reach, the wherry sails on her rudder. Be that as it may, the rudder is very heavily built with pintles composed of strong wrought-iron straps, swinging on a stout pin. The rudder is tarred like the hull, and picked



View inside Wherryman's Cabin "Surprise"— 40 Tons.

out in white and red. The tiller is often over 7ft. long, and beautifully shaped.

Round the deck edge is a stout rubbing iron (or cope), known as the " bin " iron (probably derived from bint, or bent iron), which projects about 2in. The deck itself is laid in narrow planks running fore-and-aft, with a covering-board, some 5in. or 6in. wide, round the entire deck. This is known as the plancea (Fr. *planche*, meaning a board), and is painted white as a warning to the mate not to put his foot beyond it, and it can easily be seen in foggy weather or twilight. The plancea is about 1½in. higher than the deck planking, and to let the water drain off, tiny scuppers, 2in. by 1in., are cut in it. Set in the plancea are four mooring bitts forward, and two aft. These consist of a timber-head with a stout 12in. iron rod passed through it.

Shackled to the cap on the stemhead is the lower of the two large, sheeveless blocks which form the forestay tackle. These are painted red (the recipe being red lead and goldsize), and varnished, which gives a metallic lustre, and is quite weatherproof.

The forehatch cover " curlingway " (or curlingboard) is long and narrow, as the opening has to give passage to the mast heel, when the latter is lowered to shoot one of the fixed road bridges. Aft of the mast is the hold, the opening being surrounded by coamings with narrow plankways (or side-decks) on either side of the ship.

The sheer drops amidships by about 1ft., and then rises to the sternpost, which is approximately the same height as the stem. As one passes along the plankways, at no point can the waterline be seen by looking down, and only amidships even by bending forward. This is partly because the rubbing iron projects, and partly because of the general rotundity of the sections.

Aft of the hold is the cabin with its well-cambered top, forming a continuation of the " hood " (hatch-cover), and painted red in the same fashion. At the fore end of the cabin top is the galley chimney. The "Gleaner" is shown in the plans as having a " Coburg " ventilator. This is a square sectioned, tapering chimney with a housing under it. The upper part (known as the " long " chimney) was unshipped when close-hauled to avoid the mainsheet fouling it, and just the lower part (known as the " tacking " chimney) remained a fixture. The Coburg type of ventilator was not very common in wherries, and most trading wherries had no ventilators other than the unglazed oval windows in the coamings. Later, most wherries had iron stove pipes, and that on the " Gleaner " was fixed through her Coburg ventilator.

(To be continued.)

THE NORFOLK WHERRY

By G. Colman Green, M.R.S.T.

(*Continued from page* 146.)

THE mainsheet horse was situated across the after end of the cabin top, while two large wooden cleats for the mainsheet are on the after side of the cabin bulkhead in the steering well (or cockpit).

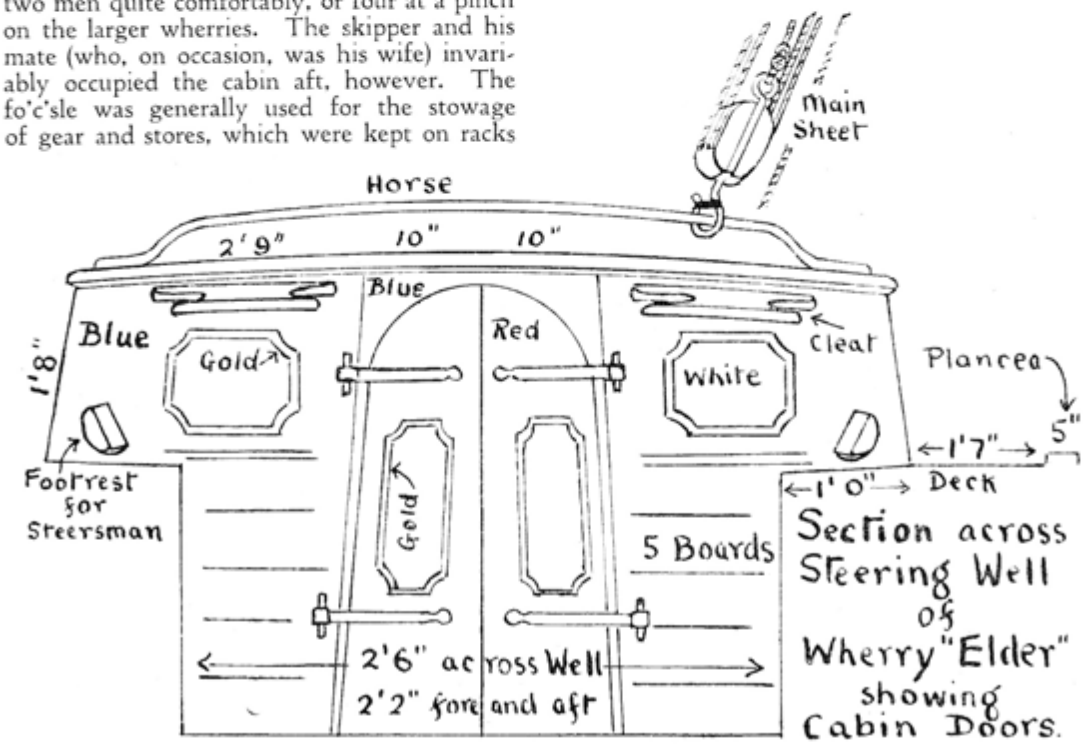
The cockpit was small and immediately aft of the cabin, from which it was divided by a bulkhead with two doors. The cockpit was knee deep, or even thigh deep, with lockers under the side seats, forming a step up to the deck. There was no seat or locker at the after end, since the helmsman often had to stand there. Not all wherries had cock-pits, some being managed from a sliding hatch with the upper part of the skipper's body protruding through the cabin top. Although the cabin bulkhead of "Gleaner" is shown as vertical, many wherries had their bulkheads raked forward.

