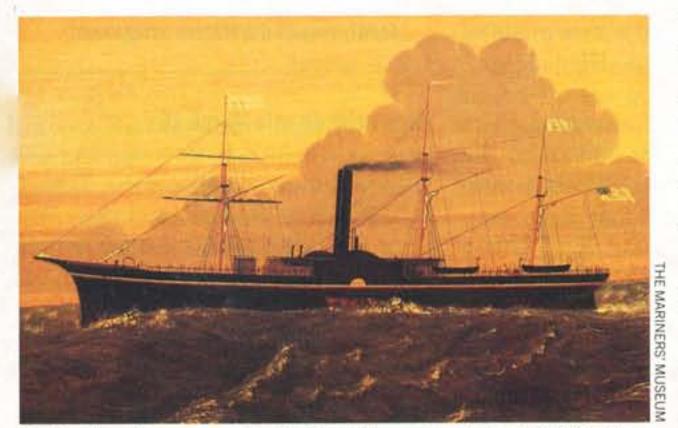


#### The Greatest Treasure Ever Found



Central America was a gold pipeline between New York and California.

For 131 years one of the world's richest treasures perhaps a billion dollars in fine gold—lay lost and out of reach in the frigid, lightless depths of the Atlantic, entombed in the wreck of a once elegant 19th century steamer, the S.S. Central America. As the side-wheeler sank in a monstrous hurricane off the Carolina coast in September 1857, hundreds of California gold miners

slipped into the sea alongside their fortunes. Shortly after the news reached bankers in New York, who were anxiously awaiting a fresh shipment of gold, the recession of 1857 became the Panic of 1857, a financial crisis that helped set the stage for the Civil War. Until recently, the riches of the Central America lay far beyond the grasp of man or machine—8,000 feet below the surface. Geologist Bob Evans scans the Atlantic for pirates and bad weather.





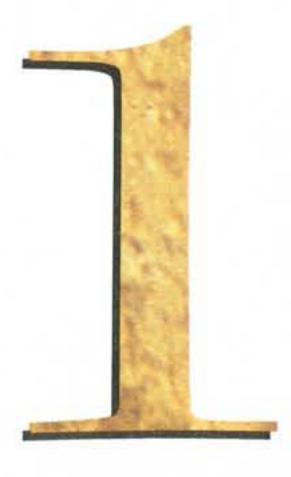
Undersea robot Nemo is the size of a truck and weighs 12,000 pounds.

Then in 1985 an unlikely trio from Ohio—a research engineer, a geologist and a journalist—began a cautious but brilliant search for the ship, using cuttingedge technology and a revolutionary undersea robot. In October their research vessel docked in Jacksonville, Fla., having recovered enough gold to make everyone involved fabulously rich. BY TIM NOONAN





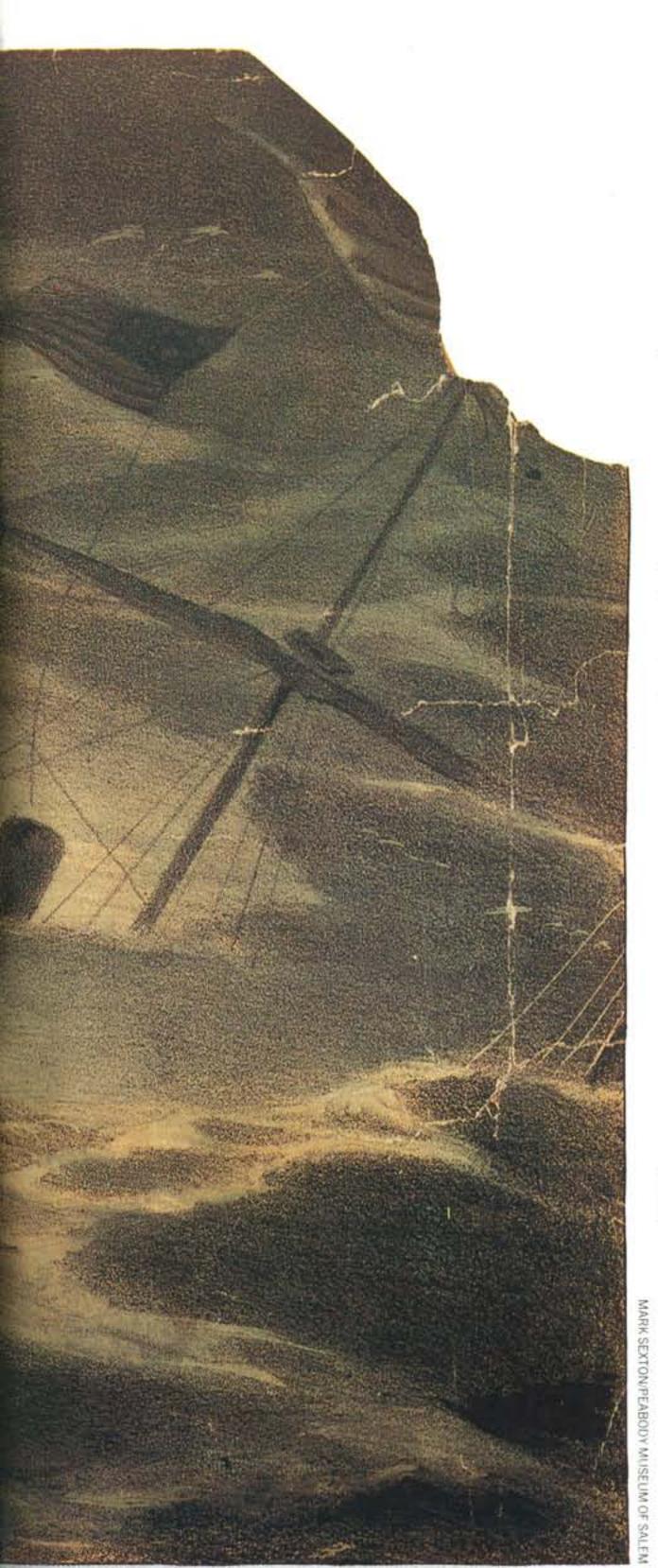
Working from eyewitness accounts, a newspaper artist depicted the last moments—eight p.m., September 12, 1857—of the Central America's passengers. As the desperate men fought each other for anything that



