



Full & By
The crew journal of the
barque James Craig

ISSUE 23

JANUARY 2011

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Photo: Hugh Lander

Web site:

www.shf.org.au/JCraig/JCraig.html

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Cover photo: 26 December 2010—Ewa Koszczynski
The opinions expressed in this journal may not necessarily be the viewpoint of the Sydney Maritime Museum, the Sydney Heritage Fleet or the crew of the James Craig or its officers.



Photo Peter Davey



Photo : Ewa Koszczynski



Photo : Ewa Koszczynski

Log of the Alvei 10.



Photo Peter Davey

After waiting a week in Fiji, Alvei finally arrived. She is seldom on time because wind ships have destinations not ETA's. There are worse places to wait. Suva must be one of the cheapest ports with accommodation at \$10 a night (South seas private hotel), meals at the market from \$2.00 and a beer at the Suva yacht club \$1.80. My favorite sign there "keep your feet out of the urinals".

We had a great run from Suva to Port Vila (Vanuatu) with the SE trades to sailing with just fore course and single top sail. From Port Vila to Louganville (Espiritu Santo) we sailed under squares, fore-and-aft and gaff top sails. One day we achieved Alvie's second best distance travelled with seas constantly breaking over the bulwarks. On one occasion, when I was on the wheel, I had water over my knees. From there we sailed to the west coast of Santo to deliver humanitarian aid for project MARC.

<http://www.project-marc.org/>

In Louganville we embarked 450 bags of cement and a couple of tons on general building hardware for a medical centre being built at Wusi on the west coast of Santo. There are a number of villages in the area and they can only be reached by a 12 hour walk or by the sea. The school for the surrounding villages is at

Wusi and MARC had elected to finance and build a medical centre next to the school. 90% of the cargo was carried on deck and Captain Evan Logan was anxious to off load. The off



Photo Peter Davey

loading was carried out in 4 hours without mishap. Wasi has very poor holding ground and, upon completion, Evan retired informing me that I was the Captain for the welcoming ceremony ashore. The elders, chiefs from the all the villagers and school children were lined up to shake the crew's hands before the ceremony. I was, together with the two mates, guests of honor. It was a coup for the village to receive this aid and they were very appreciative.

Unprovoked attack on a square rigger.



Photo Peter Davey

After our humanitarian mission, as we sailing back to our anchorage at Tasiriki for some well deserved R and R we were attacked, without warning, by the Brigantine Soren Larsen. www.sorenlarsen.co.nz/

With her superior speed and crew numbers (14 crew and 16 passenger) combined with her superior fire power (large catapults for water balloons compared to our 8 crew) she remained outside our hand throwing ranges. This attack



Photo Chris Watts

The Soren's W.M.D.s



Photo Chris Watts

Unfair gunnery from onboard the Soren.

was totally without reason, though our crew had liberated a few bottles of rum during a night raid the year before, when both vessels were in Louganville. At a crew meeting the night after the attack it was decided to release a laxative-fed greased pig on to her decks at the next opportunity.

Watch this space.

Chris Watts, voyage crew on Soren Larsen. Chris sailed on the James Craig for a number of years and crewed on the Eye of the Wind for 10 years.

Santo to Brisbane

The sail from Santo to Brisbane should have been a breeze with a course of SW by S combined with a trade wind from the SE. This gives a wind from the port quarter with a dog's leg diversion through New Caledonia. After 5 days of brilliant sailing we were nearly half way when we sailed into 10 days of doldrums. Being at sea with clear skies, moonless nights and just the noise of a wind ship has to be experienced to be appreciated. To quote and misquote Banjo's "Clancy of the Overflow" "And a night of the wondrous glory of the everlasting stars, for a sailor's lift has pleasures that townfolks never know". We also experienced some of the best sea life I have ever encountered. A bull sperm whale swimming direct at the Alvei with a phenomenal bow wave; his harem of half dozen cows just ahead; pilot whales frolicking; then dozens of Mahi Mahi or dolphin fish, these are a brilliantly colored fish that light up with iridescent greens, blue gold and yellow and orange colors. They swim in groups at the bows or alongside waiting for us scare flying fish and then they pounce. One of the memorable sights in the tropics is to see these fish jumping from wave to wave on the chase. They are a great fighting and eating fish but refused to



