Signet Classic

JULES VERNE



20,000 LEAGUES UNDER THE SEA

Translated and with a Foreword by
MENDOR T. BRUNETTI
With a New Afterword by
WALTER JAMES MILLER

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FOREWORD

What man can conceive man can achieve. —Jules Verne

THE NINETEENTH CENTURY was a century of explorations, inventions, and the practical applications of science and technology to industry. It laid great stress on astronomy and geography. Verne was not a scientist, but he was a diligent student of science. He took meticulous notes on anything that had to do with science, explorations, discoveries, inventions, travels, and adventures. The literary genre of the adventurous and the extraordinary, so popular over the centuries, was stripped of its religious mira-cles, its legends, its fairies and fantasies, and given a new marvel—the marvel of science. In a series of extraordinary novels, Verne captured the imagination of the world with his exploratory voyages into space, into the earth, in the polar regions, and under the sea. He casts science in a romantic role, but maintains his fictions almost always in what is possible, or at least, plausible. His inexhaustible enthusiasms and his gift for dramatic descriptions arouse the curiosity of the reader, give him a vision of the achievements of science; and in the process Verne makes some remarkable forecasts-dreams come true.

20,000 Leagues Under the Sea is considered by many as Verne's masterpiece. Verne did not invent the submarine. The French inventor, a Monsieur Petit, perished in his own invention in the waters around France, and Robert Fulton's submarine, the Nautilus, was offered to Napoleon, who refused it. These were crude and unreliable crafts. Verne foresaw their possibilities, and envisioned and built an imaginary master craft with which he ex-

plored unattainable regions of the sea. "Verne had three great passions," Verne's nephew said, "freedom, music, and the sea." All three are explicit in this fascinating tale of the sea. Verne not only created his most memorable characters in this story, but lavished as much care on the descriptions of the wonders of nature beneath the sea as great artists have devoted to the psychological details of human characters. The reader is made familiar with the wonderful marvels that abound in the ocean-scenes never beheld by men. Verne excels in the field of imagination. Here is a world of exquisite forms and colors, wonderful plants, coral forests, flowers, fantastic creatures of all kinds, monsters, volcanoes, the polar regions, cemeteries, the ruins of Atlantis, coal mines, treasures all described with a dramatic, vivid realism. The number of explorers and scientists inspired by this story is endless.

Jules Verne was born on February 8, 1828, at Nantes, a seaport of Brittany, about thirty miles from the mouth of the river Loire. His curiosity and imagination were whetted during his childhood by the daily sight of fishing crafts and oceangoing vessels, and further stirred by romantic stories and fantastic tales of adventures—the stories of James Fenimore Cooper, Walter Scott, Edgar Allan Poe, Chateaubriand, etc. While he was still a lad, his love of the sea and adventure led him to become a cabin boy by trickery, but he was found out and returned to his parents before the vessel had reached the open sea. Unable to run away to seek adventure, he traveled in his imagination, dreaming of all sorts of voyages, sketching fantastic animals and machinery, and showing an intense interest in the sciences, the technology, and the inventions of the nineteenth century. At school he was hardly a diligent student, but he completed his studies at the lycée of his native city.

When he reached the age of twenty, his father, a lawyer of the old school, reluctantly sent him to Paris to study law. Although he eventually completed his course in law, his interest in legal matters was purely incidental. Upon his arrival in Paris he had immediately become interested in the theater. Around 1848 he had written librettos for two operettas, and in 1850 he had in production a one-act play in verse, Les Pailles rompues (Broken Straws), which ran for twelve nights. When his father requested that he return to Nantes to practice law, he refused. "Une fatalité me cloue à Paris (Fate nails me in Paris)," he answered; and furthermore, "I would ruin your practice," he added.

All his literary efforts had brought no financial returns, however. When his father cut off his allowance, Jules found it difficult to make ends meet. In the meanwhile, an uncle had introduced him and his brother Paul, who had joined him in Paris, to some of the literary salons where fashionable ladies received the celebrities of the day. Here he met Victor Hugo, Alexandre Dumas père, and the younger Dumas, who aided and encouraged him. He wrote a few travel stories for the Musée des Familles, a family journal, and these revealed to him the true direction of his interests and talent. He haunted the Bibliothèque Nationale, read extensively in the fields of science and mechanical inventions, took meticulous

On a visit to Amiens to attend the wedding of a friend, he fell in love with the bride's sister, a widow with two daughters. He was anxious to marry, but had no means to support a family. He appealed to his father. He wanted his father not only to approve his marriage, but to buy him a membership in a brokerage house so that he could support his family. The father agreed to both requests, hoping that all this would keep his son's nose to the grindstone. It did. Jules regularly got up at five o'clock in the morning, wrote until ten, and then went to his office.

notes on astronomy and geography, and became very knowledgeable in all the technical achievements of the

nineteenth century.