### The Merciless Storm

week out of Panama, on her 44th trip to New York, the Central America rounded the Florida Keys and ran smack into a horrendous hurricane. As the side-wheeler shuddered from the shock of every monstrous wave on the bow, Capt. William Lewis Herndon, one of America's most respected naval officers, walked the steeply canted decks to reassure passengers that his great ship—nearly as long as a football field—was strong and seaworthy.

Down in the coal bunkers, chief engineer George Ashby began to think otherwise. Up to his knees in water, he knew a leak had opened somewhere in the hull. Barking orders,



would float, their wives looked on in horror from the rescue ship Marine.

he mobilized his crew to haul what dry coal was left into the boiler room. If the ship lost steam, she would also lose her ability to hold her bow into the waves. By three p.m. Friday, September 11, 1857, after three long and terror-filled days and nights, the *Central America*'s boilers went out for good. The ship was blown sideways into the swells, there to be battered broadside by waves as tall as hotels.

With more than 500 lives at stake, Captain Herndon ordered every able-bodied man aboard to begin bailing. For more than 30 hours, with little sustenance and sleep, the men fought off certain death by passing seawater up from belowdecks and dumping it back into the Atlantic.

By midday Saturday, with the storm still a fury, Herndon knew that the ship would surely sink if the weather did not abate. That afternoon, a savior appeared on the horizon: the Marine, a brig from Boston. Though the sailing vessel was heavily damaged by the storm, her captain courageously offered assistance. Herndon decided to attempt a transfer of women and children to the Marine. One of the Central America's lifeboats was crushed between the ship and a wave. Another was swamped. The rest stood off from the ship while passengers, with ropes about their waists, were lowered into the bouncing boats. That was the easy part. At times the trip to the Marine took two and a half hours. It was such a frightful ride that the crew of at least one lifeboat refused to row back. Yet by nightfall every woman and child but one had been ferried to safety.

Aboard the Central America, the battle was lost. The ship filled with water, her decks sank to

sea level, and "the love of gold was forgotten in the anxiety and terror of the moment," a survivor later reported. "Many a man unbuckled his gold-stuffed belt and flung his hard-earned treasure upon the deck." At eight p.m. Saturday, the Central America rose bow-up and slipped hissing and seething into the furious ocean. Early Sunday morning a passing ship, the Ellen, rescued about 50 men precariously holding on to flotsam, but 425 more drowned—the worst peacetime sea disaster in the history of U.S. flag vessels.

The overheated gold rush economy had begun to sputter, and the shipment of bullion and coins was needed in New York for payments and backing up loans. Some historians say the loss triggered a new round of panic, and thousands of businesses failed. Before long the nation's concerns were focused on the growing tensions between the North and South. The Central America remained lost and largely forgotten for more than a century, until three young men from Columbus, Ohio, decided they could find her.



# The Dogged Explorer

ommy Thompson was not like other boys growing up in Defiance, Ohio, in the 1960s. While his classmates were off slugging baseballs and imagining themselves to be Ted Williams, "Tommy was always dragging home neighbors' junk from the alley-old TVs, radios, motors—and coming up with new inventions," remembers his sister Sandee Butterworth. But this wasn't just another post-Sputnik nerd in the making. Though landlocked, Tommy and his buddy Barry Schatz often dreamed together about sea adventures, about

the mysteries of what might be found on the floor of the ocean.

