and carry the idea of a sweep around, in these cases a bend in a river. As carries the idea of flowing and ask or aske that of flowing through a marsh. The uck of Wanskuck is the locative meaning district, or land about a place, and tucket means a river mouth, the district about the mouth of a river, the flat part, the estuary.

We find tucket again in Tuscatucket, and Pawtucket, the mouth of a river. Paw carries the idea of falling, as in rapids or falls, fast running water coming to a level, hence sometimes interpreted as falls, or where fresh water runs into salt. The ending xet of Pawtuxet changes the meaning of the locative set from the mouth of the river to the land at the mouth of the river.

Turning to Quonochontaug, we find it means long-long-pond, and so two long ponds conjoined. Quonochon was derived from Quonquon through quonoquon, the o for euphony, into quonochon and the pond-ending paug likewise for euphony, given as taug.

Papaquinapaug was the name for the Fenner Pond, probably originally applied to both Fenner Pond and the marshy ponds that make up the lake system of Roger Williams Park. Papa is like nana, here and there, so side by side, but is a less energized prefix than nana. Quin is a variant of Quon with the idea of length and paug is of course pond. Quonabaug with the paug changed to baug and Quonopaug are similar words.

## Rhode Island's Place in the History of Naval Signal Flags

Thanks to the genius and ability of "Nat" Herreshoff, who at Bristol, Rhode Island, designed and built the fastest yacht that ever sailed, Rhode Island will always hold a unique and enviable position in the history of maritime affairs; a position equal to that held by the French Ile d'Oleron, famous for those fundamental laws of the sea known as the Laws of Oleron, and better indeed than the position of Amalfi, for Amalfi's claim to the invention of the mariner's compass has been the subject of controversy.

Rhode Island also holds an important, though hitherto unrecognized, place in the history of the development of marine signal flags, a development which has culminated in the International Signal Code, the nearest approach to a universal language that has ever been adopted as a practical means of communication. The alphabetical International Code, which was practically in universal use at sea up to the perfection of wireless radio communication and which is still in use in conjunction with radio communication, was based upon the numerical code of Frederic Marryat and was indeed a sort of amplification of Marryat's code.

Marryat's code in turn was based upon the numerical codes which had previously been in use in the British navy and the introduction of the numerical code into the British navy is said to have been due to Admiral Sir Charles Henry Knowles, Bart. G. C. B.

There has been some controversy as to whether the credit for introducing the numerical signal code into the British navy should be given to Admiral Kempenfelt, Admiral Howe, who was fondly called *Black Dick* by his sailors, or Admiral Knowles, but from a cursory examination of the rival claims, it seems probable that the credit might well be divided amongst them.

While the perfected code seems to have been the work of Kempenfelt, the earliest actual use of numerical signal flags in the British navy seems to have been by Admiral Howe in the channel fleet in 1872<sup>1</sup>. Admiral Knowles claims however to have suggested the idea to Howe in 1778.

Indeed Admiral Knowles definitely makes this claim himself in a book entitled "Observations on Naval Tactics" which was published in 1830. Writing in the third person, Admiral Knowles said:

"In the month of November, 1777, Sir Charles Knowles, on his return to America with the Marquis of Hastings, he told Sir Charles Knowles that he had been informed by good judges, that all our signals and manoeuvres were radically bad; that Lord Howe had gone on the old plan, which was to hoist signal flags at particular places, one flag generally at seven different places, and there were nearly forty flags. Lord Howe, by having horizontally striped flags, made one flag, by turning it upside down, answer the purpose of two flags; but these flags were hoisted at particular places, as the old signals were. The Marquis of Hastings desired Sir Charles Knowles to strike out something new, and to lose sight of the old plan, and Lord Howe's plan altogether, as these plans would cramp his ideas. In the month of November following, on board the Chatham flag-ship of Sir Peter Parker (rear-admiral), Sir Charles Knowles discovered the signals, by numbers, which were hoisted where best seen. These he gave to Admiral Lord Howe on his arrival at Newport, Rhode Island; and his Lordship afterwards introduced them into the channel fleet. Sir Charles Knowles did not publish them out of compliment to Lord Howe. On his passage home he discovered the tabular flags (suggested by a chess-board) which were also hoisted where best seen."

The change from the old code, wherein the position of the flag determined its meaning, to Knowles' new code in which each flag merely represented a number and the combination of numbers carried the message, was a great step forward in the development of signals.

Sir Charles definitely states that he "discovered" the code while in American waters in 1777 or 1778 and that he gave

this new code to Admiral Lord Howe, upon the latter's arrival at Newport, Rhode Island, in August 1778, so that the formal presentation of this new code occurred at Newport, Rhode Island, in 1778.

Knowles worked this code out in American waters, perhaps while at Narragansett Bay and it seems almost certain that his code was an adoptation of the code then in use by the French navy and that he may have "discovered" the principle of the numerical code from the French fleet, for the numerical code was at that time in use in the French fleet and was available in printed form in the signal book printed in 1773.

The system of "tabular flags, suggested by a chess-board" which Knowles also mentioned as having "discovered" and which he stated was published in his own name by Mr. Robson, bookseller, in New Bond Street, London, in June or July, 1778, is also a system at that time in use in the French navy.

It will be seen then that it was at Newport, Rhode Island, that the numerical (or French) signal code system was presented in tangible form to the Admiral who eventually introduced its use into the British navy.

A reference to early signal flags will be found in R. I. H. S. Collections, vol. XX, p. 4.

H. M. C.

## Was Claggett, the Clock-maker, an Engraver?

William Claggett of Newport, won an enviable reputation and lasting fame as a clock-maker, yet like his friend Benjamin Franklin, he too was versatile and many-sided, and made excursions into other fields.

In an address delivered at Newport in 1838, the Rev. Arthur A. Ross said:

"Mr. Claggett is justly distinguished for his early and successful experiments on electricity. He constructed an electrical machine of such dimensions, as to occupy the principal part of

<sup>&</sup>lt;sup>1</sup>Cf. Sir Julian Corbett in Navy Rec. Soc. XXIX, p. 235.