Below decks the wherry is divided into three compartments by bulkheads forward and aft of the hold. The forepeak (or fo'c'sle) of a wherry is large enough to accommodate two men quite comfortably, or four at a pinch on the larger wherries. The skipper and his mate (who, on occasion, was his wife) invariably occupied the cabin aft, however. The fo'c'sle was generally used for the stowage of gear and stores, which were kept on racks provided for the purpose. There were no floorboards, and the compartment was not lined (or ceiled) like the hold.

One of the drawings shows the construction of a wherry looking forward from amidships, but, in order to permit the fo'c'sle to be seen, the bulkhead forward of the hold is shown removed. As a matter of fact, the bulkhead boards were removable on some wherries, and in that case they housed in cleats.

The main beam, which is shown in this drawing, was the most massive timber in the ship, and well it need be, since the heavy mast had to be upheld without any shrouds, the forestay forming the whole of the standing rigging. It will be noticed that the vessel's official number and registered gross and net tonnage were cut into the main beam. In passing, it may be mentioned that wherrymen often nailed a horseshoe, points upward, to the centre of the beam as a mascot.

In the corners formed by the main beam and the hatch coamings massive knees were

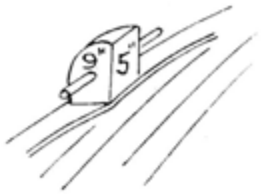


bolted. The construction of the tabernacle is given later when we come to the mast.

The hold was ceiled throughout sides and floor to keep the cargo from the vessel's sides and bottom. The runnels (or limber holes) for bilge water should be noted, also the well used for pumping out bilge water.

The hatch cover was known as the "hood," and had its forward part fixed. This fixed part was called the "dead hatch," and only extended a few inches aft of the mast. The wherry's name and port of registry were painted on the fore side of the hold coamings, the name being to starboard of the mast, and the port of registry to port of it. As wherries were inland craft, their port of registry was often an inland town, such as Norwich, Beccles, Bungay, Aylsham, Wroxham, or Coltishall. The lettering was usually in gold and often very elaborately put on, but this was the only place on the vessel where the name appeared.

When the ship was on her proper bearings, the hood was about a foot lower forward than at the after end, and for convenience the hood was made in 15 or 16 sections. All of these, except the "dead hatch," already mentioned, lifted off, and each was built on a rigid, curved frame. There were no beams under the hood, although it measured from 25 to 35 feet in length and 12 or 14 feet

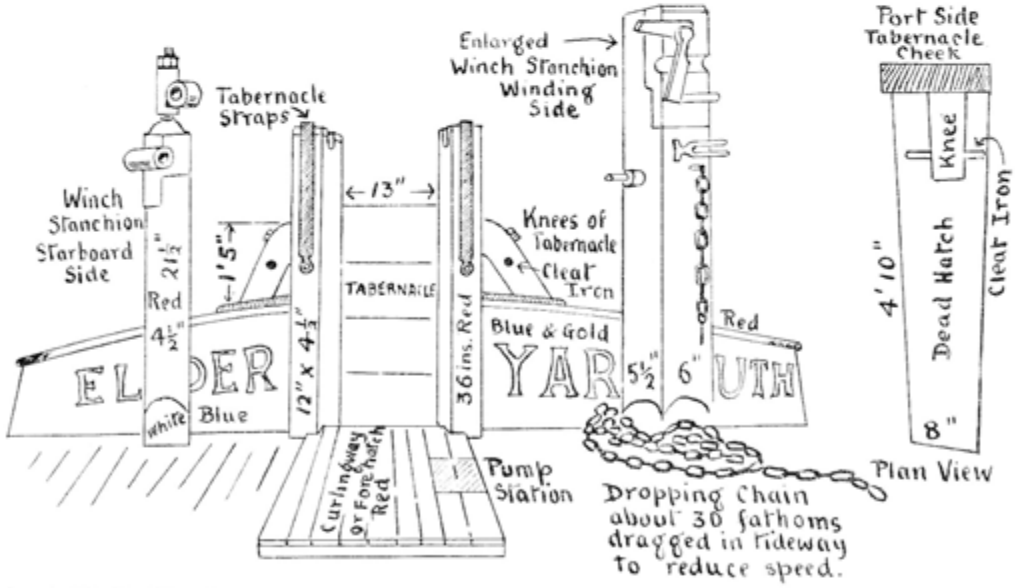


Half-Timber Head set in Plancea used as Bollard.

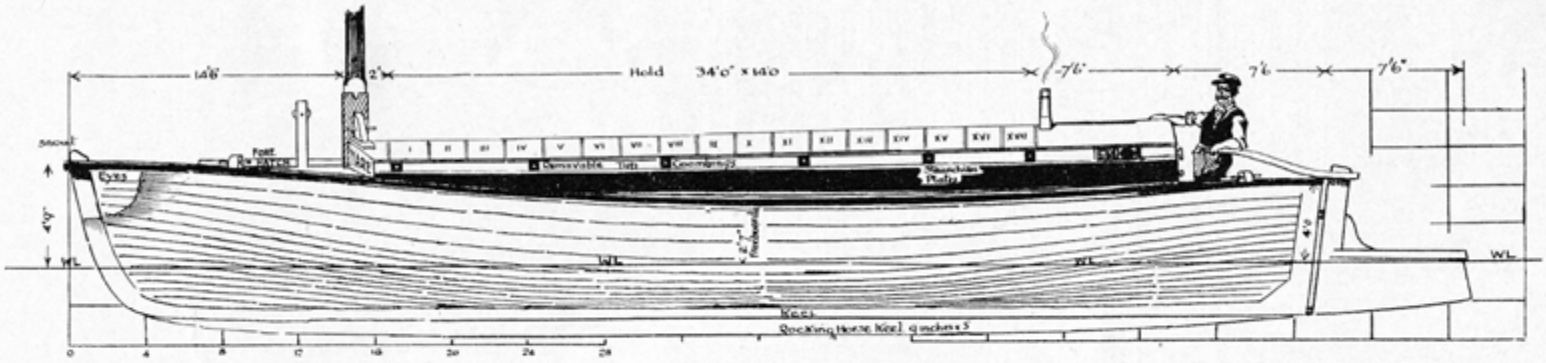
across. Since this had to serve the purpose of an upper deck, and often had to carry considerable weight, the joinery work in it had to be first-class. As the hood varied in curvature throughout its length, each section bore an incised Roman numeral to enable them to be replaced in the correct order.

