the LOOKOUT

SEAMEN'S CHURCH INSTITUTE OF NEW YORK

JULY-AUGUST 1972

THE PROGRAM OF THE INSTITUTE

The Seamen's Church Institute of New York, an agency of the Episcopal Church in the Diocese of New York, is a unique organization devoted to the well-being and special interests of active merchant seamen.

More than 753,000 such seamen of all nationalities, races and creeds come into the Port of New York every year. To many of them the Institute is their shore center in port and remains their polestar while they transit the distant oceans of the earth.

First established in 1834 as a floating chapel in New York harbor, the Institute offers a wide range of recreational and educational services for the mariner, including counseling and the help of five chaplains in emergency situations.

Seamen's Church Institute
State and Pearl Streets
Manhattan

Each year 2,300 ships with 96,600 men aboard put in at Port Newark, where time ashore is extremely limited.

Here in the very middle of huge, sprawling Port Newark pulsing with activity of container-shipping, SCI has provided an oasis known as the Mariners International Center which offers seamen a recreational center especially constructed and designed, operated in a special way for the very special needs of the men. An outstanding feature is a soccer field (lighted at night) for games between ship teams.

Mariners International Center (SCI)
Export and Calcutta Streets
Port Newark, N.J.

Although 55% of the overall Institute budget is met by income from seamen and the public, the cost of the special services comes from endowment and contributions. Contributions are tax deductible.

the LOOKOUT

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SEAMEN'S CHURCH
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COVER: Erie Canal Basin and elevator, Buffalo, New York.

The Story of the Erie Canal

Back in the early 1800's, as America was going through a period of expansion with settlers pushing West, everyone knew that poor transportation was hampering the development of New York State and perhaps the entire Northeast.

The central part of the state with its rich valleys was isolated and others further West were shipping and receiving their products from the seaport of Quebec, a tendency it was feared, that could lead many settlers back to the sympathies of Britain.

It was frustrating for residents of central New York to take in bumper crops and develop waterpower for factories, and be unable to ship their goods anywhere at a reasonable price. Businessmen in those days found that a consignment of goods transported by wagon and intermittent boats would cost as much money to carry as they would fetch on the market at Albany.

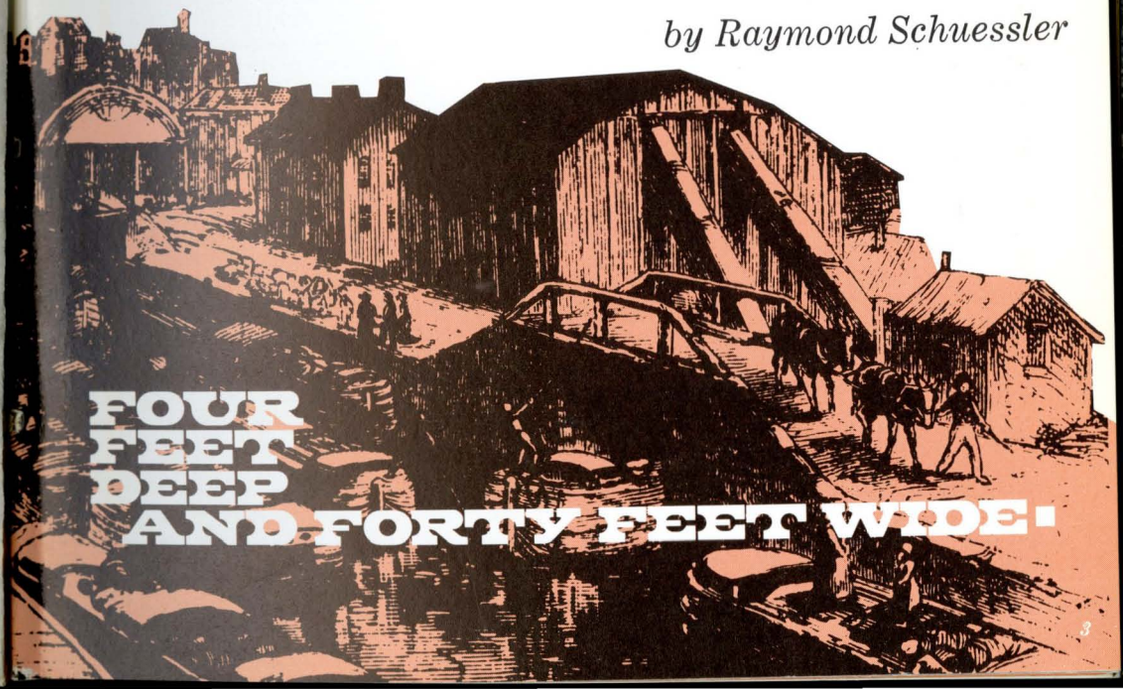
In 1814 Robert Fulton wrote that it cost $2.00 to send a barrel of flour 130 miles overland, yet the same barrel could go 160 miles by water for 25¢. If you had goods that could walk, such as cattle, fine, but you couldn't make much profit from goods that had to be transported.

Some traders on the Great Lakes would sooner ship down the Mississippi River and up around the seacoast some 3000 miles to New York City than ship overland on a wagon train.

If, as many people hoped, a canal could be built to expedite the movement of people and goods westward from the Hudson River to the Great Lakes, America's commerce and wealth would grow by leaps and bounds. There was little doubt in a businessman's mind that if the country was to grow, its waterways, the main avenues of transportation, had to grow too.

Many people had suggested that the Hudson River should be connected by a canal to the Great Lakes. But others thought it was sheer madness, an impossible engineering feat since the difference in elevation was between 500 to 600 feet, a great deal was forested wilderness and swamps, scores of rivers would have to be crossed and much private land would be cut in half, necessitating countless bridges.

by Raymond Schuessler



When the subject was first broached in the New York State Legislature it was received with "such expressions of surprise and ridicule as are due to a very wild or foolish project." First of all, they objected, there were no engineers or equipment in the country to build it, and the canal would have to be 14 times longer than any yet built in the country. (Up to that time the longest canal in America was the Middlesex Canal between Boston and Merrimack, some 27 miles long.)

