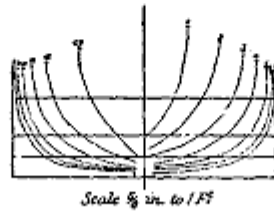
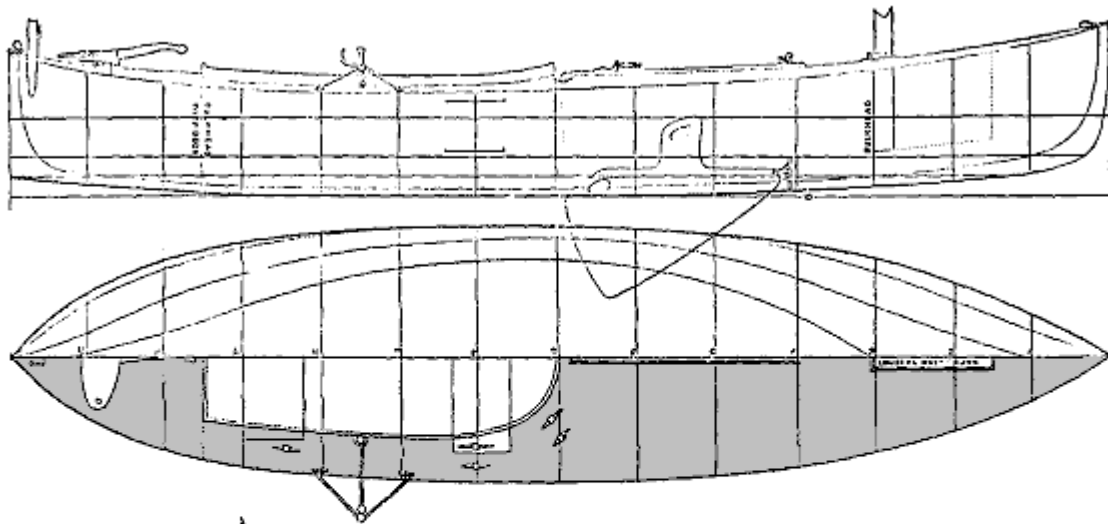


CANOE YAWLS.

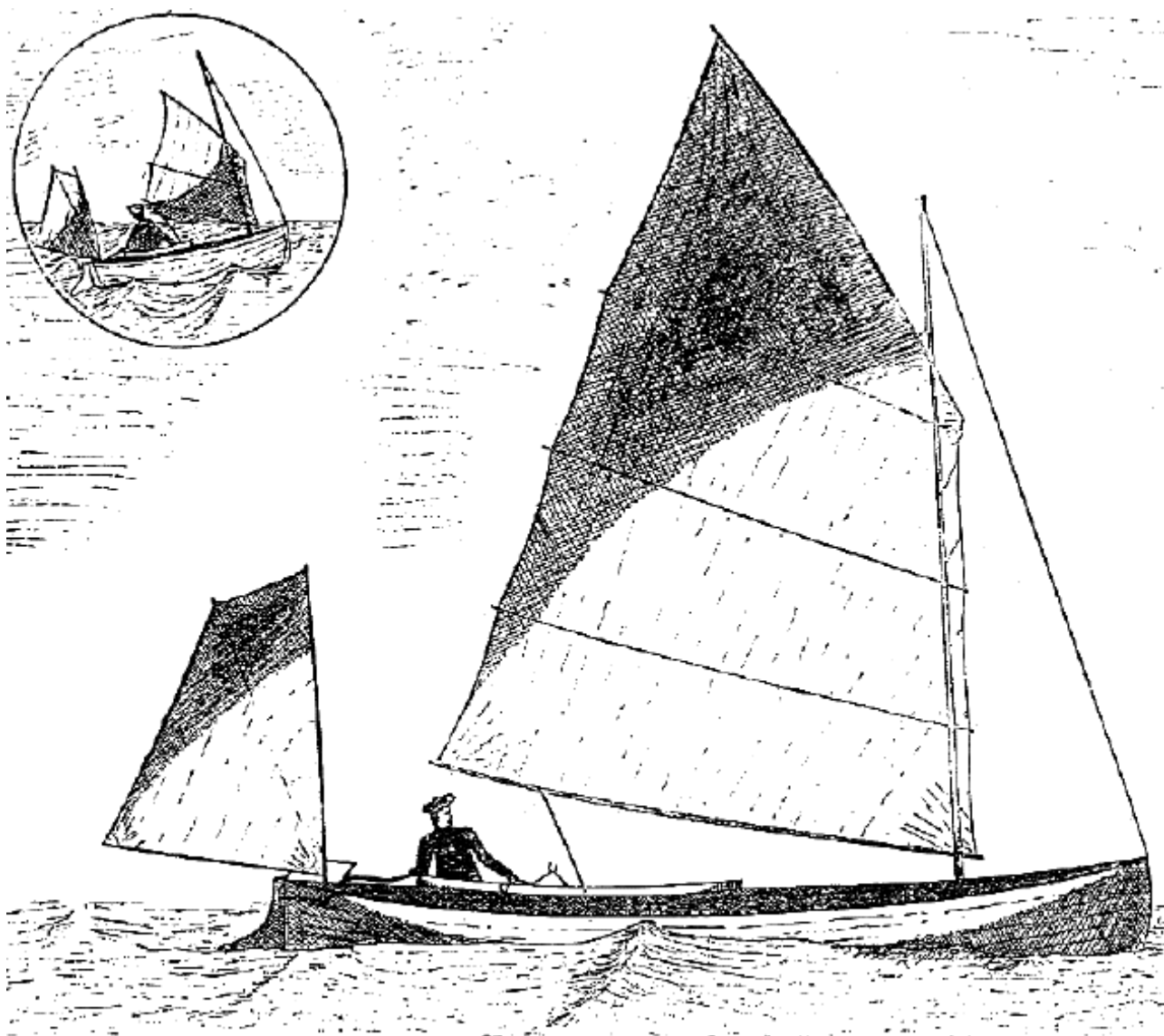
The success of the earlier canoes called the attention of boating men generally to the many good points of this type of boat, with the result that a number of large craft have been built much on the lines of the ordinary sailing canoe. All of the earlier boats were yawl rigged, some like a canoe and others with a jib, and hence the name "canoe yawl" was given to distinguish them from the small canoe. Within the past three years the number of these boats has greatly increased in England, while they are also becoming better known and liked in America, and some of them make very fine cruising craft, being far more able and powerful than the canoe. They are built with centerboard or keel, generally the latter, and are rigged with the main and mizen, like the canoe, or as cutters, sloops and yawls, the latter being perhaps the best for single-hand cruising. Some of them, such as the Cassy, the Water Rat and the Viper, have made their reputations as cruisers by several seasons of constant work in open waters. They are well fitted for bays and arms of the sea where the canoe cannot safely and comfortably be used; their shape, that of the whale boat and surf boat, is one of the best for a sea boat, and they are less costly to build than the small counter-sterned yacht, while superior to the square-sterned boat.