The coamings were in two parts. The lower coamings were fixtures and supported by a strong "shelf" (carline) about 11in. by 3in. on edge. These were painted blue or tarred, outside. The portable upper coamings (known as "slip-on right-ups") were in the form of long, white "slats," or "slides," which fitted into 6in. square plates at each section. When the hood was closed, the sections locked into special notches in the slats, and the entire top became a rigid unit. To render the hood perfectly watertight, tarpaulins were lashed across to cringles provided in the stanchion plates for the purpose. The hood itself was painted red and varnished.

The fixed stanchions inside the coamings will be seen in the plans of "Gleaner." The



FORE DECK OF WHERRY "ELDER" WITH ENLARGED DETAILS OF TABERNACLE CHEEKS AND WINCH STANCHIONS. (N.B.—The dropping chain would only be brought on deck when wanted for use passing through Yarmouth Bridges, etc.)



The above sketch gives a very good idea of the general appearance of a Norfolk wherry. The lay of the planking with the curious characteristic reverse twist in the ends can be plainly seen; also, Roman numerals on the sections of the hood. The diagram below gives the deck lay-out of the wherry "Wonder," which is typical and can be taken as general practice.

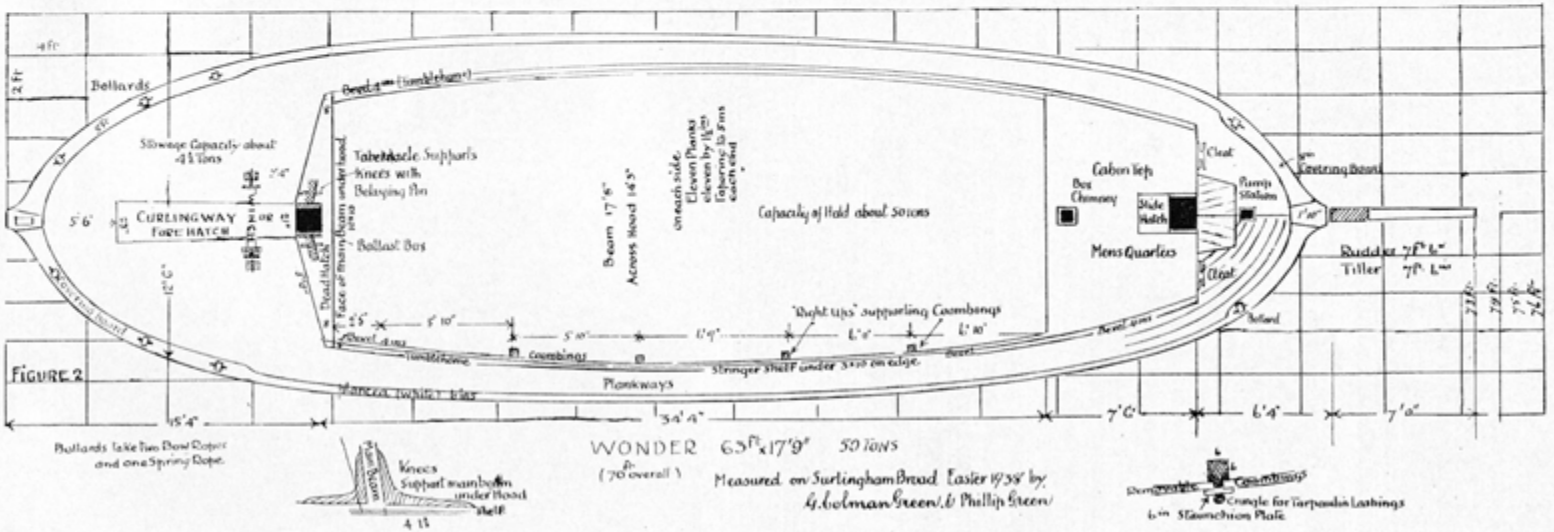
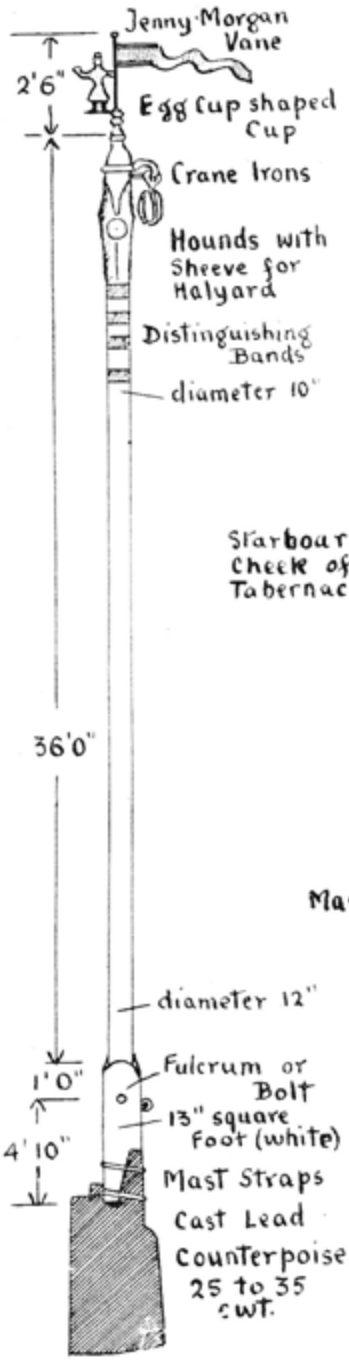
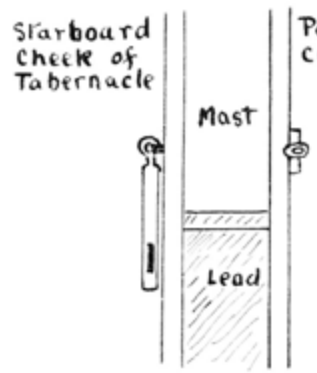


FIGURE 2

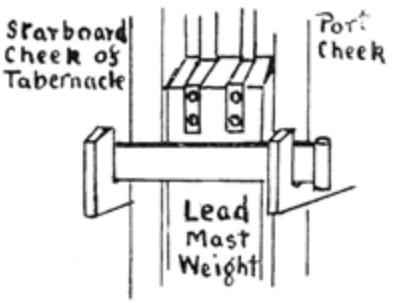
Bollards take Two Bow Ropes and one Spring Rope.