One of the moving powers behind the Canal was DeWitt Clinton, who once convinced of its merit, spent much time and energy in promoting the idea and during his term as Governor of New York saw it completed. (But as a stepping stone to the White House he missed the boat.)

In 1808 a survey was authorized by the State Senate. The surveyor, James Geddes, tramped through the wilderness sleeping on beds of leaves and clubbing small animals for food before he succeeded in mapping a favorable route from Lake Erie to the Seneca River, the most difficult part of the route.

This survey was taken by Joshua Forman, a state senator, to President Jefferson in Washington. But Jefferson, with all his genius, though agreeing it was a fine project, suggested that it be taken up again in about 100 years.

Yet, if there ever was a canal that had to be built it was the Erie. Finally in 1817 the Canal Law was passed by the state legislature and on July 4th of that year Governor DeWitt Clinton plowed the first furrow in the canal two miles south of Rome and the digging was on. This was the biggest job yet attempted in America.

Since the toughest sections were at either end, work was begun in the middle. To start with insoluble problems and frustrations would have been disastrous not only to the workers but to the public. By working at the easier part they would gain enough experience to handle the tougher problems later.

Actually no one in America knew much about digging or constructing a canal. One man, Canvass White, was sent to England in 1817 to learn something about the art and he brought back notes and a few instruments. But the Erie Canal itself became a school of engineering where the engineers practically learned on the job, reading books and discussing new theories during lunch. But with American ingenuity and creativeness they fumbled through perfectly.

The canal followed the water level route most of the way along the Mohawk River grade, but it still had to battle obstacles along the way.

Before the canal engineers even began, they had to figure out where all the water would come from to keep the canal flowing. So the route was carefully laid out by streams and lakes to afford a constant supply of water at all times to replace leakage and evaporation.

They had to devise many gates and sluices to feed this water to the canal and prepare drainage areas to let off excess water during floodtime. A level surface had to be provided along the edges of the canal for the towpath on which mules and horses would tow the ships. These towpaths were crisscrossed with branches thrown over with dirt.

The canal was to be 40 feet wide on the surface, 4 feet deep and 28 feet wide on the bottom. Stakes were driven 60 feet apart to mark the course and holes bored to 12 feet to test the nature of the soil. By January of 1818 some 58 miles were under construction by 2500 men and 700 horses between Ithaca and the Seneca River.

Work was leased out to small farmers along the way and at one section 50 contractors were working on the first 60 miles. The competition lent by such

(*Continued on page 17*)

Rum & Lime

by Enos Kalas

SCURVY: deficiency disease resulting from insufficient vitamin C (ascorbic acid) in diet. Attended by bleeding of the gums, anemia, debility. Formerly common among seamen. May occur in babies after six months of age if diet lacks vitamin C.
— Columbia-Viking Desk Encyclopedia

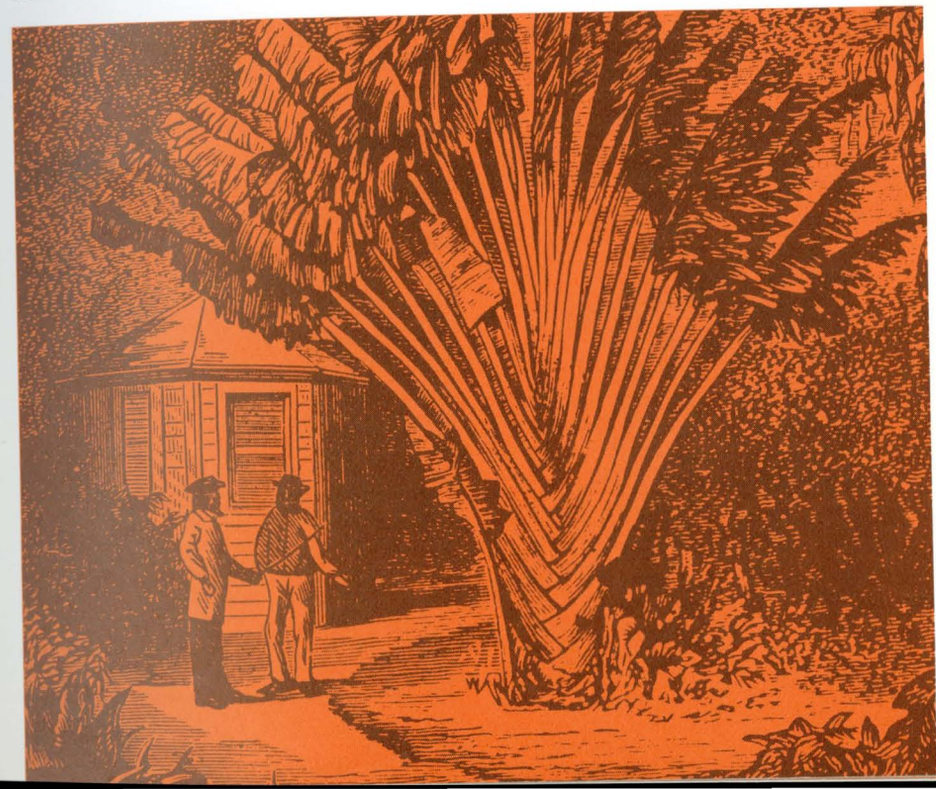
Back in the 15th century death was no stranger to seamen on merchant ships. If he wasn't hacked by attacking pirates, or swept overboard by storm-driven waves there was always the ever present threat of scurvy, especially on voyages of long duration.

Two centuries ago it took ships a month or more to cross the Atlantic. The longer the voyage the more danger of scurvy. Matter of fact, when a ship's master ordered anchors aweigh the crew began making wagers on how many would die of the disease before they returned to their home port.

Today ships cross the Atlantic in five days and the able-bodied seaman never gives scurvy as much as a passing thought.