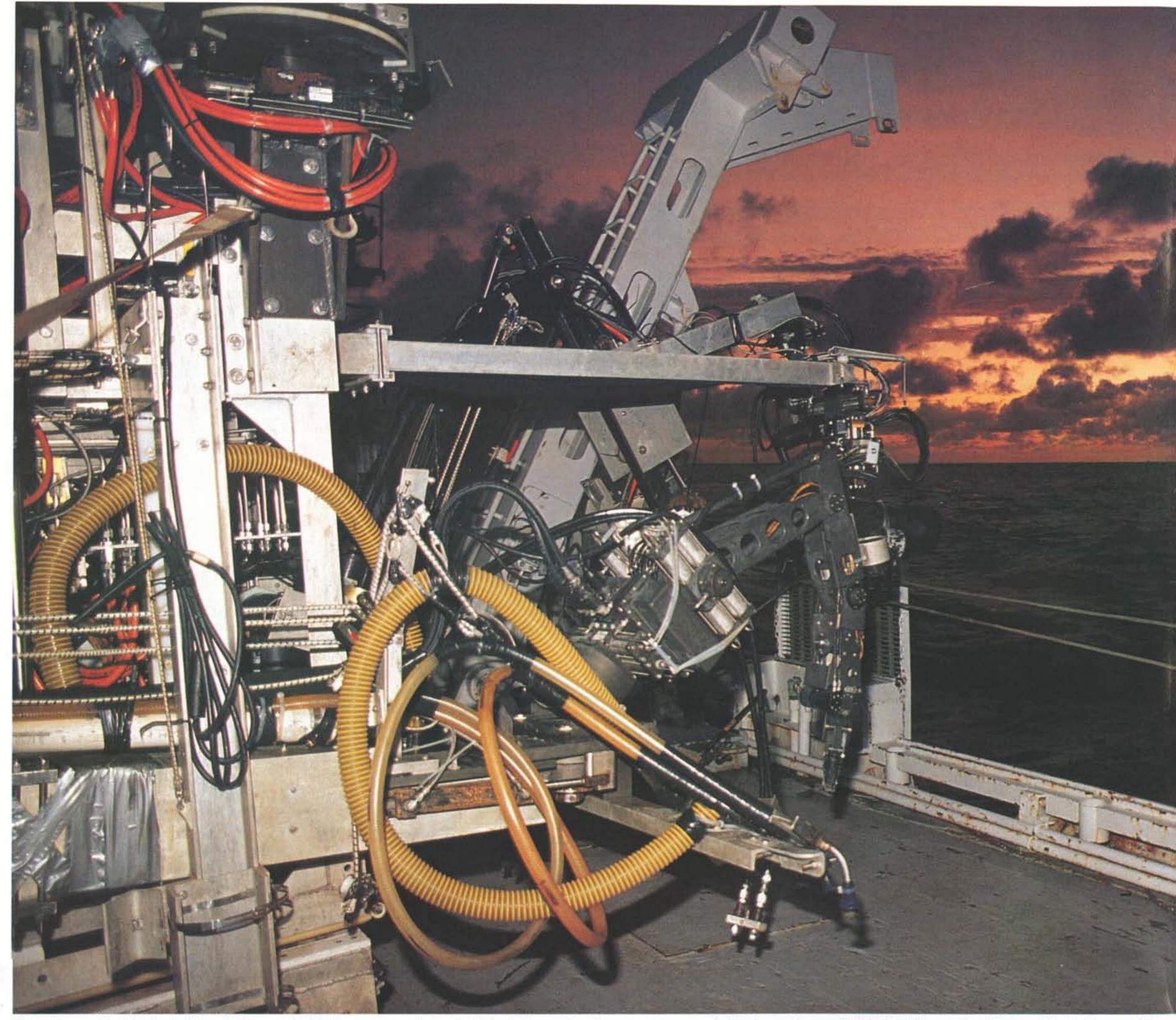
A little more than a decade later, Thompson went to visit Schatz, then a writer for *The Miami Herald*. Soon Thompson had wrangled a consulting job with treasure hunter Mel Fisher in Key West. Though he spent most of his time working on secret ocean technology for Trident submarines, he never let go of his treasure-hunting dreams.

With help from Bob Evans, an easygoing geologist who lived near Thompson in Columbus, he set out to collect data on the S.S. Central America, determined to develop a methodical,

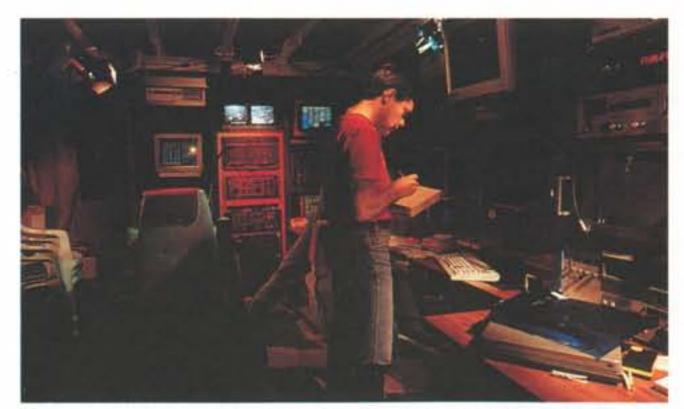


Evans, Schatz and Thompson won't disclose what their share of the treasure is.

cautious and statistically based strategy, which, coincidentally, would please investors. In 1984 he sat down with members of Columbus's conservative business community and convinced investors to risk huge sums—eventually more than \$12 million. "The guy is so precise in his choice of words, in the detail with which he approaches things," says Jim Turner, one of 161 investors, some of whom are likely to reap returns of \$1 million for every \$10,000 invested. "I admire somebody who can list all the possible things that might happen and then work a plan. Thompson's a master at that." Thompson is also very rich.