Under the influence of Felix Tournachon, known as Nadar in Paris, a successful photographer and would-beaeronaut who was raising money to build a giant balloon, Verne began to gather material for a fictional and documentary story of a balloon trip across the continent of Africa, a very topical subject at the time. Angered because no publisher would accept his story, he threw

the manuscript in the fire. His wife rescued it and suggested that he take it to Hetzel, the publisher of a boys' magazine, Journal d'Education et de Récréation. Hetzel suggested a revision. The revised story, "Five Weeks in a Balloon" ("Cinq Semaines en Ballon") appeared in 1863, was received with tremendous enthusiasm, and was translated into many languages. Hetzel immediately put Verne under a lifelong contract at twenty thousand francs a year. Verne's literary career was launched. He was now relatively rich. He bought an eight-ton fishing craft, which he named St. Michel in honor of his only son, Michel. He converted the vessel into a pleasure boat as well as a studio where he could write better than on land.

Verne's next book, Journey to the Center of the Earth, which appeared in 1864, created a greater stir than his "Five Weeks in a Balloon." It was immediately translated into every civilized language in the world, and inflamed the imaginations of its readers by its descriptions of the mysteries of the remote and inaccessible regions of the earth.

From the Earth to the Moon appeared the following year, 1865. Here was a bold and moving narrative, brilliantly conceived and so scientifically plausible that many, including some fashionable ladies, volunteered to make such a voyage with its inventor. "My belief in the 'divinatory' sense of Jules Verne," said an admirer, "is such that I am ready to believe that one of these days, by means somewhat similar to those he envisions, we will set foot on that lunar continent." Shortly before he died, Verne told his grandson, Jean Jules Verne, now a retired judge at Toulon, "to preserve my book with great care, because I know that you will be able to measure the accuracy of the image I have created."

In 1870, 20,000 Leagues Under the Sea appeared. Book publishing came to a standstill during the Franco-Prussian conflict. After the war, the work spread like

wildfire throughout the world.

In 1873, Around the World in Eighty Days was published. Serialized in newspapers, it attracted the attention of the world, as if the voyage were actually taking

place. As a spectacle on the stage, it had more than three hundred presentations, and it brought a fortune.

After the Franco-Prussian War Verne settled at Amiens, where he became a city councillor and a member of the Academy of Science. He had sold his fishing craft, St. Michel, and had bought a small sailing yacht, St. Michel II, and later, in 1876, he bought a larger one, St. Michel III, a combined sail and steam vessel. He sailed extensively and luxuriously in European waters, lionized and bored, hobnobbing with royalty and the great, preferring to escape from both. In 1886, a youth related to the family fired at him and wounded him in the leg. He was crippled for life, and unable to stand on his feet when on deck, he sold his yacht. For the rest of his life he attended to his political duties, kept in close touch with all the advances of science, explorations, and mechanical inventions, and wrote numerous books, stories, poetry, etc. He died on March 24, 1905, mourned by the whole civilized world. Many memorials were erected to his memory, the most imposing at Amiens in 1907. He is shown rising from the grave, wrapped in a shroud, with his right hand reaching upward. The epitaph reads:

"Onward to Immortality and Eternal Youth."

—M.T.B.

CONVERSION TABLE

LIKE MANY technical-minded—and especially nautical-minded—persons, Jules Verne would use either the "Anglo-Saxon" or the French measure, depending on which was more appropriate or practicable at the moment. We have taken a similar liberty in translation, using, at any given point, either the English or the metric system, depending on which would provide figures easier to work with and to remember. Often we have supplied the equivalent figures because that too is typical of Verne's virtuoso style.

The reader will find it profitable occasionally to flip to this table for quick definitions and equivalents until, as will inevitably happen, he will have mastered the

terms he needs.