To help fight this scourge of the sea, British seamen were given a daily tot of grog. The rum and water concoction was named after the British naval officer, Admiral Vernon, who officially introduced the ration in 1740 to keep his sailors alive when they were scrambling around ice-encrusted halyards and ratlines.

It also proved effective as an incentive in that extra rations were given for dangerous duties such as going aloft to bring down storm-whipped sails or the unpleasant task of sewing



the wasted bodies of scurvy victims into shrouds.

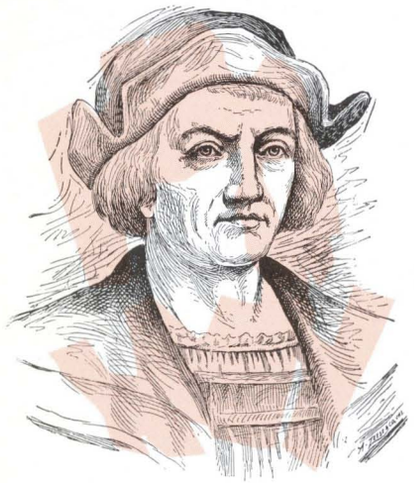
The Admiral's nickname, "Old Grog," was not inspired because of the spirits he dispensed but because of his attire —a coarse fabric cloak, made of silk, worsted, mohair, stiffened with gum and called *grogram.* Rum was usually stored in a varnished-oak, brass-bound tub.

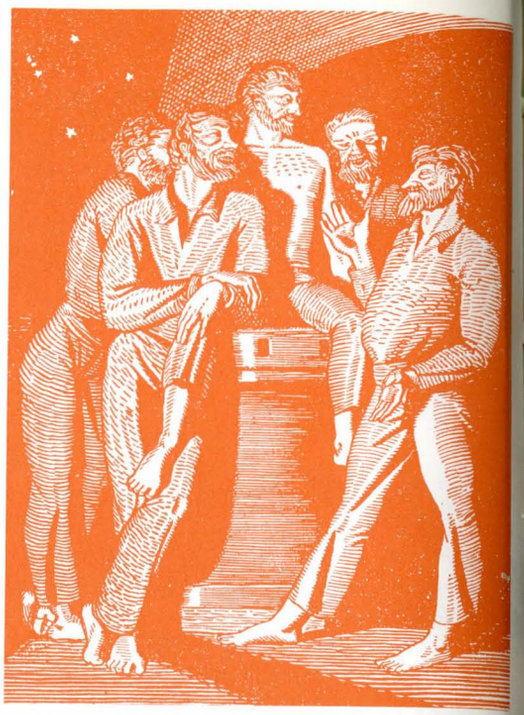
More research discloses the rum ration idea started quite by accident in the West Indies in the 15th century. When the Jamaicans asked the British to keep the channels clear of pirates, the British agreed but stipulated they wanted in return a steady supply of fresh vegetables to combat scurvy.

The Jamaicans then offered rum instead of rutabagas. English seamen then found that rum not only helped prevent scurvy but the pleasant diversion kept their minds off its ravaging effect entirely.

Long before British seamen became addicted to their daily pint, Malayan girls were sticking pins in limes to cause pangs of love in their sweethearts. And natives in Southeast Asia warded off evil curses with the little green fruit.

Arab traders brought limes in their caravans into Persia and Palestine. Some ate them, others drank the juice;





some used it as a medicine; others enjoyed it as a grooming aid. The Romans floated lime leaves in their baths.

Columbus carried limes to the New World on several of his voyages and in 1493 planted them in the West Indies. The natives acquired a taste for them and limes became a staple of the West Indian culinary effort.

Ponce de Leon, while foraging for the fountain of youth in 1513, brought the lime to Florida. Two hundred years later explorers came upon groves of limes along the banks of the Indian river in South Florida.

In the middle of the 18th century a British naval surgeon named Lind, while treating lethargic and listless seamen aboard ship, observed that those who drank lime-juice not only recovered from scurvy, but never suffered from it again.

On the basis of his findings a law was formulated that all British seamen must take limes or lime juice daily — and thus they became known as "limeys."

SEAGULLS SCREECH THEIR DISPLEASURE

by Richard M. Blanchard

On the passages through the Bahama Islands, from San Salvador (the first land fall made by Columbus) to Cuba, the gulls are unhappy.

For half a thousand years sailors have been feeding them three times a day as they threw galley left-overs and garbage overboard.

Traffic on these natural waterways has constantly increased since the time of the early explorers. The Spanish Galleons, Morgan the pirate, and Blackbeard, too, followed by the great clipper ships of the past century, and then the steam-powered ships of today have used these waters.

It is not uncommon to see a dozen large ships headed north and south between Crooked Island, Mira Por Vos, and the Windward Islands, located near 20 degrees and 24 degrees north latitude.

For centuries these ships meant food to the seagull, but now the new Pollution Act prohibits throwing garbage and trash overboard when less than fifty miles from the closest land.

The seagull who has been fed three times a day by the ships has grown dependent on this feeding. Now he finds his food not forthcoming.

During a recent voyage through these waters, the gulls certainly made it clear, by their actions, that they were dissatisfied with the new law. Seamen say that since they can't throw their leftover food overboard, their old friend, the seagull, will no longer follow the ships.

The gulls with their fantastic grace, sailing and gliding in the air currents a few feet from the ship's bridge, sounding soft contented squawks, will be sorely missed.