"CASSY."

The canoe yawl Cassy was designed and built by Mr. G.F. Holmes, for use on the Humber River. She is fitted with the tabernacle and centerboard devised by Mr. Tredwen, the latter of 70lbs. being all the ballast used with cruising rig, but sandbags are carried in racing, about 100lbs. being used. The forward thwart can be placed 2 in. below the gunwale for rowing, or about 6 in. above the bottom for sailing. The rig includes two balance lugs as in a canoe, with a deck tiller.



Length		14 ft.
Beam		3 ft. 4 in.
Depth midships		1 ft. 4 in.
Sheer	bow	11-1/2 in.
	stern	5 in.
Bow to:	after side of tabernacle	3 ft.
	fore end of trunk	4 ft.
	after end of trunk	7 ft.
	after end of well	11 ft. 6 in.
	rowlocks	9 ft. 6 in.
Sail Area	- racing mainsail	120 sq. ft.
	- cruising mainsail	60-70 sq. ft.
	mizzen	15 sq. ft.
Length of tabernacle		18 in.
Oars		8 ft.
Width of rudder		1 ft. 6 in.



CANOE YAWL CASSY (Humber Yawl Club).

Holmes writes:

CRUISING CANOE YAWLS

IN the FOREST AND STREAM [recently] appeared the lines of a canoe yawl, the **Cassy**, designed and used by Mr. Geo. F. Holmes, of Hull, England, and the following extracts from a letter of Mr. Holmes, give some further particulars of the boat and her rig:

"I can, after another season's experience of the boat, thoroughly endorse all I have said in her favor. In company with another boat of similar build I had a very successful cruise last summer. I first brought my boat by trolley and by train to Hull, the expense and trouble in transit being hardly any more than for a Rob Roy canoe.

In Hull both our boats were put on board steamer and conveyed to Port Yarmouth, where we got them into the water and loaded stores. As we lived on board, cooking, etc., in the boats. Our stores were necessarily somewhat numerous. The broads and rivers of that district being pretty well sheltered, we each had our racing sails, and to economize space in the boat, used lead ballast under floor boards. The boats row easily, in fact, I would rather row my boat with her 3ft. 4in. beam than paddle a Mersey canoe 2ft. 3in. broad.