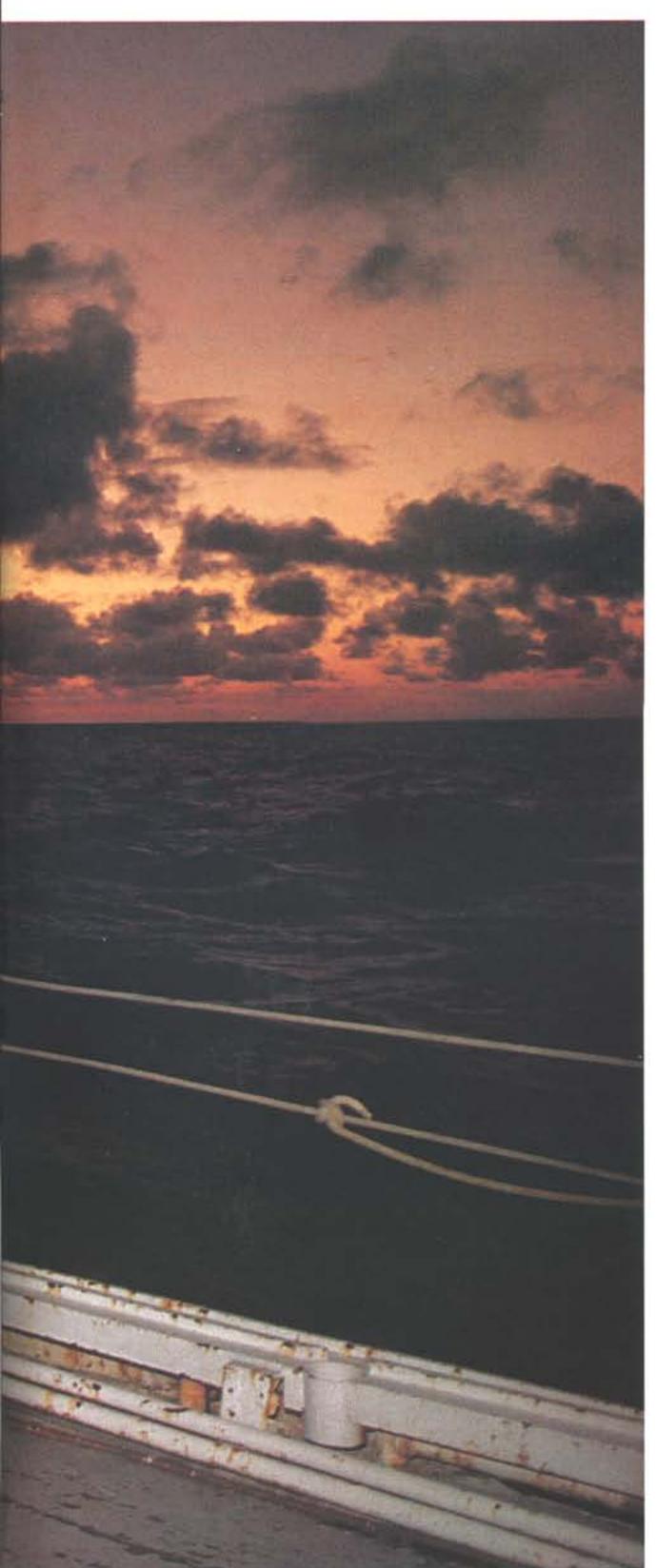
The real hero of the S.S. Central America treasure hunt is Nemo, an amazingly adaptable platform of thrusters, arms, cameras, lights, storage trays and hydraulics. Thompson's sister says it looks like one of the



Nemo's movements are controlled from a cabin filled with monitors.



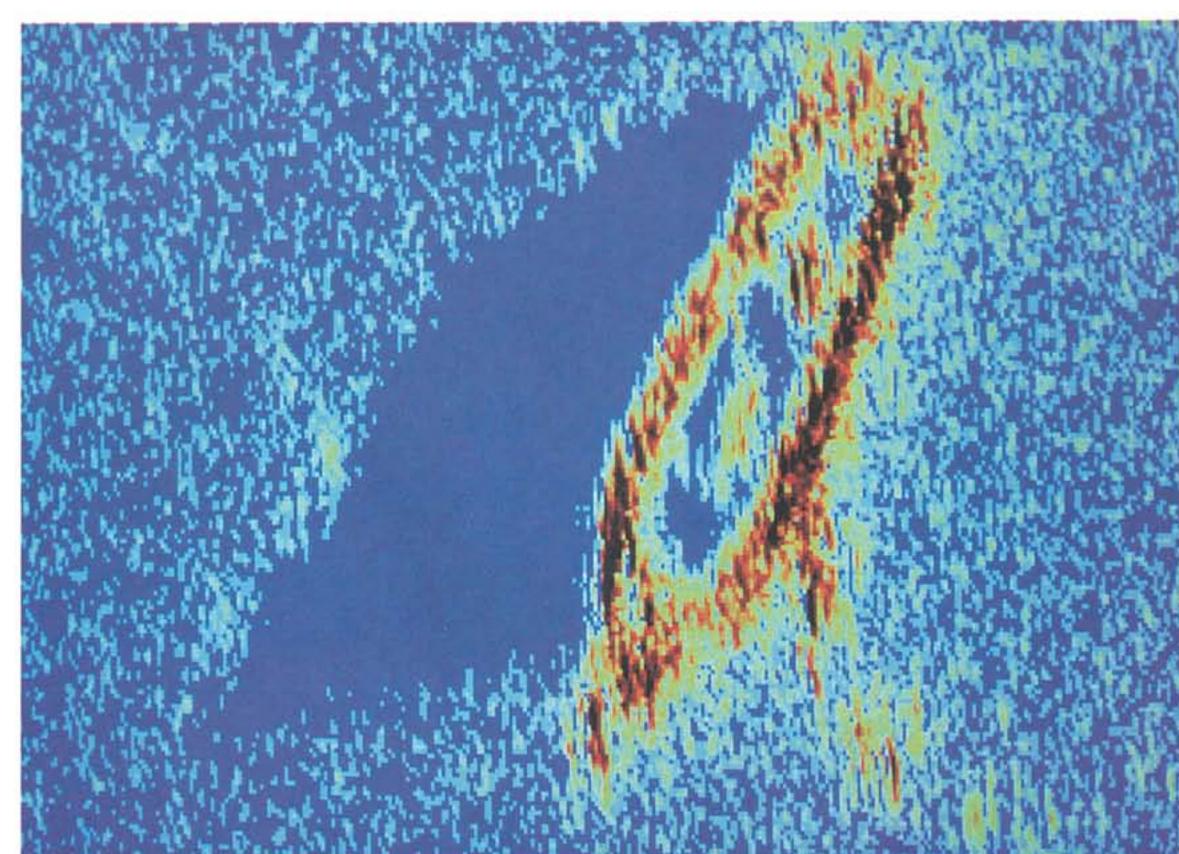
## The High-Tech Search



contraptions her brother used to build out of junk when he was a teenager.

wo hundred miles off the Carolina coast, on the eastern edge of the Gulf Stream (they will tell you this much, but no more, for even in the 1990s they worry about pirates), a 30-year-old Canadian-built research vessel originally intended for much colder waters rides high, her workmanlike gray decks and fading white hull revealing little of her Star Trek guts.