LEAGUE: Roughly, two to three nautical miles; when Verne wants to be more exact, he himself gives the equivalent in English miles.

FATHOM: An English measure equivalent to six feet (approximately the maximum distance a man can span by stretching out his arms horizontally in a continuous line with his shoulders).

CABLE: One hundred fathoms, or 600 feet; in some navies, a cable's length has been set officially at

720 feet.

METER: The basic unit in the French metric system, equivalent to 39.37 inches; in rough conversion, one English yard.

CENTIMETER: One hundredth of a meter, or 0.39 inch.

CUBIC CENTIMETER: .061 cubic inch.

KILOMETER: One thousand meters, or .62 miles.

LITER: 61.02 cubic inches, or 1.057 quarts.

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PART ONE

CHAPTERI

A SHIFTING REEF

The YEAR 1866 was marked by a strange occurrence, an unexplained and inexplicable phenomenon that surely no one has forgotten. People living along the coasts, and even far inland, had been perturbed by certain rumors, while seafaring men had been especially alarmed. Merchants, shipowners, captains and skippers throughout Europe and America, naval officers of many nations, and governments on both continents—all were deeply concerned.

The fact was that for some time a number of ships had been encountering, on the high seas, "an enormous thing," described as a long, spindle-shaped object that was sometimes phosphorescent, and infinitely larger and faster than a whale.

The facts concerning this apparition, which had been recorded in the logs of the various ships, agreed more or less as to the shape of the object or creature in question, the incalculable speed of its movements, its surprising power, and the strange life with which it seemed to be endowed. If it was a cetacean, then it exceeded in size any that science had so far classified as such. Neither Cuvier, nor Lacépède, nor Duméril, nor de Quatrefages would have admitted the existence of such a monster—unless they had seen it with the trained eye of the scientist.

Taking an average of the observations made on various occasions, rejecting the hesitant estimates that gave this object a length of two hundred feet, and discounting the exaggerated opinions that made it out to be one mile wide and three miles long, it could, nevertheless, be

stated that this phenomenal being was far bigger than anything that had been confirmed to date by the ichthyologists—if indeed it existed at all.

But the fact that it did exist was no longer deniable, and seeing that the human mind is always hankering after something to marvel at, the stir created throughout the world by this supernatural apparition will be well understood. As for relegating it to the realm of fable,

that was out of the question.

On the 20th of July, 1866, the steamer Governor Higginson of the Calcutta and Burnach Steam Navigation Company had met this moving mass five miles off the east coast of Australia. At first Captain Baker thought it was an unknown reef. Just as he was preparing to establish its exact position, two jets of water, projected by the mysterious object, rose hissing 150 feet into the air. This meant that unless this reef had a geyser within it, the Governor Higginson was confronted by some sort of aquatic mammal, thus far unknown, which was capable of spouting columns of water, mixed with air and vapor, through its blowholes.

The same thing was also observed on the 23rd of July of the same year, in the Pacific, by the Cristobal-Colon of the West India and Pacific Steam Navigation Company. Apparently, therefore, this extraordinary cetacean was able to move from one place to another with surprising speed, since, within the space of three days, the Governor Higginson and the Cristobal-Colon had seen it at two points on the map separated by a distance of more than seven hundred nautical leagues or about 2,100 nau-

tical miles.

Fifteen days later and about six thousand miles from the last-given position, the *Helvetia* of the Compagnie Nationale, and the *Shannon* of the Royal-Mail Company, sailing in opposite directions in that portion of the Atlantic situated between the United States and Europe, signaled to each other that they had sighted the monster at 42° 15' north by 60° 35' west of the meridian of Greenwich. This joint observation, then, estimated the minimum length of the mammal at more than 350 English feet, since it was longer than either the *Shannon* or the *Helvetia*, both

of which measured over 300 feet from stem to stern. Moreover, it had to be borne in mind that the hugest whales, those found near the Aleutian, Kulammak, and Umgullich Islands, have never been longer than 180 feet, if that.

These reports, coming in one after the other, with fresh observations made by the transatlantic ship le Pereire, news of a collision between the monster and the Etna of the Inman line, an official memorandum drawn up by the officers of the French frigate la Normandie, a highly objective survey made by the staff of Commodore Fitz-James on board the Lord Clyde—all this greatly aroused public interest. In countries of volatile temperament, the phenomenon was the subject of many a joke, but serious-minded, practical countries, like England, America, and Germany, took the matter very seriously.