Photo: Chris Watts

ake our lures. They had taken the same lures last year on the sail to Pago Pago. For the next 10 days we were either completely becalmed or with an extremely light trade wind making 10 to 20 nautical miles a day. When you divide this number into 500 nautical miles to go it depresses. One night when the rudder was barely answering the helm (we were making well under a knot) we ghosted into a pod of whales. There were whales next to the Alvei and all around us. I presume because we were barely moving and silent they ignored us. On the morning after the equinox, we had the full moon setting at the same time as the sun was rising. I have no idea of how often this occurs. A reinforced trade wind finally kicked in (blowing out our much patched Gaff Top Sail) until, once again, when we were within 100 miles of Brisbane we ran out of wind. Because we had to make an appointment with a slip we reluctantly stated the iron top sail. All together it was a 23 day trip. With reluctance, and after a number of rum cokes, I left Alvei. I am signing on again for four months next year. It is a pity the crew of the Alvei cannot give up the luxury of 'cruise ship' square ship sailing and join her.

Peter Davey seaman (sail)

"You cannot have too many knotting books"

Peter Davey.

"Life is too short to splice wire"

Morrin.

To know the laws that govern the winds, and to know that you know them, will give you an easy mind on your voyage round the world; otherwise you may tremble at the appearance of every cloud"

"There are no poetry-enshrined freighters on the sea now; it is a prosy life when we have no time to bid one another good morning".

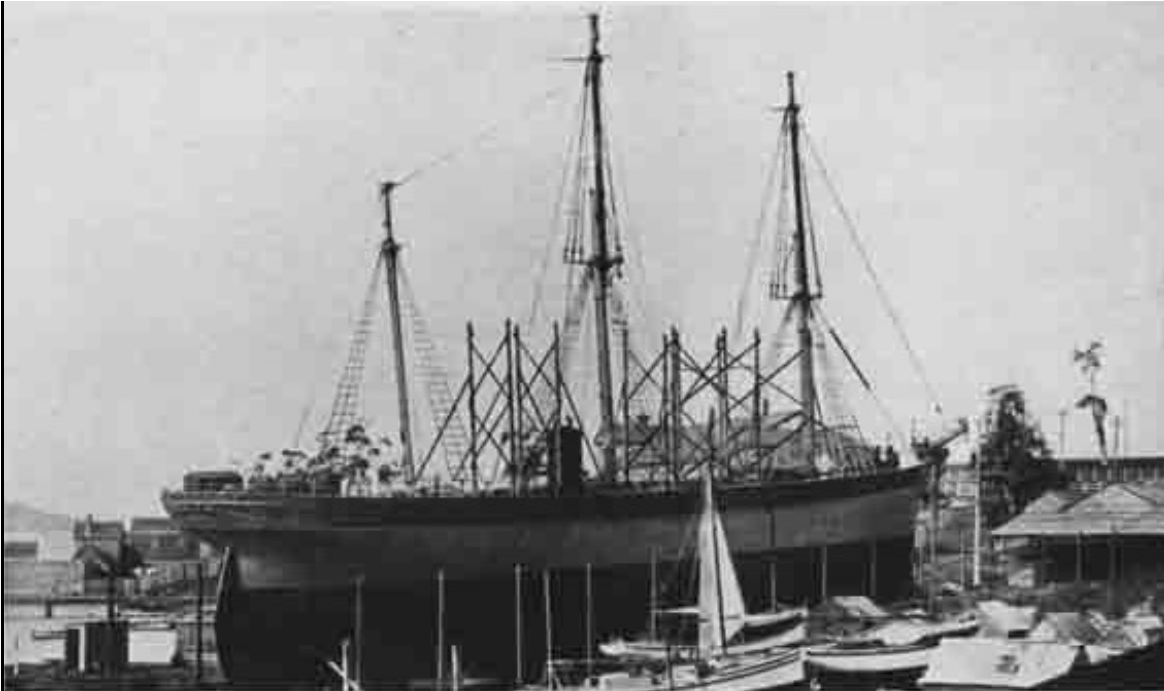
Joshua Slocum (1844-1900)
Sailing around the world (1900)

(What would he say now to a car carrier?)



Photo: Peter Davey

OLD SAILER PASSES James Craig as Coal Hulk 52 Years on the Seas



The barque James Craig (formerly the full-rigged ship Clan McLeod, of Glasgow) on the Domain slip undergoing over haul prior to entering upon the last phase of her existence. After sailing the seas for 50 years, the old barque is to be used as a coal hulk by the Catamaran Coal Co. She will be towed to Recherche, loaded with coal, and towed back to Hobart.