Within this ship lies a wondrous world of technology designed—like everything else about this project—to leave as little to chance as possible. Few passing observers would ever guess the R.V. Arctic Discoverer is held exactly in place in this



The Central America, as seen by side-scan sonar, sits upright on the bottom, throwing a "shadow" to the left.

spot by a navigational system that uses continuous fixes from several satellites to feed instructions to two massive positioning thrusters. Nor would anyone guess that deep within her midships the  $Arctic\ Discoverer$  holds a control room with five technicians and scientists, 11 computers and 18 video screens, keeping watch—in 3-D—on every movement of a massive undersea robot called Nemo. Except for the steel wires dangling from a shipboard crane, no one would be likely to guess that a mile and a half under the ship, at the end of 10,000 feet of fiberoptic cable wire, Nemo moves about with ease, its arms, booms, cameras and lights enabling those in the control room to pick up rare gold coins one by one, or to cavalierly lift one-ton beams obstructing caches of gold bricks.

Such surreal scenes have been repeated day after day for four years during the months of June to October, when the Atlantic is friendly enough to mine. They will happen again this spring, and the spring after that, until there is no more gold to get. This represents an amazing leap forward in treasure hunting. For until Tommy Thompson, Barry Schatz and Bob Evans came along, success in this field had mostly been a matter of intuition, luck and more luck.

More than a decade ago, Thompson set out to apply a system engineer's logic to treasure hunting. In the early 1980s, he and Evans combed books, newspapers and collections of letters for every shred of information they could find offering a clue to the location of the ship when it sank. They compiled a "data correlation matrix" the size of a bedroom—12 feet long by 12 feet wide—with every fact about the event listed horizontally and a timetable printed vertically. They took it to Larry Stone, who had helped find the lost U.S. submarine *Scorpion*. Building computer models of hundreds of sinking scenarios based on wind

speeds, currents and the Central America's last known coordinates, Stone came up with a 1,200-square-mile rectangle of the Atlantic most likely to contain the wreck. The area—the size of Rhode Island—was broken into half-square-mile "cells," and most of the cells were assigned a number between 1 and 10,000 corresponding to the probability of it being the final resting place of the ship.

"Search theory allowed us to quantify the risk," Thompson says. In 1986, with \$1.4 million in hand, Thompson and Schatz went to sea in a leased boat towing state-of-the-art Sea MARC 1a side-scan sonar. With only enough money to search for 40 days, the two sat in a cabin staring day after day at monitors showing sonograms of the ocean floor. They found hundreds of possible sites but few that looked like the *Central America*. Next winter Thompson raised another \$3.6 million and built his remarkable robot, Nemo.

n the summer of 1988, on Nemo's first pass over a probable site, the control room erupted with shrieks as the robot returned a ghostly TV image of a sidewheel buried on the sea floor. "It was a special moment," Evans says, "as if the wreck were calling to us: 'Here I am.' "Though Nemo was later damaged and a gold search had to wait until the following season, the discovery was a special moment for the future of treasure hunting. Norman Scott, president of a treasure search firm who years ago sold some of his information on the Central America to Thompson's group, doubting the wreck could ever be recovered, says, "Tommy and Barry and Bob laid a foundation for the sophisticated location and recovery of deepwater wrecks through the use of research and high technology. And you can believe the Central America won't be the last one they go after, either."



#### The Awesome Treasure

Nemo sent a brief blast of water across a deck of the Central America to clear dust from the wreckage.

Here is how the reserved, unpoetic and always understated
Thompson described what Nemo's cameras revealed:

We have found the main gold storage area. It lies in a part of the shipwreck that we call the area of fallen timbers. In some areas the gold is perched up on rotten wood and debris. In other areas the bottom is covered with gold. There are shiny freshly minted gold coins cemented together in their original rolls. There are bright towers of coins that reach up to our cameras. The scene is surreal. There are bars stacked on the bottom like brownies, there are bars stacked like loaves of bread. There are bricks of gold dust, frozen in time. Spectacular gold bridges have formed on beams. We have a waterfall of coins going to a lower deck. The Central America looks truly like a storybook treasure.

Though it might seem that getting rich should be merely a matter of Nemo picking up what was in front of it, work on an ancient wreck 8,000 feet below the surface is never easy. The wreck itself is strewn, Thompson says, over a large area, "a three-dimensional jigsaw puzzle." Although records show the ship was carrying about three tons of gold, there could be more. The reported commercial shipment (then worth \$1,219,189, with gold at about \$20 an ounce) was accompanied by other major commercial shipments of undeclared value and a large number of private stashes. Survivors reported that passengers abandoned entire carpetbags of gold in their panic for survival.

