

THE VESSEL THAT ACCOMPLISHED THE NORTHWEST PASSAGE.

BY J. MAYNE BALTIMORE.

The Norwegian seventy-five-foot sloop "Gjøa," which is famous the world over for having been the first and only craft to have threaded its way through the Arctic Ocean from the north Atlantic to the Behring Sea, is now the property of the city of San Francisco. Capt. Roald Amundsen, the noted Arctic navigator, sailed from Christiania, Norway, with a crew of seven in the year 1903, and after nearly three years he succeeded in reaching Nome City by way of the Northwest Passage. From there he sailed his little vessel out into the Pacific, and thence down the coast to San Francisco harbor. Later he returned to Norway, leaving the "Gjøa" at the Mare Island navy yard. The little craft was turned over to the Norwegian consul at San Francisco by his government, with instructions to make whatever disposition of this historic vessel he deemed best. The consul finally concluded to present the "Gjøa" to the city of San Francisco in behalf of the Norwegian government, to be preserved as a relic and souvenir of the feat of Capt. Amundsen in making a voyage through the Northwest Passage.

The city authorities gladly accepted the gift of the famous old craft, and decided to place the vessel in a conspicuous position at the extreme western confines of the Golden Gate Park, just bordering on the ocean beach.

The "Gjøa" was fitted into a cradle of wood, and loose dry sand filled in all around up to the waterline. The work of hauling the old sloop out of the sea up the beach for a height of more than 40 feet and several hundred feet across the big boulevard to the point where it is mounted in permanent position proved a very heavy and difficult task of engineering. Several days were required to accomplish this work.

The total weight of the empty hull of the "Gjøa" is estimated at 300 tons. The total length over all is 75 feet; length of waterline, 65 feet; beam, 16 feet; depth of hold, 16½ feet. The "Gjøa" was not primarily intended for Arctic navigation. When purchased by Capt. Amundsen, the vessel was reinforced with stout wooden and iron beams and sheathed with an outer layer of 2-inch planking and fitted with a petroleum engine of 39 horse-power and a two-bladed propeller. However, sails were depended upon as main motive power.

A TAME NAUTILUS.

BY CHARLES F. HOLDER.

The accompanying photographs show a paper nautilus which was so tame that I could handle it with impunity. The animal was brought to me without a shell, and I provided it with one.

The beautiful animal seized upon it with all the eagerness of a homeless hermit crab, occupying it at once. When alarmed it would crouch low, its entire body and tentacles drawn into the shell; nothing but the green eye

to be seen peering over the edge. Then, when satisfied that all was well, it would gradually come out, changing tint and shade of blue all the time, presenting a most interesting spectacle. Now the two large shell-forming arms would creep out and slowly envelop the shell, until it was entirely covered by the speckled blue mass. The animal would do this even when I held the shell. The animal did not display any fear, and would throw its tentacles about my fingers, and even

leave the shell and permit me to handle it. This is well shown in the illustration, where the animal is leaving the shell which I am holding. Its big blazing silver shell-making tentacles are being thrown over my hand, while the other arms are toying with the weed at the bottom.

The dark spot in the center is the mouth, or the black mandibles surrounded by a white circle of muscle. In another view the animal is seen entirely out of the shell; its mouth near my thumb, one long tentacle thrown across my fingers, while the big

as a gelatinous cast of each tentacle, the exact size of the shell the animal had been inhabiting.

The radiation on the face of the tentacles made the radiations on the shell, and one could imagine that gelatin had been pressed into the molds and allowed to harden; and this is practically what is done. The two molds (tentacles) are held up close together; the left one forms the left side, the right one forms the right side. Then by manipulation they are joined together. Indeed, the two tentacles have been joined all the time, and so form a mold in which the beautiful shell or egg capsule is made. I watched this radiant creature all day and late into the night, and the following morning part of the new shell was found, a delicate, tenuous mass, that would gradually harden. Hence I believe that a new and large shell can be produced in a few hours, and nearly a whole one was made by this animal in the Avalon zoological station between 1 o'clock in the morning and 9.

It is given in all the textbooks, I believe, that the male of the argonaut is a minute animal hardly an inch long. This cannot be so in all species. I have a male which has a radiant spread of eight or nine inches, and is as large as the female. The female lives in the shell and deposits her eggs here—yellow masses which hang in the shell. I saw her leave

the shell and wander about at will, darting into it when alarmed, and having practically all the habits of an octopus. The male of this species is large, and might readily be taken for an octopus, having its habits. The beautiful animal appears at the Southern California channel islands, especially Santa Catalina, in February and August, from ten to twenty shells being found every year. Doubtless hundreds come ashore, but are deserted and broken.

The argonauts that I have kept in confinement, three in number, were extremely interesting. They would eat fish from my hands readily, and displayed little or none of the timidity of the octopus. When alarmed they would dash away, filling the water with ink and propelling themselves by the siphon, out of which they sent water with such force that when held above it, the stream would go five or six feet through the air. I noticed that the octopus tried to use this as a defense, as when I moved my hand near its egg cluster it would direct the siphon at me, and shoot a stream with such force that it was easy to see that small enemies, at least, would be blown away.