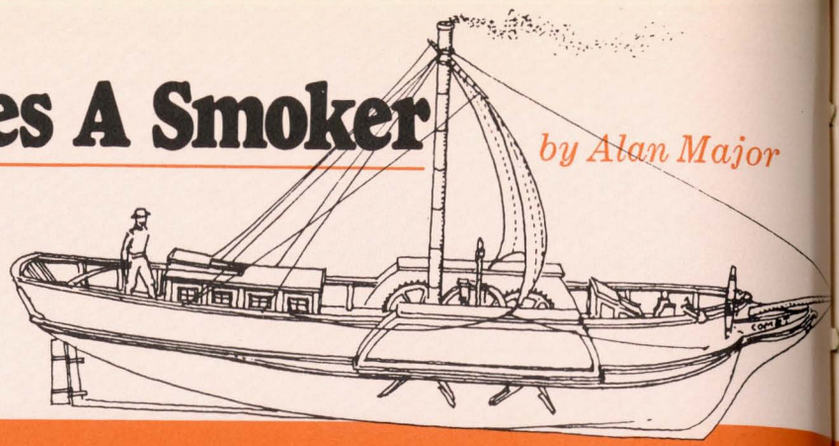
One evening shortly before sunset, it was observed, twenty or thirty gulls were on station and seemed a bit nervous after missing breakfast and lunch. Now as the sun was about to set, each gull dove about the ship like Kamikazes with beaks wide open, screeching their consternation. As twilight softens into night, the seagulls now silently wing toward their island home — quite hungry and perplexed.

A DAILY PRAYER

Dear God, keep close to me this day, for the sea of the world is so wide, and the frail boat of my life is so small. Help me chart my course aright and keep my bearings. If the winds and waves are against me, let me head into them and keep full steam ahead; and, O God, keep Thy hand on mine as I stand watch and hold the wheel, unafraid, steady as I go, in Christ's Name. Amen.

Here Comes A Smoker

by Alan Major



Several reasons were asserted by disbelieving ship-owners and nautical men why steamships burning coal would never oust sailing ships.

It was claimed, and rightly in some instances, there was a dangerous risk of fire; that if the engines broke down or ran out of fuel at sea the ship would be stranded and drift, and smoke given off by the burning fuel would make the ship dirty, smelly and annoy the passengers.

Time was eventually to prove these arguments wrong, but the first builders of steam-propelled ships tried to meet all the ship-owners' requirements by using steam as an auxiliary to sail. The first passenger steamer in Europe, Henry Bell's *Comet*, built in 1812 navigated the Clyde "by the power of air, wind and steam," and had a smoke-stack or funnel more like a high stove-pipe.

It was so tall it was also used as a mast for the sail.

The stacks' height on these early steam-using vessels not only helped keep the smoke and grit clear of the passengers on deck (except when a following wind swirled it back again) but such a stack was also essential for a good draught.

An American ship owner who had complete faith in the steamship innovation was Samuel Cunard, whose shipping line was under Government contract to carry mails between Boston and Bermuda and Halifax and Newfoundland.

As the various steamships being built and experimented with both in the USA and Britain improved in performance and safety, Cunard decided to have steamships constructed for his line instead of sailing ships, saying "steamers properly built and manned might start and arrive at their destination with the punctuality of railway trains on land."

His first steamship, with a single, tall stack, was the 1,156 ton barque-rigged paddle-steamer *Britannia*. With her, Cunard secured a contract to convey Atlantic mails between Boston, Halifax and Liverpool and founded the famous Cunard Line. On her maiden voyage, leaving Liverpool on July 4th, 1840, which took 14 days, 8 hours, she consumed 38 tons of coal per day.

As they became bigger and faster, so the number of boilers were increased, which meant an increasing number of stacks, and a ship's speed became noted by how many stacks she carried. Up to four was quite common in both merchant, passenger-carrying and naval ships, but some French warships had up to six stacks.

Obviously, as greater speeds were required and meant an increase in boilers, ship designers could not continue adding more stacks ad infinitum, and so the boiler design was concentrated on. This in turn meant that eventually only one or two stacks were necessary.

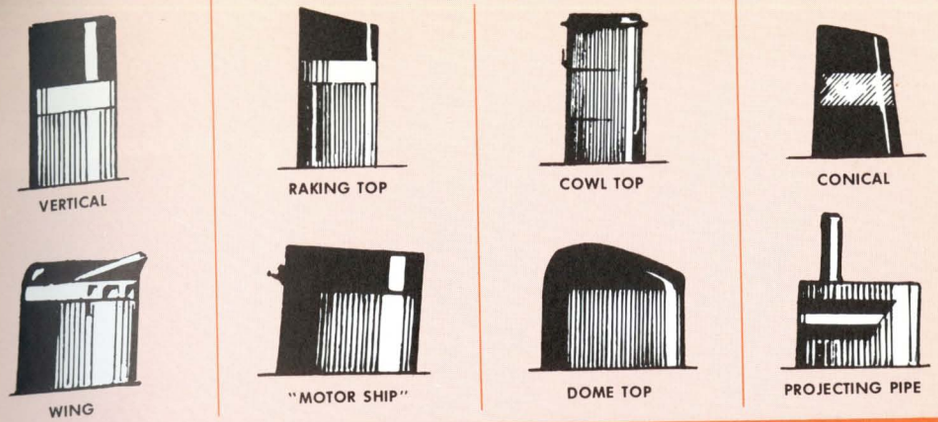
Curiously, however, many of the passengers who had travelled on the giant luxurious pre-1914 War liners, such as the red and black four-funnelled *Mauretania*, associated the luxury of such ships with the number of stacks they carried. The passengers demanded to travel on the ships depicted on the posters with lots of stacks and those that had only one or two were rejected.

To overcome this strange situation, designers of passenger-carrying ships began the practice of fitting dummy funnels which never did and could not emit a puff of smoke. The space in them was usually used to house a cabin, probably for a wireless operator, water tanks, or equipment.

One liner even had its mortuary inside a dummy funnel.

It might be thought that the stack was empty inside, apart from the smoke emitting from it, but there may actually be several dust collectors, each serving a different boiler, that trap soot which is then washed into hoppers and then emitted overboard near the ship's waterline.

Also inside there will be exhausts from the grill and galley or other equipment, depending on the ship's use. Motor liners have silencers inside their funnels, too.



When motor ships were first introduced it was thought that stacks would become obsolete, because only a small exhaust would be needed and this could be made to resemble a mast or be affixed on the side of a mast. But the normal stack shape continued to be used, to follow the well-known design for the vessel.