After lying idle at Recherche for nearly four years, the barque James Craig was brought to Hobart yesterday, in tow of the river steamer Togo, to be dismantled and converted into a coal hulk for the use of the Catamaran Coal Mining Company. The James Craig, which was built in Glasgow in 1674, was originally named the Clan Macleod, and for many years traded from London, visiting Hobart several times in conjunction with the Edenholme, Briarholme, and units of the "Clan" line. It was usual for these barques to bring general cargo from London, and to load coal at Newcastle for American ports for the return cargo. After being some years in this trade the Clan Macleod passed into the hands of the "Craig" Line at Auckland, New Zealand, and was renamed James Craig. The Craig line at this time consisted of ten or twelve speedy barques, including the Jessie Craig (now a coal hulk for the Union SS. Company at Hobart), Joseph Craig, Selwyn Craig, and Hazel Craig (now known as the White Pine, a hulk in Melbourne). The James Craig was the last of the Craig line to be in commission, and is

the only one not actually dismantled. Carrying an exceptionally large spread of canvas for her comparatively small hull, and with beautiful, speedy lines, the James Craig was always a famous sailer. On one trip to New Zealand, while in command of Captain M. Murchison (once of the barques Wild Wave and Lobo, and well-known in Hobart), the James Craig made the run from Adelaide to the North Cape of New Zealand in 12 days, making on occasions the exceptionally fast time of over 14 knots. After passing out of the New Zealand trade the James Craig spent some time as a coal bulk at Port Moresby, New Guinea, and during the tonnage shortage following the war was bought by Messrs. H. Jones and Co. and placed in the trade between Hobart, Adelaide, Melbourne, and New Zealand. She was brought from Port Moresby under jury-rig, and fitted up in Sydney. Her first trip following this was made from Newcastle to Hobart with coal, and when six days out from Newcastle the barque was caught in a hurricane off Gabo Island, and was forced to put back to Sydney

to refit.

The James Craig is a barque of 646 tons, and will be the largest hulk in Hobart. She is lying at Ocean Pier, where as much as possible of the work of dismantling will be carried out. She will then be slipped and cleaned ready to take up her commission, for the Cataraman Coal Mining Company. With her dismantling the last square-rigged ship in the Australian trade will disappear. The other coal hulks in Hobart are the Jessie Craig, 637 tons, Otago, 37C tons (Huddart Parker Ltd.), Aldarbaran and the Silver Cloud, 292 tons (Union S.S. Company).

The Mercury (Hobart, Tas.),
Saturday 5 June 1926, page 7

Sea Fever

Since I published John Mansfield's Sea Fever in an earlier Full and By, I have read a copy on the internet that has the last line as "and a quiet sleep and a sweet dream when the long *trip's* over" and is sung as by sea shanty, by Irish women, as "trek".

All seamen know that it is the long trick¹.

¹TRICK. The time allotted to a man on duty at the helm.

From "The Sailors Word Book" Admiral Smith 1867.

A 1000 page book used by Patrick Obrien as a reference when writing his books on fighting sail. It can be downloaded by googling.

Son of a Gun

Begotten in the galley and born under a gun.
Every hair a rope yarn, every tooth a marlin spike,
Each finger a fish hook and his blood, right good Stockholm tar¹.

In the days of fighting sail, the only place on-board war ships which gave some privacy for women giving birth was the space between the guns on the gun deck.

Any male child born was entered in the log as a Son of a Gun.

¹Stockholm tar is the name given to a high-grade pine tar that was exported from the Swedish port of Stockholm. Used to preserve ships decking and ropes

Dead reckoning:

Estimating a position or a course; an opinion of how a course of events will develop

Dating from at the sixteenth century, mariners would plot a course and expected position according to last known position, time, compass course and present speed, without allowing for unknown variables such as wind speed and direction, currents and drift. Originally 'deduced' reckoning, this navigational method became 'de'd', 'ded' and then 'dead' reckoning.

Women at sea.

Mary Patten, the wife of the English Captain Joshua Patten proved herself to be a seafaring heroine when, in 1856, battling ferocious storms midway around Cape Horn, she took control of The Neptune's Car, a magnificent clipper, after her husband collapsed on deck. Mary safely delivered all the crew but one, who fell overboard, and a valuable cargo of iron, sheet lead and mining machinery destined for the California goldfields. The clipper reached San Francisco on November 15, having left New York July 1, 1856. Captain Patten had taught his young wife the skills of navigation.