"The two boats being very equal in sailing qualities, our cruise was a perpetual regatta on a small scale. The Cassy proved herself the faster boat to windward, especially in very narrow waters and strong breezes, while the Alice, with nearly fifty percent more ballast, rise of floor (and straighter keel) and one inch more draft, ran faster especially in light breezes 8'II ol would squeeze round a point better. The Cassy rows also considerably more lightly. We used tents of undressed material of the d'abri kind and simple construction.

"On a former cruise (1882) in Denmark with a smaller canoe yawl (no centerplate), the same friend accompanying me in a 12ft RCC first class canoe, we used a shore tent, but I am bound to say that for comfort, both in sleeping and cooking, the shore tent isn't a patch on the boat tent.

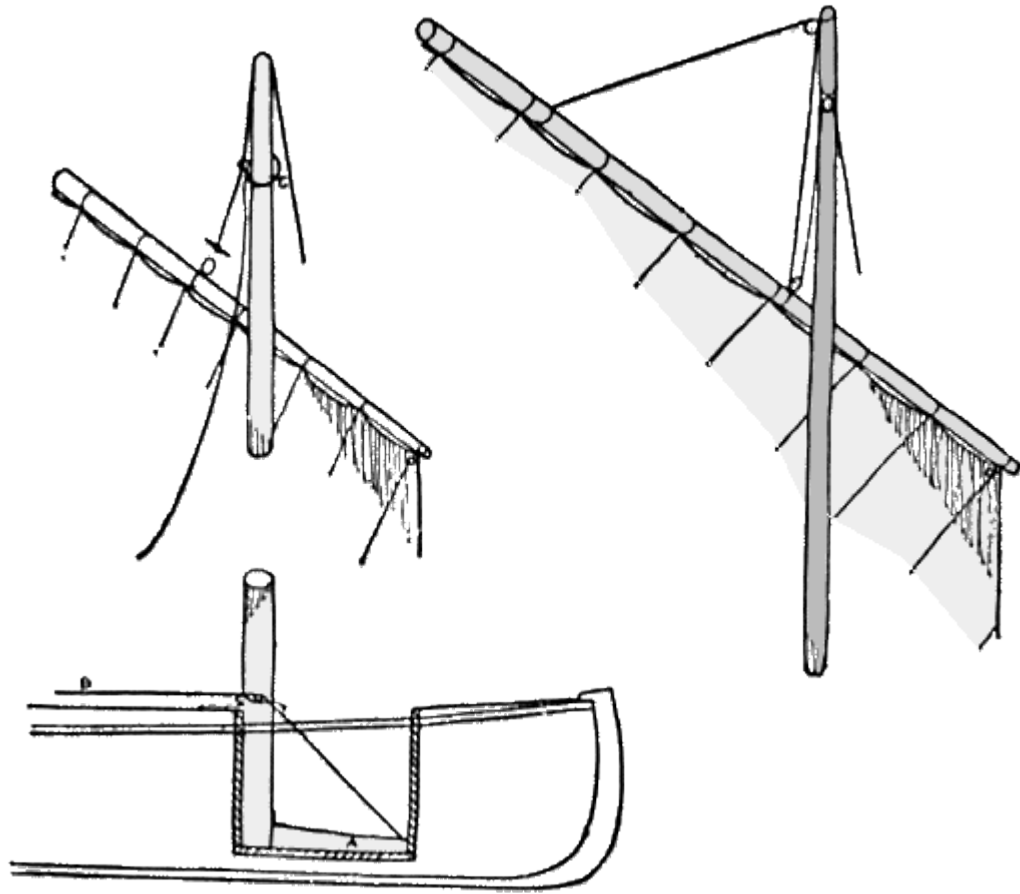
"My usual cruising ground is the open sea off a sandy beach and I have to launch through the surf, which is sometimes rather heavy. With an oilskin coat on one can generally get out pretty dry, as the well is small and in case of a breaker coming on board the long fore deck is a great advantage. The boat is quite steady enough for one to stand on the deck even when the water is not quite smooth. The boat alone weighs 224 pounds, center plate 70 pounds (lead ballast only used for racing rig, 90 pounds). With my wheels I can launch the boat alone at low water (200 yards) but I don't do so if I can help it as you may suppose. The boat's worst fault is her tendency to yaw when running in troubled water. She is, however, so delightfully easy on her helm when close hauled, and so quick in stays for narrow waters that I am willing to part with a little steadiness. In addition to the Mersey kind of a yoke (for steering) which I now connect with a hollow brass rod with ends screwed in, I often use the boathook as a Norwegian tiller, which is handy, especially when there are two in the boat, as either can then steer. A sculling crutch on the quarter is often useful.