Mast Measurements acknowledged to Mr. A. Fox, of Thorpe, Norwich.



Mast Gate about 1894



Gate on Modern Pleasure Wherry.

lower ends of these were fastened to the hull frames. For convenience in loading and unloading, two of these stanchions were sometimes made to unship.

In the coamings at the after end on each side are two 6in. by 4in. oval lights with wooden shutters. These openings were never glazed and served to give light and air to the skipper's quarters. There were no other ports or windows.

Just for a moment let us go below into the little cabin that served the skipper for bedroom, dining saloon and office. Children were occasionally born in these little cabins, and sometimes the aged died in them. Love and contentment, poverty and endurance in turn resided there.

On either side are two broad seats that served as bunks at night. A small range, giving out a terrific heat, was installed at the forward end and served for cooking, heating, etc. Its chimney passed through the deckhead in the usual way. For light at night an oil bracket lamp was fixed on a cross beam. At the after end were two tiny cupboards for crockery, etc. As far as I can recollect, I never saw a table in one of these cabins, but I believe a fish-box was invariably used for the purpose. The cabin sole (or floor) was below the level of the cockpit, to which one or two steps led. The doorway was narrow, and only measured about 20in. between the jambs.

Stepping out into the well, and looking forward, we have a commanding view of the whole ship, and at once notice that when sailing, the deck works are kept as clear as possible, all ropes and spare gear having been stowed away.

(To be continued.)

THE NORFOLK WHERRY

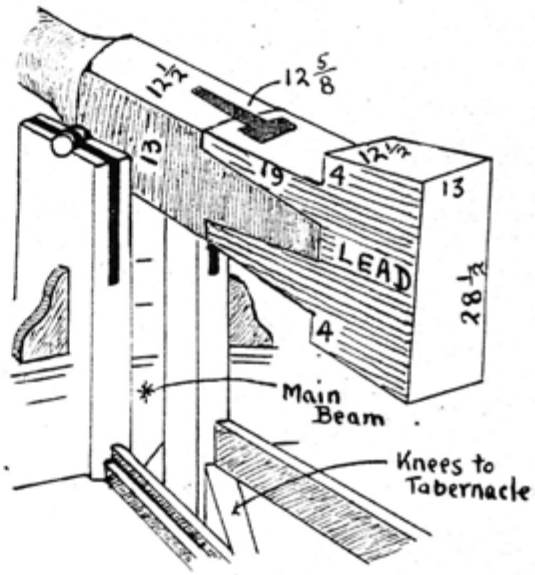
BY G. COLMAN GREEN, M.R.S.T.

(*Continued from page* 185.)

THE trading wherry was essentially utilitarian and all her gear was simple and practical. When under way, the only loose gear about the decks were the two quants—lying one on each side—ready at a moment's notice for use to give the head a "set" round from the lee shore when coming about.

In order to be able to lower the mast, to negotiate fixed road bridges, the mast is swung in a massive tabernacle standing about 3ft. 6in. above the deck, being pivoted on a stout iron pin. In general, the construction of the tabernacle will be plain from the various drawings. The cheeks of the tabernacle measured 12in. by 4½in., and were usually painted red. The lower ends of the tabernacle cheeks stood either side of the keelson, being notched to fit over one of the timbers. The cheeks were supported on the after side by the main beam, and had heavy "inner" and "outer" knees. The terms "inner" and "outer" knees may be confusing to those unfamiliar with wherry construction, and they imply the upper and lower knees supporting the tabernacle. The back of the tabernacle was open.

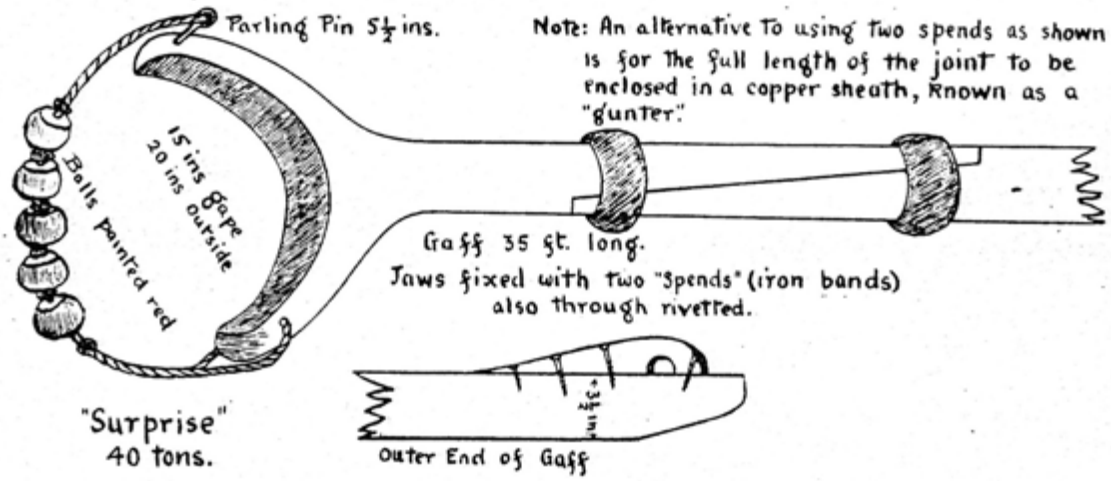
When the mast was up, it was held in position by what was known as a "spider iron" (otherwise "latchet" or "gate"). This consisted of a stout iron strap going round the



TABERNACLE AND HEEL OF MAST WHEN LOWERED

tabernacle, and binding it. The forward side of this was hinged and could be opened by taking out a pin on the port side. It was fixed at a height to take on the mast just above the counterpoise weight on the mast.