The foremast was struck by lightning, seriously injuring several crew members working aloft. Mary set broken bones, tended wounds and fevers. She kept vigil by her husband's side when not at the helm.

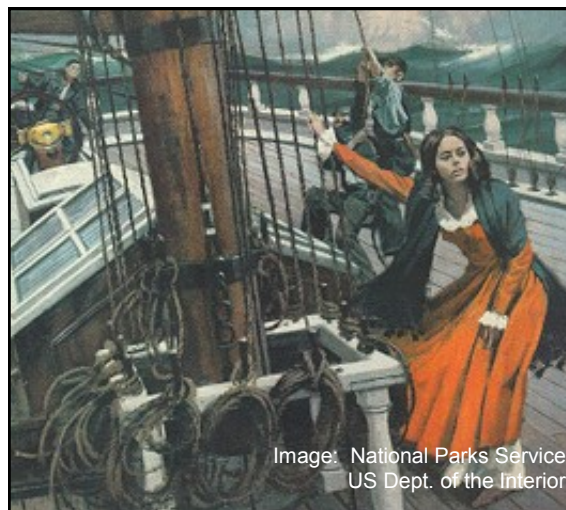


Image: National Parks Service
US Dept. of the Interior

A mutinous first mate compounded the difficult situation on board, then when Mary steered the ship away from the potential disasters of the Horn, they travelled far to the south and within sight of the Antarctic field ice.

Once back in New York, Mary was awarded \$1,000.00 by the insurers of the voyage and she was besieged by reporters. Her main concern was for her dying husband however. She then gave birth to a son in March 1857, so as well as commanding her husband's ship she had carried a pregnancy to its full term.

Captain Patten died four months later in a lunatic asylum. Four years later, in 1861, Mary herself died of consumption, which she had contracted during that harrowing yet astounding voyage of 1856. She was not quite twenty-four years old.

The Boatswain Explains



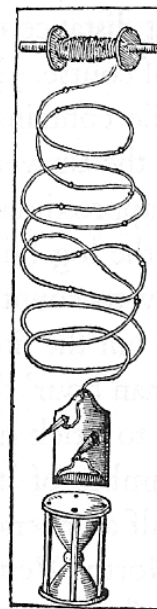
During most off shore sails either the Bosun and/or I can be seen streaming the log. I wrote this article after extensive research.

Streaming the log.

The first mention of the 'common, 'hand', 'ship', or 'chip' log' appears in 1534 when it was described in William Bourne's *A Regiment of the Sea*. A log line and glass have been tentatively identified among the artifacts recovered from the 1545 wreck of the *Mary Rose*. For over three centuries it was the major tool used for Dead Reckoning and an essential element in what was known as the three L's "Lead, log and Lookout", (On long voyagers it became "Latitude, log and lookout].

Bourne believed that the nautical mile measured 5000 feet and used a 30 second glass. In 1637 Richard Norwood, after measuring a meridian arc between London and New York, (for the purpose of accurately measuring the exact dimension of the earth) published in *The Seaman's Practice*², advising seamen to remark their log lines on the basis that the nautical mile

was 6120 feet. The nautical mile¹ is now accepted to be 6080 feet and the proportion should be 47 ft three inches for a 28 second glass. Even though Bourne worked on a Nautical Mile of 5000 feet it still gave an accurate measurement for Dead Reckoning in that if the distance between land falls, was 500 nautical miles and the log gave a speed of 5 knots the time taken would be 100 hours. When using Bourne's log, the distance was unknown or presumed, his log would give a speed of 6 knots and the time taken would be still be 100 hours. With various speeds being sailed and logged, for the voyage, the Navigator would still have a reasonable estimate of when he could expect make land fall.



Heures.	Nœuds.	Braffes.	Routes. Rumbs.
2	3	2	Cap au Nort $\frac{1}{4}$ du Nordest.
4	2	4	Cap au Nort-nordest.
6	4	2	Cap au Nord-dest.
8	5	3	Cap au Nord-dest.
10	2	3 $\frac{1}{2}$	Cap au Nort $\frac{1}{4}$ du Nordest.
12	3	5	Cap au Nort-nordest.
2	2	3	Cap au Nordest $\frac{1}{2}$ de l'Est.
4	2	4	Cap au Nord-dest.
6	6	1	Cap au Nort.
8	6	3	Cap au Nordest $\frac{1}{4}$ du Nordest.
10	6	2	Cap au Nort $\frac{1}{4}$ du Nordest.
12	3	4	Cap au Nort-nordest.