The Grand Trunk Pacific Railway (Canada) has commenced a novel undertaking whereby a record of the growth of the West so far as the railway is a factor in its growth will be kept. The official photographers of the company have begun to work on the plan of the company, and towns along the line will be photographed, each photograph being duplicated yearly, so that a continuous record may be obtained and kept of each individual town from the time it sprang up throughout the period of its growth. The record

kept is expected to be of invaluable importance in years to come.

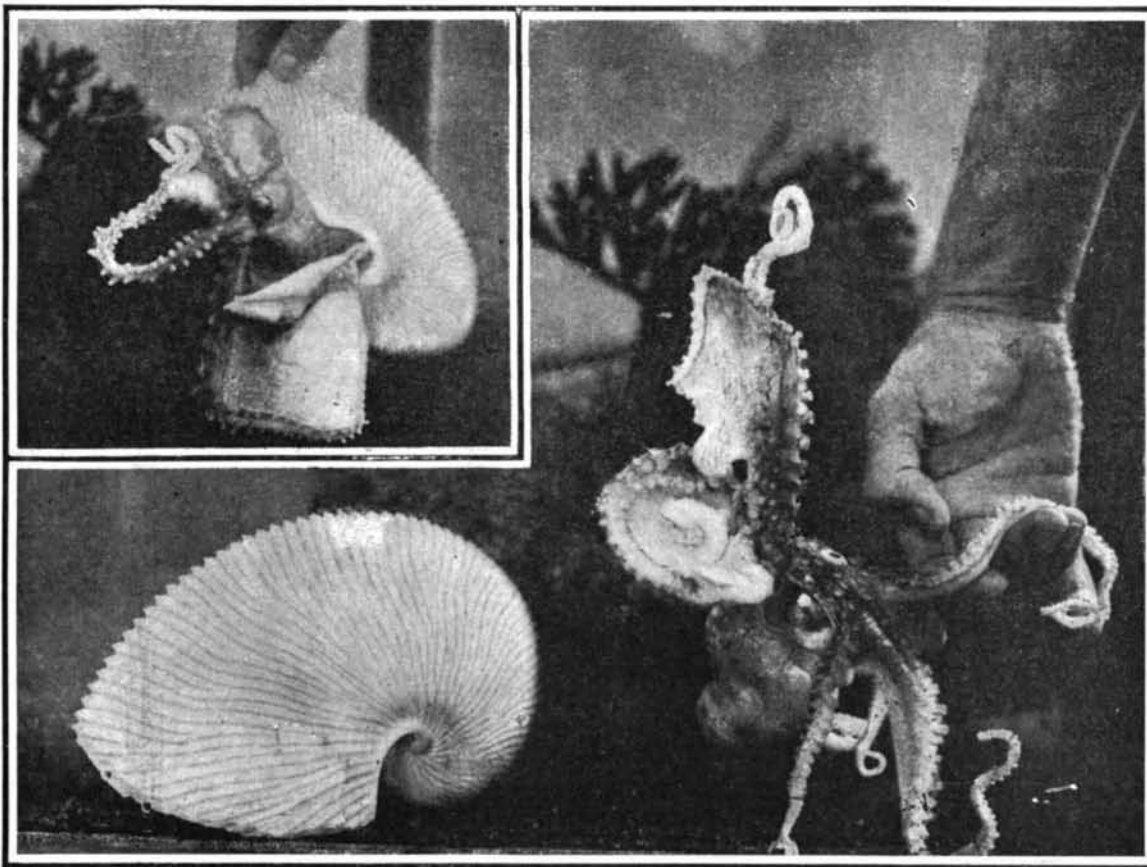
In British Columbia platinum is found in many of the alluvial gold workings, where it can be saved as a by-product. The saving of it in a small way is, however, attended with so much trouble that it has been practically neglected and no appreciable production made recently.



THE "GJÖA" BEACHED AND ABOUT TO BEGIN ITS "INLAND VOYAGE" TO GOLDEN GATE PARK.

spreading tentacles of silver and blue are being waved aloft like brilliant Venetian banners. The eye is shown as a pure white spot, just below the mouth and near the large gill openings. Below this hangs the bag-like body. When I withdrew my hand the nautilus fastened itself to the glass sides of the tank and hung, a glistening mass of color, scintillating in the light. Not one person out of a thousand could even guess what it was. Even teachers of zoology, when the shell was taken away, failed to recognize it, and there was some reason, as this was the first opportunity they had had to see the animal really alive. By placing a cloth over the tank, and raising and lowering it, the nautilus could be made to change its color.

If the broad tentacle is examined it will be seen to



SCENES IN THE LIFE OF A TAME PAPER NAUTILUS.

have radiations which correspond to those of the shell itself. It also bears numbers of glands, and clings tenaciously to any object it may touch. These tentacles are the shell makers, and part of the work in shell making was observed in a specimen that had no shell. Resting on the bottom, it held its two shell-secreting arms above, side by side; in point of fact, they were joined at the base. Then from the glands oozed the shell-making secretion, and it soon appeared