The mast was made from an Oregon or pitch pine stick, large enough to give a 12in. square



ENLARGED DETAILS OF GAFF

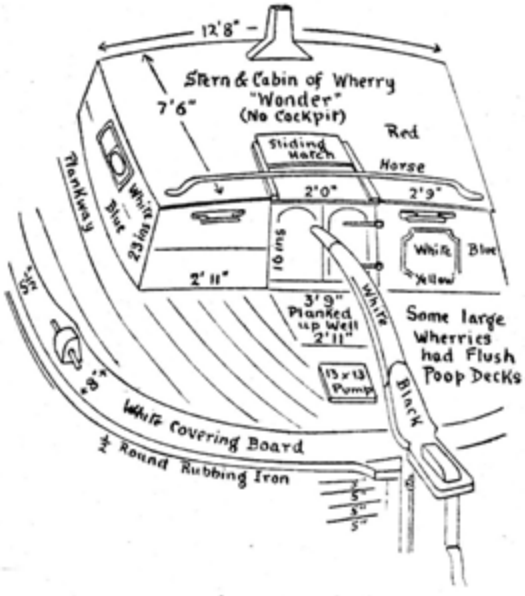
at the base, and was a solid pole mast. The squared part extended to just above the tabernacle, but above that it was round and tapered up to the halliard sheeve where it developed flattened cheeks. The sheeve-hole was, for some reason, known as the "herring hole." Above this come the hounds, and thence the mast tapered to the top rapidly. On the mast just below the herring hole were two or three 3in. bands of coloured paint for decorative and distinguishing purposes.

The mast of a wherry had to be very strong, since there was no standing rigging except the forestay, but although such a strong, heavy spar, it was quite an easy job to raise and lower it by means of the forestay, since a heavy counterpoise weight of 20 to 25 cwt. or even 30 cwt. of lead was used to balance it. As will be seen in the various drawings, the lead counterpoise was fitted to the mast heel in several different ways.

The gaff was also a stout spar, made of spruce and fitted with hardwood jaws. The jaws had a "parling" (more usually called a parrel) fitted with the usual wooden "beads" or balls, round or barrel shape).

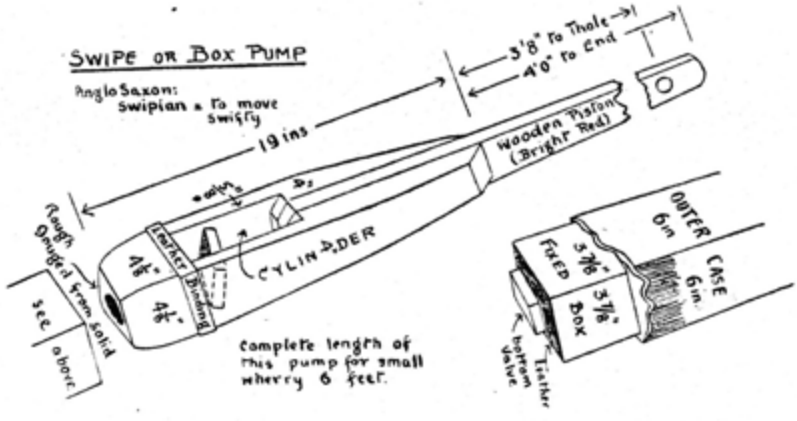
The gaff and great mainsail of heavy tanned flax were a great weight to get up and down, and the wherry's single halliard therefore led to the winch. The winch was a perfectly simple type of gallows winch, and could be unshipped and swung aside (to starboard) when it was desired to lower the mast. It should be mentioned that when the mast was lowered, the curlingway hatch was stood on edge on the port side of the opening resting against the starboard winch stanchion, on two slight battens to protect the deck.

It used to be a fine sight to see a wherry approaching a fixed road bridge in a strong breeze with the tide under her. Along she



came at a tremendous speed dead towards the centre of the bridge, and just when disaster seemed inevitable, down came the great sail, rapidly followed by the mast, and, without losing her way, she shot the bridge in great style. As soon as she was through, up went the mast. Then clank, clank went the winch and almost leisurely the great sail ascended. As the throat went up, the sheet blocks rattled, and when the lofty sail was once more peaked, the wherry swept away round the bend of the river with never a falter in her stride. The manœuvre was always beautifully executed and most inspiring to witness.

The wherry's single halliard was one of the most interesting things about her from a sailor's point of view, and many people find it difficult to follow the lead, so I will explain it in detail.



There were two spans on the gaff to distribute the weight. The outer span was at the extreme peak, and the inner span (locally known as the "inner spen") in the middle of the spar. There was a travelling ring on each span, and a bridle (known as the "martingale") shackled to the travelling rings. The peak block ("spen" or "spend" block) hooked or shackled to a travelling ring on the martingale.

The single halliard was a remarkably combined throat and peak halliard. The end of the halliard was shackled to a lug on the gaff at the throat, thence it led through one sheeve of the peak halliard block, through the spen block and back to the other sheeve of the peak halliard block, then through the single throat block and finally through the mast sheeve, the fall being led down to the winch. An alternative to the above rig was when, on very large sails, three spans were used. In addition to the outer and inner spans mentioned, a throat span was used on the inner end of the gaff in place of the lug to which the extreme end of the halliard was shackled.

Like the other blocks, all halliard blocks were painted red and varnished.

The sail was heavy tanned flax, the cloths, which were usually about 12in. wide, being parallel to the after leach. It was roped on luff and head, and also on the after leach, but not on the foot. There were three rows of reef points which were set on the seams. The first reef took off a depth equal to the bonnet, the second and third reefs rather less. With three reefs down the area of the sail was reduced by about one-third.