Similarly, during the Second World War, many ships were built with short, thin smoke-stacks in order to save steel, but after the War ended, in cases where the same ships were still needed for service, extra casing was built around the outside of the small stacks to make them appear the normal size and shape.

Today research still takes place in wind tunnels with models and artificial smoke tests in order to design the most suitable smokestack for a new ship. Smoke deflector fins are one method that have been widely used on stacks to keep the smoke from drifting downwards to the decks. The *Queen Elizabeth I* had funnel vanes to keep the smoke high.

There has also been a return in recent years to one stack. The single large stack of the Cunard liner *Caronia* actually contained seven main funnels and smaller exhaust inside it. One of the trendiest stacks is the tall, elegant, tapering example adorning the liner *Q.E.II.*

We are a k leidoscope of the wat rfront

Mr. Stahre shows Mrs. West and Dr. Mulligan coded card received with knitted sweater.

Mrs. Ellen C. Tillinghast

In late July, 1969, a volunteer knitter for the SCI Women's Council (distaff adjunct of the Institute whose major activity is the annual preparation and dispatching of the well-known SCI Christmas gift boxes to seamen obliged to be at sea during Christmas) was knitting a sweater in her home in Middlebury, Vermont, while watching the Apollo XI moon-landing exploit on her television.

She was Mrs. Ellen C. Tillinghast, and the sweater, when completed, would be sent to the Council headquarters to be packed, along with over 10,000 other similar volunteer hand-knitted woolen garments, in the Christmas boxes.

So impressed was Mrs. Tillinghast by the moon-landing and safe return to earth by the astronauts that as she knitted and exulted on the progress of the Apollo project, she was inspired to mark the event in a unique manner:

"I put a loop (of colored yarn pieces) into the stitch I was knitting at each special moment: pink, 'The Eagle has landed'; green, 'small step for Man, giant leap for Mankind'; blue, blast-off from moon; purple, docking in space; yellow, splashdown in Pacific; orange, safe aboard ship." This she said in her note to the Council staff.

When the staff received the sweater and note from her it thought it should give the garment special attention and see that it reached an appropriate sea person instead of an anonymous seaman.

So searching its records, it discovered Ted Stahre (originally from Gloucester, Mass.) aboard one of the NASA Apollo tracking ships, *USNS Redstone,* and sent him the sweater (contained in the regular gift box together with the other customary articles) and Mrs. Tillinghast's explanation of the knitted-in yarn color-coding.

Mr. Stahre, delighted, of course, wrote to thank the knitter and the Council.

In April, 1972, with exquisite timing (during the flight of Apollo XVI), and proudly wearing the Navy-blue SCI sweater, Mr. Stahre called at the Institute to meet the Council staff for the first time and to express his thanks in person. He was given a tour of the building and chatted with SCI general director, Dr. John M. Mulligan, and Council director, Mrs. Constance West.

He also purchased a pound of wool to take home to Mrs. Stahre in Melbourne, Florida — to launch her into the Institute knitting program.

National Maritime Day was observed with appropriate ceremonies May 22 in Battery Park (across from the SCI building). The featured speaker was Mrs. Helen Delich Bentley, chairman of the Federal Maritime Commission. A parade and review was presented by the U. S. Merchant Marine Academy midshipmen from Kings Point. SCI's Dr. Mulligan, Protestant Chaplain of the Port of New York, gave the invocation and benediction. Capt. Robert E. Hart was chairman of the event.

Institute Club Hits Fourteen

The International Seamen's Club of the Institute observed the fourteenth anniversary of its founding in the club's headquarters at SCI June 8 with a rousing evening of dancing and special entertainment continuing until one o'clock.

At midnight Miss International Club was chosen from among the hostesses present by a chance drawing, as was a runner-up. A lady's gold wrist watch and a flacon of perfume were awarded the winners of the drawings.

A male juggler and his balancing feats brought spontaneous applause as did the singing of an attractive female artist who encouraged audience singalong participation with her guitar accompaniment.

The crowd was huge. Seamen representing eighteen countries were present. Three bus-loads of seamen came from SCI's Port Newark Center; the preponderance of them were Norwegians because the Center was then the host for the Norwegian Government Seamen's Service which conducts sports contests throughout the world for seamen of all nations.

The large crowd taxed the SCI club room and the SRO condition continued until the gala festival came to a close. Around sixty hostesses were present. Refreshments were keg beer and sandwiches.

Elected to Board of Managers

A. L. Loomis III, a resident of New York City, has been elected a member of the Board of Managers of the Institute.

He is a member of the Marine Historical Association, the New York and Seawanhaka Corinthian yacht clubs and has sailed in many ocean races, also in one design competition.

Mr. Loomis was graduated from Harvard College, majoring in government and economics.

After graduation he joined the U.S. Coast Guard Reserve and after a period of active duty entered the management development program at Morgan Guaranty Trust Company. He subsequently joined his family's investment partnership firm, St. Vincents Island Company.

Life Owed to Cat

In the 17th century a little French girl, Francoise d'Aubigne, daughter of the Governor of the Isle of Marie-Galante, died at sea when travelling to the island. As was the custom, the child's body was to be buried at sea.

During the service a mewing noise was heard repeatedly. It came from the canvas covering the body.

The Captain, remembering that cats will never go near anyone dead, if possible, decided to stop the funeral.

The child was found to be still alive!

She became the famous Marquise de Maintenon, the wife of Louis XIV, and lived to the great age in those days, of 84, and owed her life to a cat.

EDYTH HARPER

by Robert W. Pelton

Mr. Pelton, a California resident, has just published a book on voodooism and black magic, one of several on varied subjects. He says his interest in the supernatural and occultism was first aroused by a series of mysterious accidents occurring to his grandfather's boats, this story being an account of one such.

— editor

Eighty-eight years ago, my grandmother recorded a most unusual story in her diary. My grandfather, Captain Robert W. Pelton, owned a small sailing vessel named the *Dolphin Skinner*. His birthday, January 9, was planned as a day of great festivities, and many preparations had been made to make it a birthday to long remember — and it certainly turned out that way, but not for the reasons one might expect.