"To remove strain from forestay when racing mast is in use, I used a piece of wood, A, hinged to mast near heel, with a tripping line, B, secured on deck.

"The best form of connection of lug yard to mast is shown here. A double halliard sets the large lug sail well. I used it on my canoe this year and was fairly satisfied with it. A downhaul is necessary. I have used your uphaul for centerboard and found it works very well.

"I am glad to hear of canoeing prospering so well in your country, it seems to be in rather a poor condition in some parts of England. Our little club is threatened with dissolution in consequence of the boat house on the Humber side being required for shipbuilding purposes, and only last summer two races fell through in consequence of the apathy of the members.

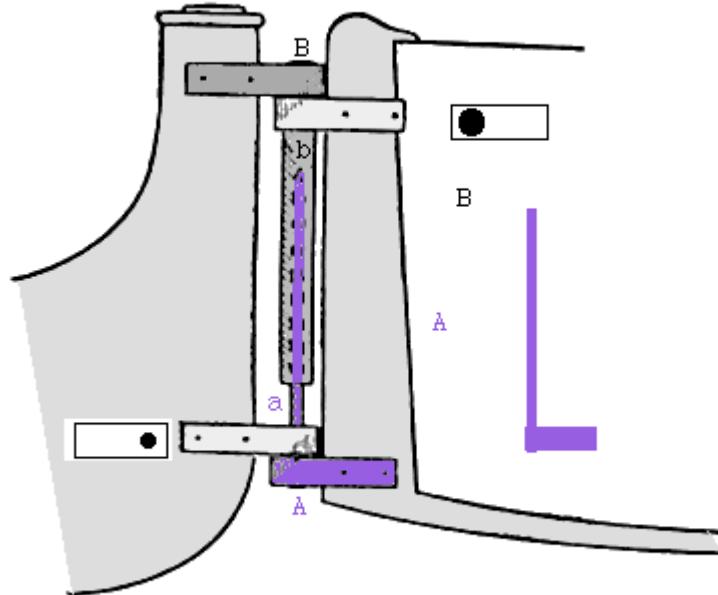
GEO. F. HOLMES"



Holmes also devised a way to hold a rudder on yet let it kick up:

RUDDER GEAR FOR BOATS AND CANOES.

THE accompanying cut shows a form of rudder gear that is, we believe, new in this country. The pin *a* is fastened permanently in the lower brace on the boat, and reaches up to within an inch of the upper brace. The rudder is fitted with two braces, the lower being drilled to fit rod *a*, while in the upper one a brass tube *b*, also fit-



ting over *a* is fastened. To ship the rudder, the lower brace on rudder is entered on the rod, the tube sliding down a hole in upper brace on boat, and at the same time over the rod *a*. The rudder will rise freely, may be quickly hung or removed, and the rod can never be bent. We are indebted for the device to Mr. Geo. F. Holmes, Hull England, who has used it for several seasons on his canoe yawl *Cassy*.

MERSEY CANOES.

The Mersey canoes or canoe yawls, have grown out of the small canoes, and are used like them for general cruising, but on more open waters. The dimensions are:

Length 17 ft., beam 4 ft. 6 in., depth 2 ft.

Oars are used, as the beam is too great to admit of paddling. The deck and well is similar to a canoe. Lead ballast is stored under the floors. The rig consists of two lugs, main and mizzen, the dimensions being:

	Racing mainsail.	Cruising mainsail.	Mizzen.
Foot	10 -- 0	6 -- 6	4 -- 6
Head	10 -- 0	7 -- 6	2 -- 6
Luff	5 -- 0	2 -- 6	2 -- 4
Leech	14 -- 6	10 -- 0	6 -- 0
Tack to peak	14 -- 8	9 -- 0	5 -- 9

Dimension ft -- in

Clew to throat 10 -- 9 7 -- 0 4 -- 9

As there is no centerboard the interior of the well is entirely unobstructed, and there is room for three persons, though on a cruise two, with the necessary stores and baggage, would be enough. Beds for two might easily be made up on the wide, flat floor, a tent being pitched over the well, while the seats may be removed entirely at night. Under the fore and after decks is ample room for storage of all stores. The steering is done with a deck tiller, as in a canoe.

In building such a boat, the stem, sternpost and keel would be of oak--or the former of hackmatack -- sided 1-1/2 in.; keelson of oak, 3x1/2 in.; plank of cedar, 5/16 or 3/8 in. lapstreak; gunwale of oak or mahogany; deck of 3/8 in. pine, covered with 6 to 8oz. drill laid in paint; coamings of oak, 3/8 in. thick. The ribs would be 3/8x5/8, spaced 9 in., with floors at every alternate frame.