Nemo will have to pick through the entire wreck to find most of the gold. "We know generally what the ship looked like when it went down," Thompson says, "but information about the location of the gold aboard was kept a secret in 1857." Furthermore, Nemo must move very cautiously, like a child playing Pick Up Stix, so as



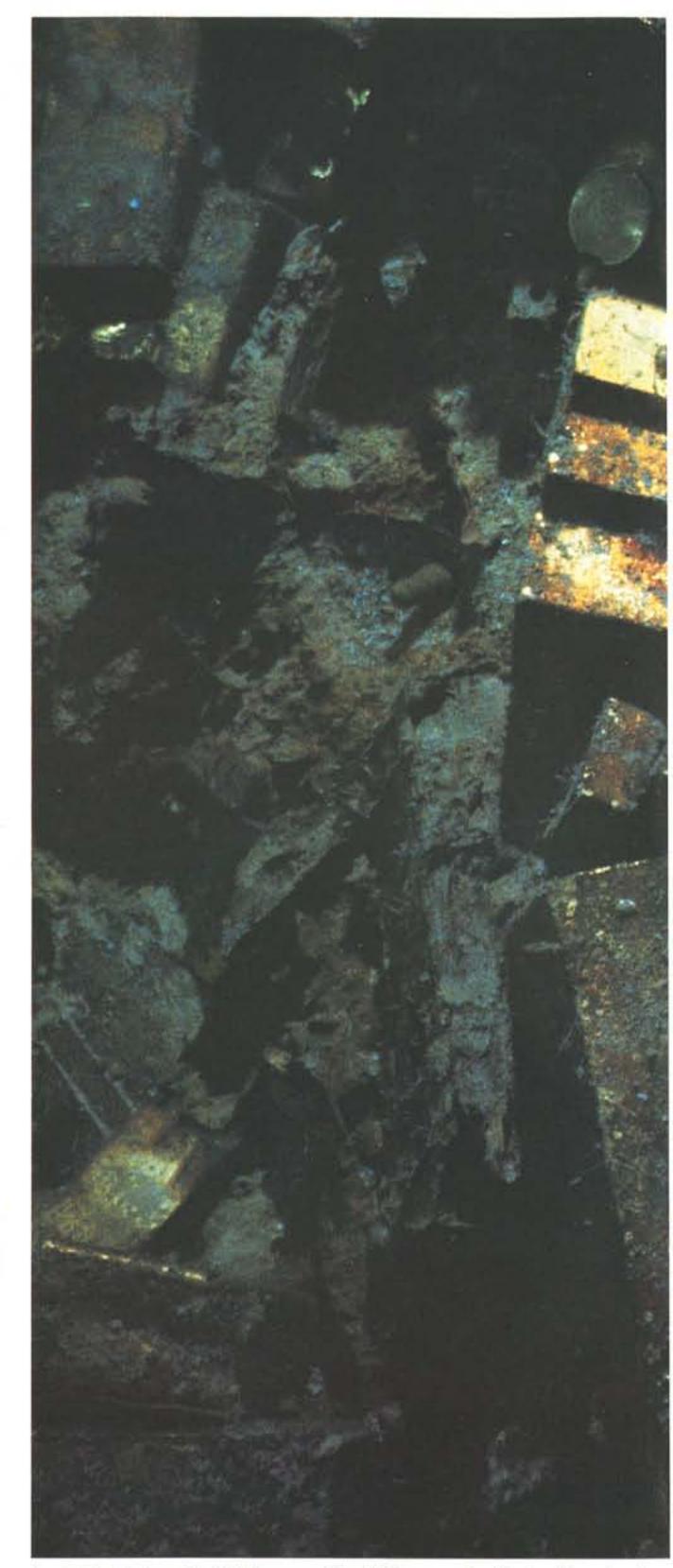
Worth more than gold, a bar stamped by an assayer is a collector's treasure.

not to pull out the piece that causes the whole structure to collapse.

So far, Thompson says, "we've raised more than a ton of gold." Even so, the photos Nemo beams up from the bottom are just as breathtaking as the images seen in 1989. As he prepares Nemo and the *Arctic Discoverer* for another season, Thompson says, "We're planning on two or three more years at sea."

To date, the team has brought up thousands of gold coins from the 1850s—many of them single and double eagle gold pieces in mint condition—amid ingots and bars stamped for purity by California assayers of the time. One bar, at 754 ounces, may be the largest ever found.

There are also pounds and pounds of gold dust. Bob Evans— who is in charge of the gold, carefully cataloguing and storing every single piece—says, "It's amazing to me to be working with this gold, particularly when I find myself panning for the same gold dust the miners did a century ago and a continent away."



Buried in dust and debris for more than 130 years, the Central America's

hough original investors in the project will be millionaires, not one has seen a dime yet and not an ounce of gold has been sold. Insurance companies still in existence claimed they had covered much of the Central America's loss. Thirty-nine insurance companies, the State of New York and Columbia University (which was also searching for the treasure) sued. All lost, but each appealed the case. "We really can't sell any of it until the appeals are resolved," Thompson says. A verdict is expected soon, but there are other complications.

Understandably, gold in these quantities can be difficult to sell at normal market prices.



gold, the largest treasure cache in American history, has lost little luster. Once found, recovery is simple, but complex computations are required to predict where the next load of gold might be in the shifting wreck.

Disposing of the coins, the value of which is based far more on rarity than on the actual worth of the gold content, will be particularly tricky. Dumping hundreds of 1857 double eagles on the market, for example, could depress their value, currently as much as \$100,000 each. Thompson, ever the exacting planner, says the gold will be sold through a carefully developed marketing strategy based on historical value to increase the price of each coin. "We're in the concept phase of the marketing," he says. Barry Schatz suggests that individual coins, for example, might be sold along with several minutes of videotape showing those very coins being picked off

the bottom by Nemo. "People will pay more for something that has historical value, and we've videotaped every minute of our recovery," he says.