Preparing his sailing ship for the impending party, Grandfather hired a cleaning women to straighten things up and thoroughly clean the vessel before the guests began to arrive; she was an elderly black who proved to be full of superstition — and thought to be rather ignorant.

It was a fine clear day, and the sky was free of any clouds. The sun beamed brightly — a perfect day for a fun-filled get-together, and the entertainment of guests. But scarcely had the woman boarded the *Skinner*, than she began acting strangely.

Grandfather thought her to be ill, but she certainly was not; she delayed starting her task at hand and tried to convince grandfather to do his entertaining in the arbor of the garden at home, because she claimed to have had a clear vision of the *Skinner* being struck by lightning.

Grandfather merely laughed at her pleadings since there was certainly no sign of an approaching storm of any kind.

Finally, the woman did as she was ordered. The day remained a fine one, and the guests began to arrive to start the celebration.

Everyone was having a great time when suddenly storm clouds gathered on the distant horizon. They were driven toward the ship by high winds, but no one except my grandfather seemed to notice.

The woman had stayed on board to assist in serving the guests. She, too, observed these wicked-looking clouds and again pleaded for grandfather to leave the ship and to ask his guests to disembark immediately. Some guests decided to leave as the storm approached with great violence. Others followed quickly.

The last guests had not been off the ship more than a few minutes when the lightning struck. It demolished everything that had been left in the ship, and the damage was extensive.

Grandfather was stunned and could scarcely believe what had actually taken place. His luck at sea had taken another strange twist of fate. He had gone through another unusual accident, yet he was again not hurt in the least.

His whole life had been a series of unavoidable, possibly fatal situations, yet he survived to finally die under very mysterious circumstances in 1903, while aboard ship and at sea.

ISLAND OF HERRINGS

by Joyce I. Corlett

In the Isle of Man, that tiny island in the Irish Sea, there are more legends and old customs connected with the herring than with any other fish.

In olden times this fish was the chief diet of the peasants, and so important was the herring fishing that the quaint "Herring Bone" oath was invented and is still used to swear in the Deemsters (Judges of the High Court):

"By this Book and the holy contents thereof, and by the wonderful works that God hath miraculously wrought in heaven above and in the earth beneath in six days and seven nights, I do swear that I will without respect of favour or friendship, loss or gain, consanguinity or affinity, envy or malice, execute the law of this isle justly between our Sovereign Lord the King and his subjects within this Isle and betwixt party and party as indifferently as the herring back-bone doth lie in the midst of the fish."

In bygone days charms were used extensively to appease the Gods of the fishery. If one boat had exceptional luck, it was believed that the luck might be transferred to an unsuccessful one by secretly sweeping the doorstep of the fortunate skipper at midnight. The 'lucky' dust thus collected was shaken over the 'unlucky' nets before they touched the water once more. Dust swept from the church steps was also considered an unfailing charm to bring in a good catch.

Again, witches were employed in boiling certain herbs, the resultant brew being sprinkled over the nets, or the herbs themselves tied inside the ship's bow. The fee for such charms was always to be paid in silver.

Sometimes the witches invented variations of their own. One is said to have favored the buying of three papers of pins in the village shop. None of them must have been used before and none of them must be missing. These she boiled with herbs and each man of the boat had to drink a mouthful, presumably doing his best to escape the pins!

The most picturesque custom was the burning of heather after a bad catch. A pile of this was made in the middle of the boat. It was lighted by a burning branch which first touched the stern and bow and then the sides of the boat. This was supposed to burn out the witches who wished them ill.

Even to this day fishermen in Peel do not like to sail past the old Castle when the wind roars from it like the voice of a giant.

"Of course it is all superstition," they murmur, and shrug their shoulders, "but it is well to be on the safe side. Perhaps it is only the wind's voice, but boats have been lost when they did not heed it."

Standing on St. Patrick's Isle, the ruins of the old castle look strange and forbidding in the moonlight. No wonder the fisherfolk want to be on the safe side.

The Captains of the fishing boats used to hire their men at the beginning of the season by giving them a shilling. Once the shilling had passed between captain and man it was legal as today's signed agreement.

Some of the old captains in Peel preferred to hire a room and ask all fishermen who wanted jobs to go there. A chalk line was drawn across the middle of the room with fishermen one side, captains the other. Directly a man crossed the chalk line he was hired. The bargain was usually sealed with a tot of rum.

One day, however, there was almost a riot. One captain was a teetotaler and offered his men buttermilk to drink!

Until recent years Peel was still a great fishing port. Every year dozens of Scottish fisher girls came over to the island for the gutting and packing of the fish.

You could see them standing in long rows in front of the huge barrels of gleaming herrings. They sang as they cut and gutted with incredible speed. Then, when the work of the day was over and hundreds of gulls were screaming and whirling in the harbor after the fish guts thrown to them, the girls strolled through the streets, knitting as they walked, knitting as they talked. Now, unfortunately, there are only a few fishing boats sailing out of Peel.

The wreck of the herring fleet which happened in Douglas Bay in 1787 is depicted in many old prints and ballads. A sudden storm arose while the fleet was at sea, and the boats were wrecked within sight and sound of the womenfolk on the shore. Practically the whole of the fleet of 400 boats was lost, and such a deep impression was made on the lives of the islanders that even yet the old fishfolk speak of the disaster in hushed voices, as if it happened within recent times.

Kipper-curing is still one of the island's chief industries. From June until September the brown cardboard boxes in which kippers are packed are piled high in many of the shop windows, ready for visitors to buy and address them. The Manx kippers are particularly good to eat because the method employed eliminates the curing matter used in most processes and so does not impair the full, rich flavor.

Fresh, salt and pickled herrings are still great favorites with the Manx and there are few cottages or farmhouses without the barrel of salt herrings put down for the winter.

Strange Fellow-The CuttleFish

by R. D. Rives

A canary pecking at a cuttlebone hung in its cage to supplement its diet is a familiar sight to everyone acquainted with feathered pets; but only a limited number are aware of the life and habits of the cuttlefish that produces the bone.