The sails are rigged as "standing lugs," or a yawl rig similar to the Viper may be carried. They will be of 6oz. drill, double bighted; rigging of "small 6-thread" manilla; blocks of wood, iron or brass.

The dimensions of a similar canoe are given in **Cruises in Small Yachts and Big Canoes**, by Mr. H.F. Speed, as follows:

16 ft. long, 4 ft. 1-1/2 in. beam, 20 in. deep amidships, with 6-1/2 in. of keel, containing 3cwt. of lead. Inside she carried 1cwt. 10lbs. of lead.

The sail area was 180 ft. mainsail and mizen, lugs, with jib, the dimensions of spars being:

Main mast	13 ft. 1 in.
boom for lug sail	10 ft. 4 in.
yard for lug sail	12 ft. 6 in.
boom for gaff mainsail	8 ft. 5 in.
gaff for gaff mainsail	8 ft. 5 in.
Mizen mast	8 ft. 0 in.
boom	6 ft. 4 in.
yard	7 ft. 4 in.
boomkin, outboard	2 ft. 6 in.
Bowsprit, outboard	5 ft. 9 in.
Spinnaker boom	10 ft. 6 in.
Tonnage	"one ton and an awful fraction."

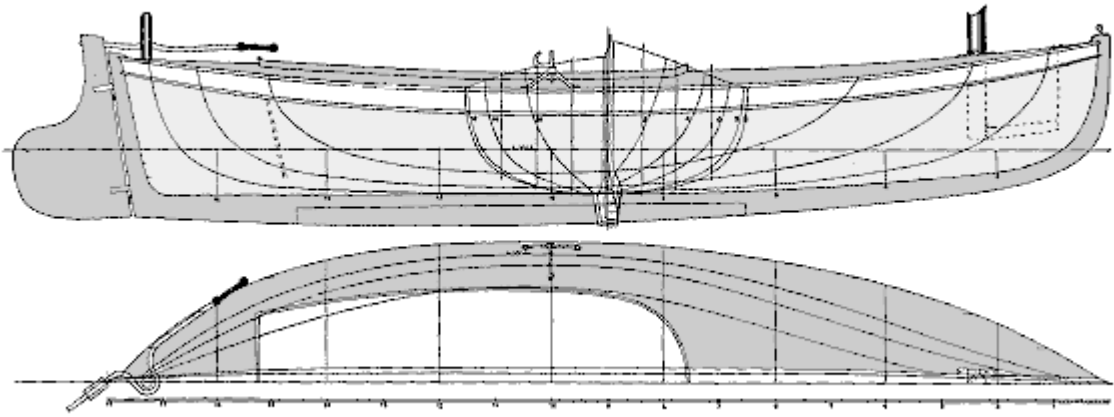
Her well was 5 ft. 6 in. long and 2 ft. 6 in. wide, with a locker aft for stores, open lockers along the side, and two shifting thwarts, steering with a half yoke on the

rudder, and a rod hinged thereto, the motion, of course, being fore and aft. The well was covered completely by a tent.

"IRIS" CANOE YAWL.

This boat was built in 1887 by J. A. Akester, of Hornsea, near Hull, Eng., and is now owned by Mr. Holmes, of the Cassy. The hull is carvel built. The mast is fitted with a tabernacle for lowering, the sail plan being shown in plate. The inside ballast is in four blocks, two being generally carried, while the lead keel weighs 450lbs. A centerboard could readily be fitted to work entirely beneath the floor, and would be a great aid to the boat in windward work. The tiller is of iron, and curved as shown to as to work about the mizen mast. The dimensions are as follows:

Length over all		18 ft.
	lwl	17 ft. 4 in.
Beam, extreme		5 ft. 1 in.
	lwl	4 ft. 7 in.
Draft, extreme		1 ft. 4-1/2 in.
Least freeboard		1 ft. 1 in.
Sheer at bow		10-1/2 in.
	stern	7 in.
Ballast keel, lead		450 lbs.
Ballast inside, lead		225 lbs.
Mainmast, from stem		2 ft. 3-1/2 in.
	deck to truck	15 ft. 3 in.
Mizenmast, from stem		17 ft. 3-1/2 in.
	deck to truck	7 ft.
Mizen boomkin		2 ft. 3 in.
Main boom		15 ft.
	yard	15 ft.
Mizen boom		6 ft.
	batten	6 ft. 6 in.
Mainsail, area		168 sq. ft
Mizen, area		25 sq. ft
	Total	193 sq. ft



Iris (above and below)