Wherries had a bonnet laced to the foot of the sail, the bonnet being what an Irishman once described as "a topsail set at the bottom of the mainsail." The bonnet was, in fact, a strip of canvas set along the bottom of the mainsail (to which it was laced with a continuous lacing), to give extra sail area in fine weather.

The sail was laced to the gaff with a continuous lacing, the lacing holes being spaced on the seams of the cloths. The tack was shackled to a lug on the mast, and the throat to a lug on the gaff. The peak had a lacing rove through a cleat on the gaff. As a rule the mast hoops were wooden, but iron hoops were used on some vessels engaged in coal carrying.

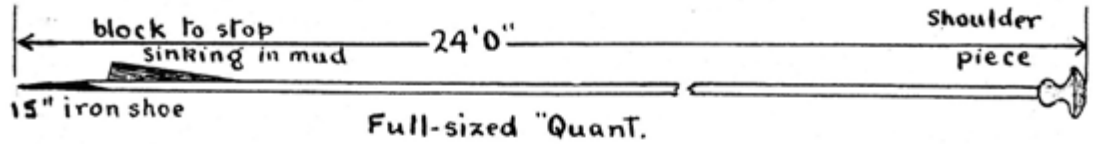
The halliard was tarred hemp, but for the mainsheet the wherryman preferred cotton rope if obtainable. The peak line (vang line) was ¼in. diameter halliard line. This was used for getting the gaff inboard when lowering, and for gybing. When the sail was "dowsed" (i.e., partially lowered to ease the helm when running in a heavy wind with frequent gybes), the peak line was hitched to the cleat in the cockpit to save excessive gybing.

The spens were wire, or sometimes light chain. The forestay was wire with a hemp tackle.

The most used appurtenances of a wherry's gear were her mainsheet blocks. They were large wooden double-sheeved blocks, and travelled on a horse. As the mainsheet was 80ft. to 100ft. long, the sheeves were continually on the move. These blocks also were painted red and varnished. The straps, eyes and hooks are all painted black in contrast.

One of the most characteristic fittings of a wherry was her masthead "vang." This was a gate-flag, half-vane arrangement. On the masthead was an egg-cup shaped fitting, generally gilded, into which was shipped the spindle of the vang. These vangs had various devices embodied. Some had sailors dancing hornpipes, gladiators, maltese crosses, stars, anchors, stags, and so forth, but my memory fails me to enumerate them all. By far the most numerous and popular symbol was the "Jenny Morgan," and the wherry's vang (whether bearing this device or not) was known as a "Jenny Morgan." The original Jenny Morgan was carried by the wherry "Jenny Morgan," which first sported a dancing woman, holding a bunch of forget-me-nots. This device took the wherryman's fancy, and soon became quite a vogue. Nowadays, there are only as many original Jenny Morgans as could be counted on the fingers of one hand. The writer has the good fortune to be the owner of one of these, and it is now on loan to a well-known local museum.

(To be concluded.)



Full-sized "Quant.

THE NORFOLK WHERRY

By G. Colman Green, M.R.S.T.

(*Concluded from page* 210.)

THE wherry "Jenny Morgan" belonged to Messrs. Morgan, the well-known Norfolk brewers, but who the original Jenny Morgan was named after, or who the vang represented, is a matter of conjecture. I have one or two stories to account for this, but I fancy that the "Morgan" part of the name commemorates the owners, and that "Jenny" was intended for Jenny Lind, the Swedish nightingale, who sang at Norwich Cathedral about 1850, and afterwards handed the very large cheque that represented her fees back to the Mayor of Norwich to start a children's hospital, now the famous Jenny Lind Infirmary.

THE WHERRY YACHT "ZENOBIA"

(*From a painting in oils by G. Colman Green*)

The "Zenobia" was 64ft. overall and very beautifully fitted, being one of the finest pleasure wherries of her day. She was remarkable for the small mizzen right aft, making her a kind of wherry-yawl.

Be that as it may, towards the end of the wherrying period, the most popular local pleasure steamer was called the "Jenny Lind," and she belonged to Mr. Morgan, a well-known citizen of Norwich.

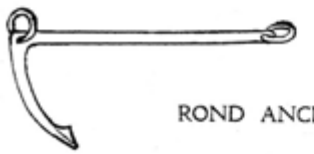
Even the tightest craft leak a certain amount and in a wooden vessel, a reasonable quantity was considered a healthy sign, and said to "keep her sweet." A pump was therefore a necessity. The pumping well of a wherry was usually situated immediately ahead of the foot of the mast, and has already been referred to. It should be noted that in order to get this well as deep as possible, the keelson is cut away at this point.

The pumping well was approached through the forehatch (curlingway) for either inspection or pumping. The old wherries had a wooden box pump, 5 or 6 feet long, which could easily be inserted in an upright position, ready to operate at short notice.

The mate stood astride the hatch, which was placed crossways over the opening, and with a few strokes of the swipe handle, sent a stream of bilge water flowing on the deck towards the scuppers. I have drawn the details of a box pump in my possession and another drawing will be found included on the "Gleaner's" plans.

But about the year 1895 all kinds of more or less effective yacht pumps were on the market, and the wherrymen found them more convenient, though much more expensive.

When sailing light, a wherry needed no ballast, though, of course, they were stiffer and steered more easily when laden. Reference has also been made to the fact that when coming about the mate helped the vessel's head round with a quant. The quant was also used in calms to give the vessel a "shoulder breeze," or, in other words, to push her along. Quants are found on other inland waterways, but the Norfolk wherry, by reason of its long "sidewalks" and absence of shrouds, was particularly convenient for their



ROND ANCHOR

use. The method of employment was to walk right forward with the quant trailing. Arrived forward, the mate planted the quant firmly in the river bottom, and setting his shoulder to the knob, walked aft, using his weight to push strongly on the pole. When the end of the deck was reached, the pole was withdrawn by giving it a peculiar twist to free it from the mud, and the mate walked forward to repeat the process.