Beautiful only in the eyes of those who can see beauty in all creatures of the sea, the cuttlefish is considered ugly and grotesque with its flat subcentral head, widely-spaced eyes, and beaked mouth.

Closely akin to the octopus and often mistaken for the look-alike squid, it has a brown oval body with crossbands and purple spots. All is surrounded by a frilly fin. Its color becomes a brilliant metallic hue when exposed to the sunlight but it can also change color like a chameleon when necessary.

Equipped for living in the sea, it has eight short arms and two long tentacles surrounding the mouth. The tentacles are used to capture its food and to attach itself to various objects. It has the odd ability to retract the tentacles and place them in pockets behind the eyes.

Both arms and tentacles have four rows of suckers, hard and tough, weapons that make the cuttlefish one of the most rapacious and carnivorous of mollusks. For a mollusk he is! A cephalopod of the "Sepiidae" family, it differs from other mollusks in that its calcified shell lies hidden within its body instead of forming the protective outer coating of the conventional shell fish.

There are about one hundred species of its kind usually ranging from a few inches to two feet in size, although some specimens have been known to grow to an enormous six feet. Since the cuttlefish avoids the cold as much as possible, it is found only in the temperate and tropical zones and seldom elsewhere. None are known to exist along the coast of the United States.

Haunting the shore waters of warmer regions, it lives a hectic life of adventure and harrassment. Fish and aquatic birds find it a rare delicacy and its existence is a hazardous one.

It uses its frilled fin to swim in a leisurely fashion when unmolested; when frightened, jet propulsion is its mode of travel. By forcing water in and out of the space between the cuttlebone and body, its departure can be a speedy one.

When pursued by an enemy, like the squid and octopus, it beclouds the water by emitting an ink, or sepia, to confuse the pursuer and to conceal its escape route.

Besides supplying their pet birds with a lime diet, the cuttlefish is beneficial to man in other ways. The ink sacs are dried to obtain the rich dark brown ink tinged with red, or black, depending on the species. The sepia obtained has a low saturation point and low brilliance, a pigmentation so desired by artists.

In some countries it serves as a food source. In others, the powdered bone is used commercially as a polish in manufacturing toothpaste and other industrial processes.

Indeed, it is a strange little fellow — the cuttlefish.

The Story of the Erie Canal

(*Continued from page 4*)

a system generated a furious rush of construction because contractors hoped to get additional contracts at other areas.

Each contractor's stretch of work was tested by filling it with water; if it leaked, the contractor was expected to repair it at his own expense. Workers got about 50¢ a day. The contractors got 10 to 14 cents per cubic yard of earth and up to $2.00 per yard for very hard work. The engineers received about $2000 per year.

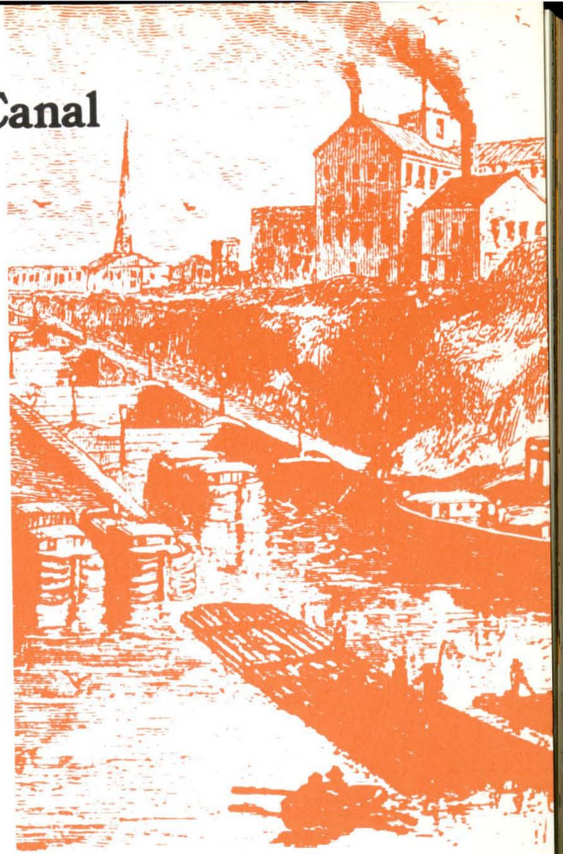
Equipment was primitive. It must be realized that there was no huge earth-moving machinery in those days, but only horse-drawn scrapers, plows and wagons. As the work progressed a great deal of crude machinery was devised.

A dumping wheelbarrow was put together to carry off the mud quicker. A stump puller was invented since much of the course was through wooded area: the men put together a huge 16-foot-high wheel which wound a chain around an axle and popped out stumps at the rate of 40 per day.

In some spots such as the swamps below Syracuse the men had to fight malaria and typhus as did the men in Panama years later. But the work went on.

Residents would crowd the banks along the route and watch all day as the labor progressed, cheering the men on. The entire country was, in fact, watching the progress of the Big Ditch. Soon 96 miles of the canal had been dug and some areas were already in use.