Log, log-line, & sand-glass. From Samuel de Champlain voyages (Paris 1632)

In Ships of war and East Indiamen, it was usual to stream the log once every hour, and in all other vessels once in two hours, and if, at any time of the watch, the wind has increased or abated in the intervals so as to affect the ship's velocity the deck officer generally makes a suitable allowance for it, at the close of watch. However, most navigators used 48 feet, this being 8 fathoms and were easier to measure, one fathom being the span

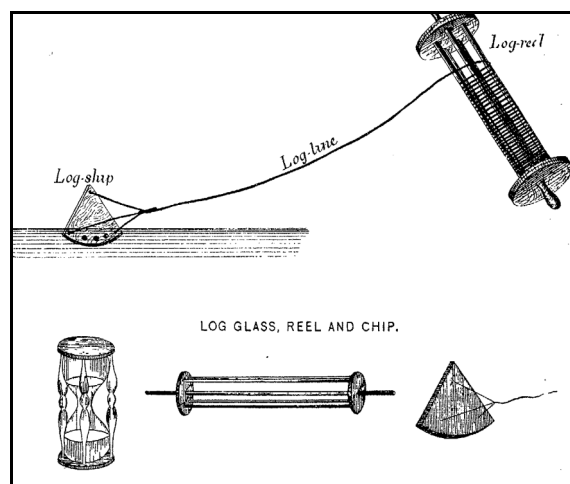
of man's arms. It also meant that, when combined with dead reckoning, they would arrive late at their destination. An early arrival could lead to disaster. The modern version of this is a line, which is marked at constant intervals with a series of knots (Various methods involving knots, bunting, leather etc were used) in the form of a piece of knotted cord worked between the strands. They should be 47 feet 3 inches apart; thus having the same relation to a nautical mile (6080 feet) as 28 seconds has to an hour (If you divide 28 seconds into an hour you get 128 and one nautical mile divided by 128 is 47 feet 3 inches). The time was measured by using a glass in which grains took 28 seconds to run from the top to the bottom bulb. This gave them the speed in nautical miles per hour or knots, "Knots per hour" are incorrect.

Before this method came into acceptance there were a number of methods. One method, known as the Dutchman's log³, which was favored by the United Netherlands Chartered East India Company. (VOC). After the mutiny of the *Bounty* and Bligh's epic voyage he took passage from Batavia on a Dutch packet and made the following remarks in his journal "They use no log. I was told the Company does not allow it. Their manner of computing their run is by means of a measured distance on the ships side. They take notice of remarkable patch of froth, when the forward of the measured distance and call is abreast the seconds till is abreast of the forward end of the measured distance. This method needs no sand-glass but a chip of wood was sometimes necessary when there no marks in the water. Some other nationalities used chants to time the water or chip. The Spaniards and Portuguese for long would have none of these methods they said the 'way' of the ship knew the speed of the ship just as a driver knows the speed of a car.

The log was also used to discover the currents As described in Sir Jonas Moore's *A New System of Mathematics*. "When there's a smooth sea and not much wind, heave out the boat taking into her three or four hands, a compass log-line and half-minute glass fasten a good lead weight to sink the board, turn your glass as you veer out the log-line, set the drift of the log and your compass, so shall you know whether there be a current or not; and if any how it sets; and the rate of driving....." He also noted that "the bigger the weight and board is that the boat is to be rid of, the less will be drift" By this tone Sir Jonas Moore's last sentence, it is apparent that he was not convinced but was content to go along with the method until something better

came along. Captain Cook also used this method.

The equipment used is a glass timer⁴, a hand-reel containing the log-line and a weighted wooden 'log-ship' (or log-chip) attached to the outboard end of the line. The log-ship has a peg on one corner which is designed to disengage when a strong jerk is applied. This expedites the retrieval of the log-ship. The log-ship is designed to remain as near as possible stationary in the water and to drag the line off the reel. To achieve this, 15 fathoms of 'stray' line was streamed before the glass was turned. The line has had various marking over the ages with the present method of marking the knots travelled by inserting a thin line with



the appropriate number of knots attached. A line without any knots is used for half a knot. This also has the advantage that the speed can be measured at night by feeling the number of knots. When measuring the ships speed the crew can simply use his arms width (6 feet or 1 fathom) to ascertain the speed number of 8ths to add to the knots. Clippers used a 14 second glass with all speeds doubled. Even so a clipper sailing at 20 knots would have to stream 160 fathoms of measuring line plus the 15 fathoms of 'stray' line. The shock of stopping a line at such a speed was considerable. There is a famously macabre story, hopefully apocryphal, of a clipper clocked at 20 knots and a Chinaman, when a Chinese crewman who nipped the line was shipped overboard and lost. Those who used the log-line knew of its shortcomings and adjusted the distances as they saw fit. Captain Cook, who was the first navigator who could accurately measure is Lat and Long adjusted his intervals by 2 and a half feet.