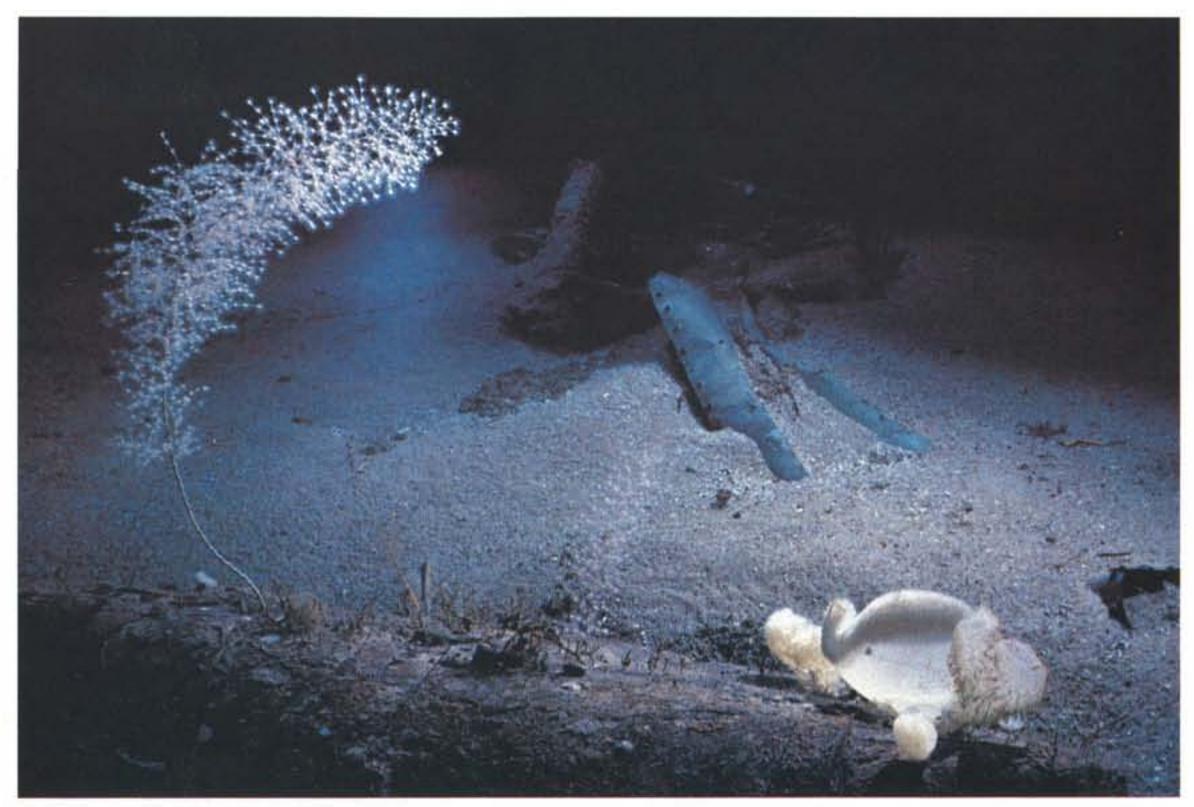
"The question is how to market a national treasure with all its various assets— historical, numismatic, scientific," says James Lamb, a numismatist at Christie's in New York who has seen some of the treasure, "because it's likely to generate interest from people from different walks of life all over the world."

Meanwhile, the investors seem to be remarkably patient. "This is probably a better investment than most of us can find right now," says Jim Turner.