This was an engineering feat of no small measure. The canal had to ascend through the Mohawk Valley nearly 500 feet (the distance varies in almost every book on the subject) above the Hudson River and the canal had to employ a combined ascent and descent



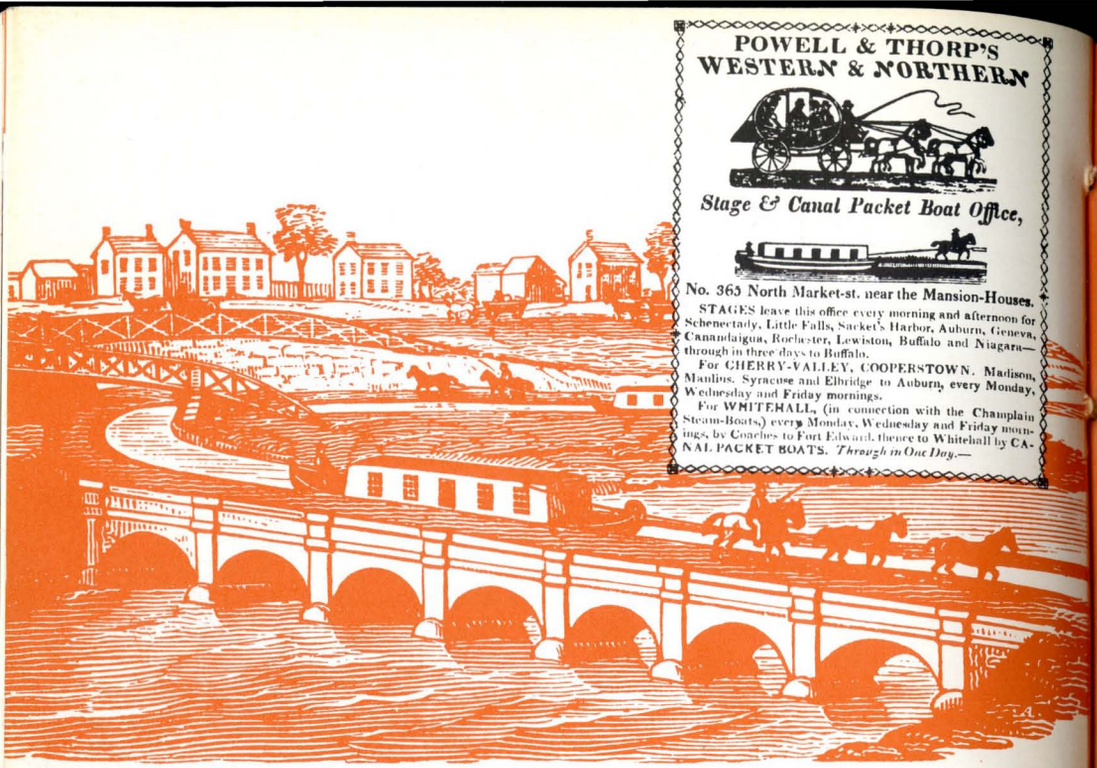
Locks at Lockport, N.Y.

of 675 feet which required 83 locks and lifts ranging from 6 to 12 feet.

One of the toughest sections was an area between Schenectady and Albany alongside the Mohawk River where 27 locks had to be used to descend the mountains. And you just couldn't run a canal into a river and come out the other side. So aqueducts had to be built which allowed the canal to flow *over* the river.

These aqueducts were marvels of engineering genius. They were supported by sturdy stone arches supporting water-filled flumes of timber wide enough to contain a stone towpath for the mules and horses. In one spot at Crescent, 12 miles from Albany, the canal had to cross the Mohawk River on an aqueduct 1199 feet long. In all, 18 aqueducts had to be built on the route.

To save time and money some small streams were bridged only with a



raised towpath for the horses while the creek was dammed below the crossing with guard locks which, when closed, formed a quiet pool for the boats to be towed across. In addition, 300 bridges had to be built over the canal where it cut the farmers' land in two.

Many emergencies arose along the way but miraculously the solution popped up just as often. When water seepage became serious a blue clay was found nearby which was perfect for sealing the banks. When the construction men began to worry about the necessity of importing expensive cement, they found a native lode of limestone in Madison County that when made into cement hardened even more under water.

In 1820 the waterway was just south of Syracuse and great celebrations were held that Fourth of July which included 75 boats on the canal waters. By 1822 the canal was open for 220 miles and allowed some 1800 boats over its stretch. So heavy was the traffic that a speed limit of 4 miles an hour was instituted.

One newspaper wrote in the summer of 1823: "A boat leaves this place (Utica) for Rochester every day for a trip down to the Genesee River. The boats are well built and fitted in the style of magnificence that could hardly be anticipated in the infancy of canal navigation in America."

Another critic wrote: "To behold a vessel committed to the water 400 miles inland and in a place which ten years ago was wilderness, excites emotions of great exhilaration."

Work began at the Buffalo end in 1823 during August. Oxen began to pull crude plows to begin the digging. The toughest job of all, however, was the three-mile cut through solid rock 20 miles from Buffalo which was pulverized with dynamite.

But more burdensome yet was designing and building a double set of five locks placed side by side to carry the canal up an elevation of 76 feet on the rock ridge at Lockport. It was the engineering marvel of its time.

(Continued in September Lookout*)*

A portion of the State Street building plaza was utilized by SCI Women's Council volunteers on a sunny May day as the locale for a plant sale, proceeds for the work of the Council. Results reported excellent.

Seamen's Church Institute of N. Y.
15 State Street
New York, N. Y. 10004

Address Correction Requested

SECOND CLASS POSTAGE PAID
AT NEW YORK, N. Y.

BEYOND THE DARK

Gray clouds hanging low
above the reaching sea
whose waters
pushed by wind and tide
assault the shore.
Sea gulls, waiting up for rain,
huddle on sodden sand.
Their drooping feathers
wet with spray
they stand
all facing windward
among the moving mounds of foam.

A hanging dome
darkens the earth
till suddenly, and far,
far out where sea meets sky
the dark is pierced
by one thin stream of light.

Remembering the constant sun
I have no need for sight.

Emily Sargent Councilman

SHADOWS

Windblown shadows
cover a darkling sea
meadows and hills lie unseen
tall steeples like landmarks
rise above the hoary billows
in flannel skies
clouds tremble.

Heavy shadows at dusk
litter the darkling waters
a greedy wind
blows puffs of cold air
dense darkness covers
the sea like a dome
slowly the light
vanishes beyond.

D. M. Pettinella

SAVINGS PLAN

Bee buzzy apple wind
freighted with bird song
storing honey in the hold

against days of summer
when hopeless becalmings
shatter in thunder gusts;

for steady blows of autumn
that keep hand glued to tiller,
eye on weather all the way;

even for the winter, laid up,
listening content to blizzards
lashing snow across the deck.

L. A. Davidson