Three crew members are necessary: One to

hold the line, one to turn and call cut when the sand is depleted and the other to stream and nip the log line. On the Barque James Craig when streaming our log (Normally once per passenger cruise) the speed is normally within a few percentage of the GPS. Occasionally, there is a wide discrepancy, but, thanks to Hollywood and the movie "Saving Nemo" everyone has heard of the East Australian Current. I blame the difference on the EAC and the fact that the GPS gives the speed over the ground whereas the Log gives the speed through the water.

Peter Davey
Seaman (sail) Barque James Craig.

¹Nautical mile. The origin of the nautical mile rests with the realization that the world is spherical. In 580 BC, Pythagoras put forth a theory to obtain the diameter of the Earth, in 200 BC a Greek, who was the keeper of the library of Alexandria, using the following method. He measure the distance north south between Aswan and Alexandria (using a method devised to measure in the Nile valley used after the Nile floods) Aswan lies on the Tropic of Cancer, and here a pillar was set up at the time of the Summer solstice when there was no shadow. The length of a pole set up at Alexandria on the same day enabled him to work out an angle of that could be used with Pythagoras that gave a diameter that was within 4% of today's measurements. The distance of a nautical mile is based on the circumference of the earth at the equator. Since the earth is 360 degrees of longitude around, at equator and each degrees is broken into 60 "minutes", that means there are 360 by 60 = 21,600 "minutes" of longitude or nautical miles around the earth.

²THE SEAMAN'S PRACTICE became one of his best known works of its time, because it was a standard book on practical navigation. In 1700 the 17th edition was printed, twenty-five years after Norwood's death. The remarkable thing about that book was the fact that until it came out, navigators had a very imperfect concept of the length of a degree or a nautical mile. Norwood's work to determine these things began by his observing the meridian altitude of the sun at a point near the Tower of London in June 1633. He repeated this procedure two years later in the middle of the city of York. He used a sextant with a five foot radius and by carefully measuring distances between his observation points and making corrections to allow for deviations, he came up with a figure only two-thirds of one percent off what is recognized today as the correct distances discovered through modern scientific measurement. This was a brilliant piece of work on Norwood's part considering the crudity of his instruments and the fact that no-one else had attempted to do the measurements so vital in navigation.

³Dutchman log. If the chip or froth takes 10 seconds to travel a 100 feet, she is making 60 feet per minute or 36,000 feet per hour. - 36,000 feet is roughly six nautical miles - so her speed is 6 knots.

⁴The heat and moisture can have an considerable effect on the glass, so as to make it run faster or slower and it was checked by pendulum in the following manner: On a round nail hang a string that has a musket ball fixed to one end, carefully measure betwixt the centre of the ball and the string loop over the peg 39 and one eight inches, then swing, beginning at the second time it passes and the number of swings made during the time the glass is running out shows in seconds it contains. Ground egg shells were often used to replace the sand because they do not absorb moisture.

Full & By

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*Author of "Two Years Before the Mast" (1840).
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Animals at Sea Captain Cook's amazing goat.



Photo: Hugh Lander

A goat that circumnavigated the world twice. Firstly with Wallis on the "Dolphin", and then with Cook on "Endeavour". After this the goat was pensioned off. She was awarded by the Admiralty the "privileges of a pensioner" and she ended her days grazing at Mile End. She wore a silver collar (believed to have been a gift from Banks). The collar was inscribed with an epigram written by Samuel Johnson to honor the goat, which had provided milk for the officers on two separate global circumnavigation voyages. However in a letter to Banks, in February 1772, Johnson was unable to remember his "motto".

Alas, the goat died only a month after being pensioned off — it is said she died of the shock of a comfortable pastoral life after so many uncomfortable years at sea.

"In fame scarce second to the nurse of Jove.
This goat, who twice the world had traversed around,
Deserving both her master's are and love,
Ease and perpetual pasture now has found."
Boswell

James Craig Day Sail Diary