A full-sized quant was 24ft. long, and had to be well balanced for ease in handling. It was a well-tapered slender spruce pole, but strong and resilient. The top had a round, turned knob (" button ") to go against the user's shoulder. The bottom was shod with an iron shoe about 15in. long, which was used to stick in wood piling, etc. The business end had also a wood block (or "heel") screwed to it, to prevent the pole sinking too far into the mud. In the hands of an expert, the quant is a very useful method of propulsion, but a novice usually makes hard labour of it without imparting very much of the energy expended to the propulsion of the boat. An hour of this work on a sultry summer's day would satisfy the keenest enthusiast.

When the crew consisted of three men, or two men and a woman, who could steer, it was remarkable how fast and far a wherry could be quanted with both quants at work. I have, on occasion, seen a wherry with mast lowered to reduce windage, being quanted out of narrow rivers like the Ant, or narrow dykes like the entrance to South Walsham Broad in the teeth of a gale of wind.

One appurtenance of the wherry that has not been referred to, is the dropping chain. The Bure and Yare in their lower reaches are tidal, and when approaching Yarmouth with a heavy ebb tide it was necessary to have some means of controlling the ship when the sail was lowered. This was accomplished by lowering a length of chain over the bows. The chain, dragging along the bottom, acted as a brake and slowed up the wherry, and by varying the length of chain dragging along the bottom, the speed could be varied. With the chain out the vessel dropped down the river stern first, being steered with the tiller in the usual way. As the water was going faster than the vessel, the head swung the same way when the helm was put over as if she was going ahead.

The wherry always moors alongside a staithe or bank, and in consequence carries no proper ground tackle. A peculiar form of bank anchor has been evolved with a single arm and palm, and no stock. In local parlance, the bank of the river is known as the " rond," and the bank anchor is known as the " rond hook." The second ring in the crown of the anchor is used to pull the anchor out of the ground. A wherry's rond hook is about 3ft. long.

Of stories of the Norfolk wherrymen there are no end, but space prevents our telling many of these.

In 1934 I came across William Royal on the bank of the River Wensum, opposite the old common quay. He was then 82 years of age, and the oldest wherryman then afloat. He was busy mopping the paintless sides of his once smart and well-found vessel, the

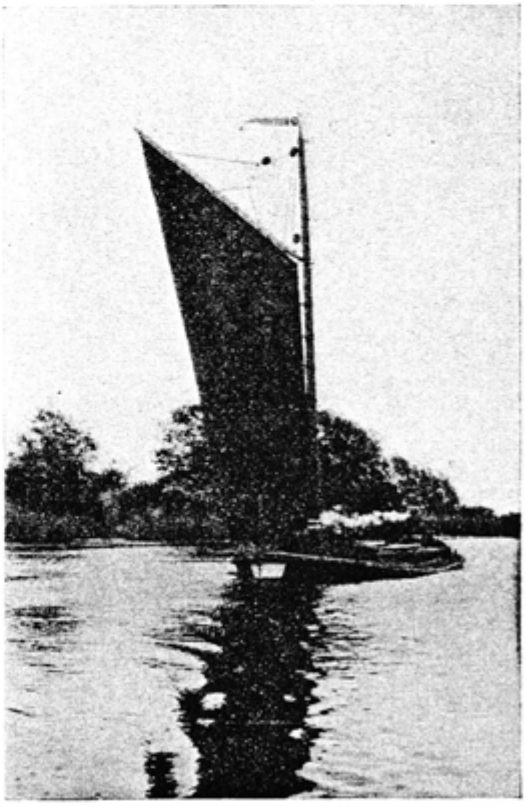


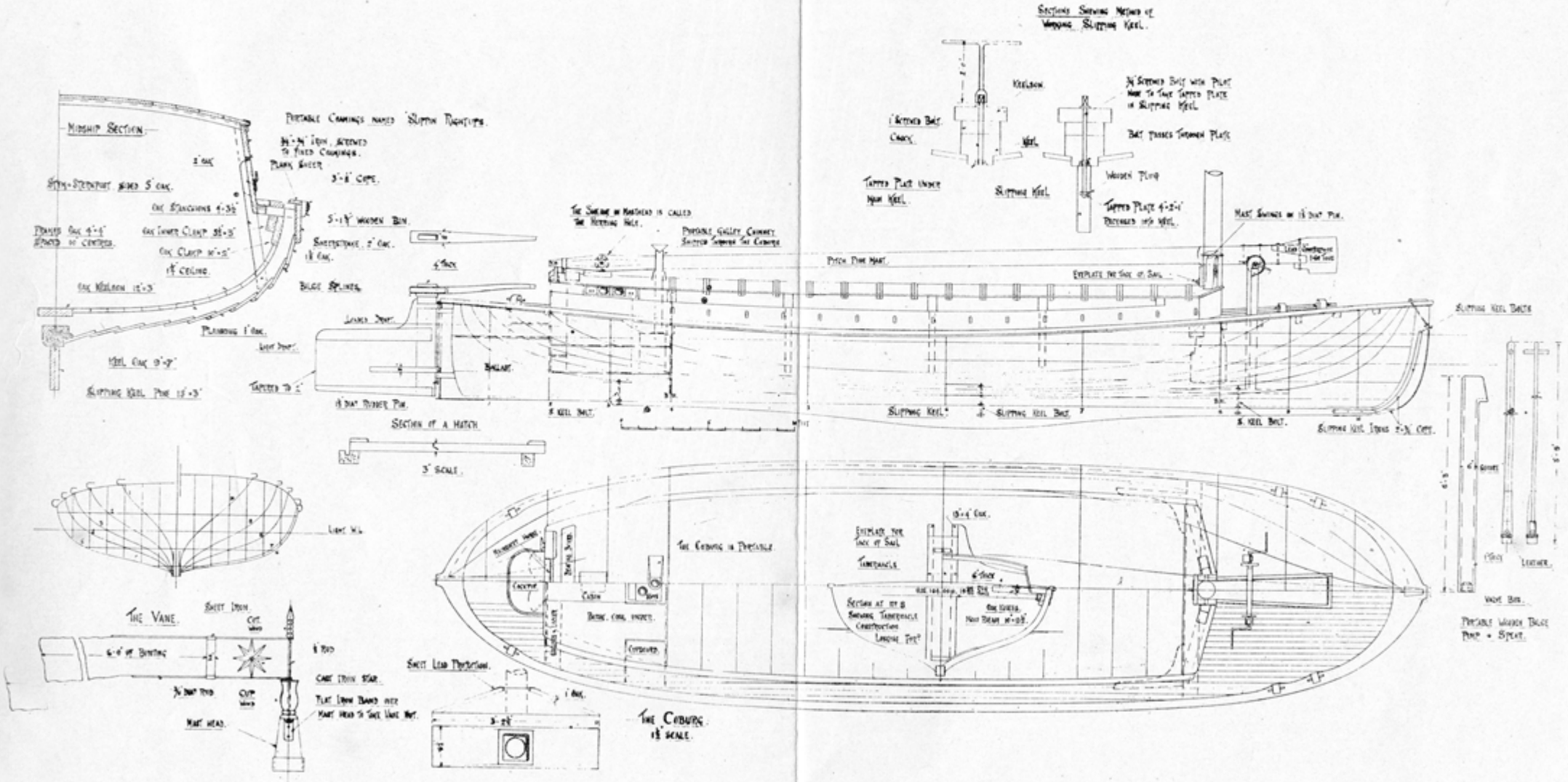
Photo.: A. R. Pike.