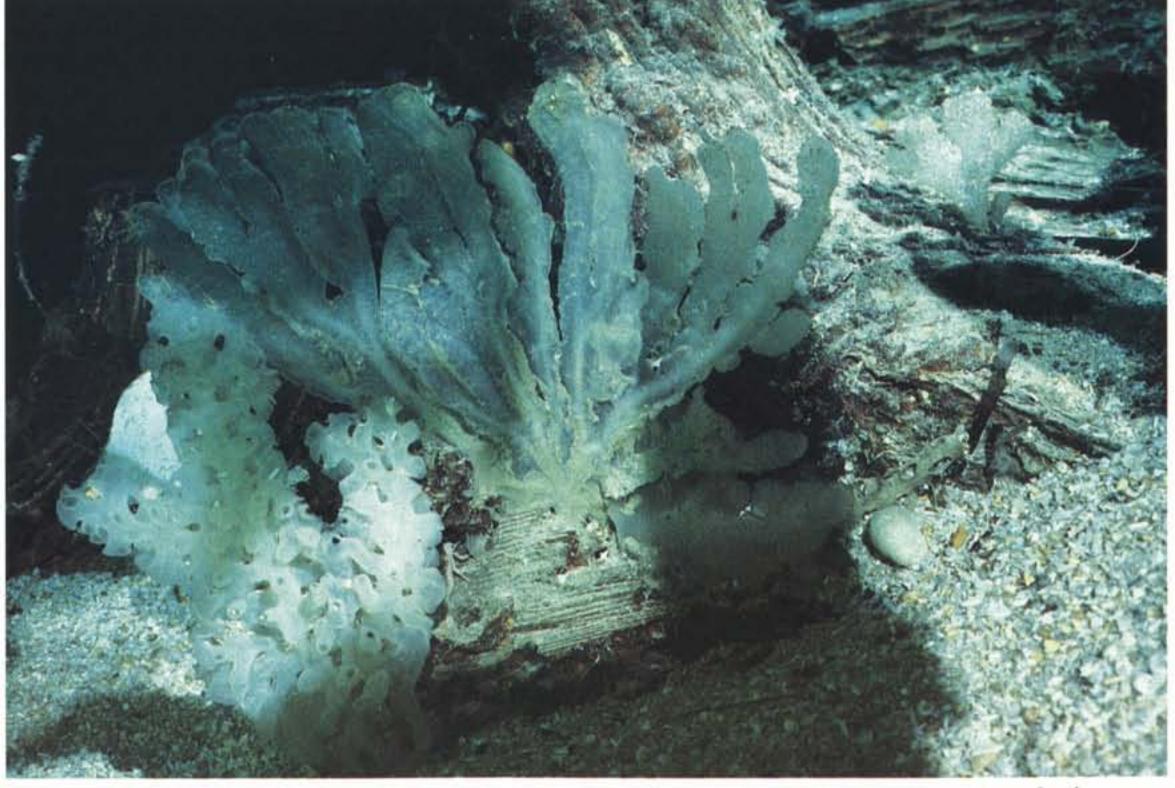


Rolls of coins are covered with silicone and collected en masse.

## The Mysterious Underworld



What may be new species of gorgonian coral (left) and sponge find an unlikely home on a rotting trunk from the Central America.



A fanlike sponge found on the wreck is believed to be a new genus, one of several surprising biological discoveries at the site.

n a calm fall day after months at sea, engineers and scientists in the  ${\bf control\ room\ of\ the}\, Arctic\, Discoverer$ suddenly stopped working. The tranquil scene in front of Nemo's cameras had grown dark. First one set of monitors, then another, and finally a third slipped into eclipse as a long menacing creature slowly drifted by. A swarm of eels feeding at food trays put down by scientists had disappeared, as had the trays themselves, all presumably gobbled up by the monster. Reviewing the footage, scientists tentatively identified the creature as a Greenland shark, 21 feet long. The identification is tentative because this is 4,000 feet deeper than any Greenland shark has been found and at least 1,000 miles farther south than any Greenland shark has been seen.

Such surprises are almost commonplace aboard the wreck of the Central America, which is itself a biological surprise. The area where the ship went down, called the Blake Ridge, is a virtual biological desert, yet the ship swarms with life. Thompson's group, rather than take the gold and run, has treated the wreck as an archaeological site with rich scientific value. More than 50 scientists from around the world are conducting studies involving the wreck.

Eleanora Robbins of the U.S. Geological Survey, for example, is studying the ship's icicles of rust, called rusticles. Robbins's research suggests they may be caused by a previously unknown form of bacteria. "We may be on the way to finding bacteria that can do a lot of work for us, such as turning toxic metals into useful ones," she says.

"The S.S. Central America is not just the only deep-sea wreck significantly recovered, it's only the second deep-sea wreck ever seen, after the Titanic," Evans says. And thanks to Nemo, no wreck has ever been better observed. Unlike other submersibles, which can only stay down for a few hours, Nemo stays down for days at a time. It also has many more lights and cameras than any other submersible.

Scientists are eager to understand how the Central America has become an oasis for life, especially at such depths. Already, at least five new species of life have been found at the wreck, including several new species of sponge. These may prove the most valuable finds of all, since sponges emit toxins that may be useful in chemotherapy. "The ship provides an artificial deepwater reef for fixed animals like sponges and coral that have nowhere else in the area to attach," says Eddie Herdendorf, biologist and professor emeritus at Ohio State University. "But there is no other significant life in the vicinity. Exactly how this community established itself is a mystery."

It may also be a community of finite duration. Scientists believe the ship provides a food chain that ranges from deep-sea wood-boring worms at the bottom of the chain to the Greenland shark at the top. But Ruth Turner, a Harvard zoologist, is not finding any wood-borers these days, suggesting that the base of the food chain, the wood itself, may be exhausted of nutrients. If that is true, the exotic and colorful sea creatures may someday have to travel on. That would leave the *Central America* a ghostly and deserted wreck once again.



Sea anemones cling to one of many sunken sea chests, each a historical treasure of artifacts from the turbulent years before the Civil War. Below: double frame photos of Ansel and Adeline Easton.





ike suitcases that have tumbled from a derailed baggage car, large passenger trunks litter the debris field around the S.S. Central America.

With rectangular bottoms, curved tops and leather straps, they look a lot like the treasure chests imagined by illustrators of comic books.

The treasure in these chests, however, is more likely to be historical than metallic. Bob Evans calls them "ultimate time capsules." Many are thought to contain virtually everything entire families owned as they made their way east for a new life in New York after having struck

it rich in the gold fields of California.

In 1990 the robotic explorer Nemo brought up the first trunk. When the lid was opened, the markings on one well-preserved shirt read: A. I. Easton. Ansel Ives Easton and his bride, Adeline Mills Easton, were first-class passengers aboard the Central America on their honeymoon. One of California's wealthiest couples, she was the sister of Bank of California founder Darius Ogden Mills. As the boat wallowed in hurricane, "we committed ourselves quietly, calmly into His care," Adeline Easton later said. "We decided that when the last moment came, we should

go down together hand in hand." The Eastons were separated a few hours later when women were transferred to the *Marine*, and Mrs. Easton watched the *Central America* sink, certain her husband had died. A day later Ansel Easton was found floating in the sea and rescued by the *Ellen*.

Hundreds of men disappeared with the Central America, their lives soon forgotten. But as their personal effects are recovered and studied, their legacy may be to help us understand the murky but crucial period of our history before the Civil War. And ultimately that information may be more valuable than any amount of gold.