A TRADING WHERRY

THE NORFOLK WHERRY "GLEANER"

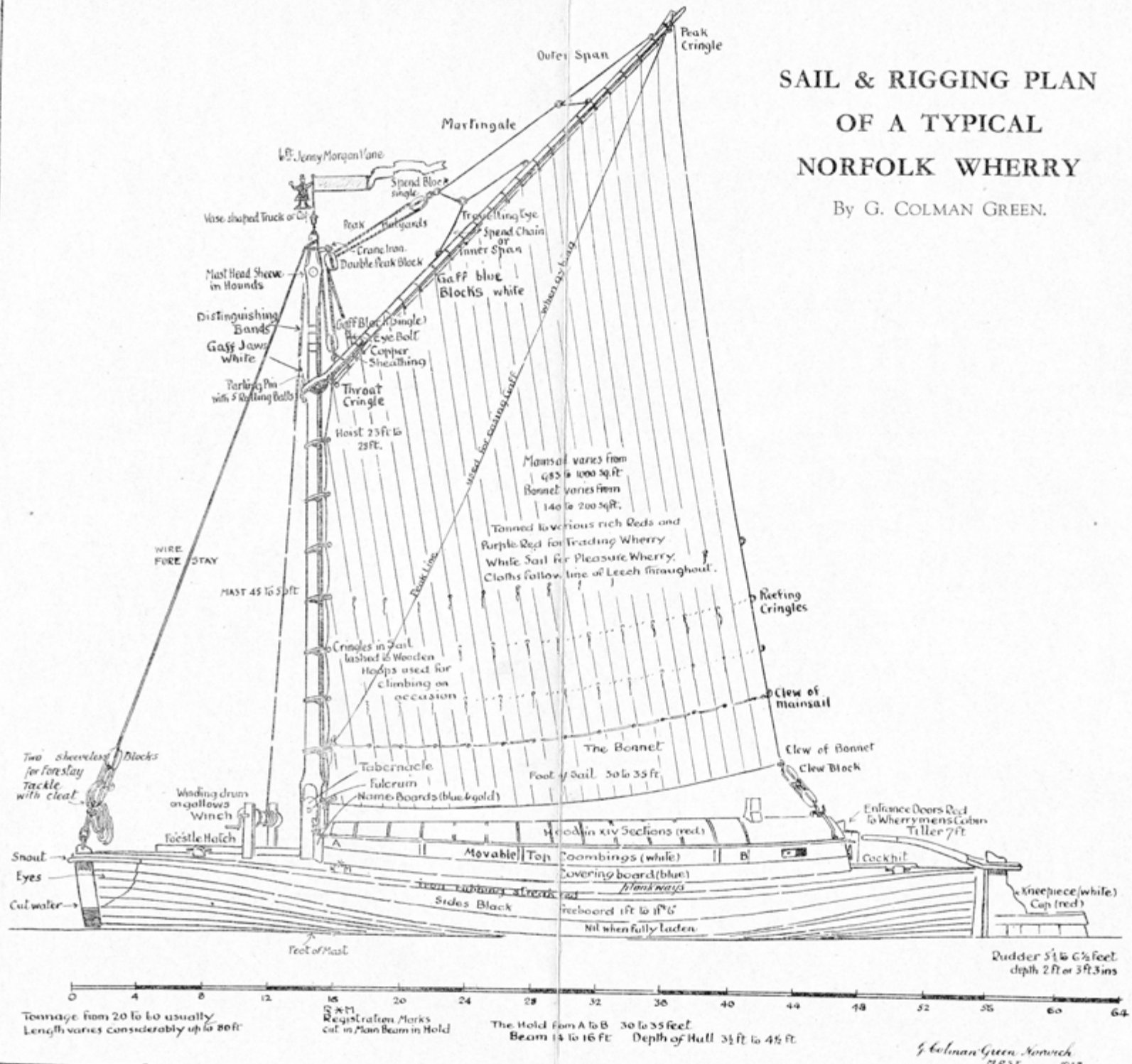
57′ 0″ × 14′ 0″ × 4′ 0″ Mld.

Scales: Lines $\frac{1}{8}$″ = 1′ 0″
Midship Section $\frac{1}{4}$″ = 1′ 0″
Vane, Slipping Keel $\frac{3}{8}$″ = 1′ 0″



SAIL & RIGGING PLAN OF A TYPICAL NORFOLK WHERRY

By G. COLMAN GREEN.



Tonnage from 20 to 60 usually
Length varies considerably up to 80ft

Sam Registration Marks
Cut in Main Beam in Hold

The Hold from A to B 30 to 35 feet
Beam 14 to 16 ft Depth of Hull 3½ ft to 4½ ft

G. Colman Green. Norwich
M.R.S.T. 1938.