In all the commercial centers, the monster was fashionable! It was sung about in the cafés, made fun of in the papers, and even represented on the stage. Reporters of the yellow press took the opportunity to invent all sorts of wild stories about it. Some newspapers—short of something to write about—raked up all the gigantic imaginary creatures they could find, from the white whale—the terrible "Moby Dick" of the hyperborean regions—to the huge kraken, whose tentacles could enfold a five-hundred-ton ship and drag it down to the bottom of the ocean. Even the accounts found in ancient writings were revived: the opinions of Aristotle and Pliny, who admitted the existence of such monsters; the Norwegian tales of Bishop Pontoppidan; the reports of Paul Heggede; and lastly, the reports of Mr. Harrington, whose good faith may in no way be considered suspect when he says that in 1857, on board the Castillan, he saw that enormous serpent that had, until then, never been seen in any waters except those once "navigated" by the now-defunct newspaper, the Constitutionnel.

Then an interminable controversy between the credulous and the incredulous exploded in all the learned societies and scientific journals. The "question of the monster" inflamed all minds. Journalists professing knowledge on scientific matters, at odds with those laying claim to intellect, spilled gallons of ink in the course of this memorable campaign; some of them even drew a little blood, for, from talking about the sea serpent, they shifted their ground all too easily to the most offensive personal slurs.

For six months the battle was waged to and fro with varying fortune. To leading articles by the Geographic Institute of Brazil, the Royal Academy of Sciences in Berlin, the British Association, the Smithsonian Institution in Washington; to discussions in the Indian Archipelago, in the Abbé Moigno's Cosmos, and in Petermann's Mittheilungen; as well as to scientific articles in the more important newspapers in France and abroad—the popular press retorted with endless wit. Their humorists, parodying a remark of Linnaeus, quoted by the adversaries of the monster, to the effect that "nature does not make fools," adjured their contemporaries not to give the lie to nature by admitting the existence of krakens, sea serpents, "Moby Dicks," and other lucubrations of delirious sailors. Finally, to cap it all, in an article in a much feared satirical journal, the most celebrated and popular of the editors struck at the monster as a legendary Hippolyte, and dealt him a death blow amid a universal chorus of mirth. Wit had vanquished science.

During the first months of the year 1867, the question seemed to have been buried for good and never likely to be raised again, when new facts were brought to the notice of the public. It was then no longer a question of a scientific problem to be solved, but a real and genuine danger to be avoided. The question took on quite a different complexion. The monster again became a small island, rock, or reef; but if it was a reef it was a shifting one, indeterminate and incomprehensible.

On March 5, 1867, the *Moravian* of the Montreal Ocean Company, which was sailing in a latitude of 27° 30′ and a longitude of 72° 15′, struck with her starboard quarter a rock not marked in any chart of that part of the sea. Under the combined efforts of wind and four-hundred-horsepower engines, it was going at the rate of thirteen knots. There is no doubt that but for the superior quality of her hull, the *Moravian* would have broken

up under the impact and gone down with the 237 passengers she was bringing back from Canada.

The accident had occurred at about five o'clock in the morning, just as day was breaking. The officers of the watch hurried aft, where they scanned the sea with the greatest attention. But they could see nothing except a choppy area about three cables' lengths away, as if the carpetlike surface of the water had been violently agitated. The exact bearings of the place were taken, and the *Moravian* continued on its course, without apparent damage. Had it struck a submerged rock or an enormous piece of drifting wreckage? No one could tell. But later, when the ship's bottom was inspected, they found that part of her keel had been broken.

This incident, which was extremely serious in itself, might well have been forgotten like so many others, if the same thing had not happened three weeks later under identical circumstances. However, because of the nationality of the ship that had been a victim of this latest collision, and because of the reputation of the company to which it belonged, the occurrence had enormous repercussions.

Everyone has heard the name of the famous English shipowner, Cunard. In 1840 this farsighted industrialist founded a postal service between Liverpool and Halifax, with three wooden paddle steamers, each of 1,162 tons and powered by 400-horsepower engines. Eight years later, the company's fleet was increased by the addition of four 650-horsepower, 1820-ton boats, and, two years after that, by two other ships, both superior in power and tonnage. In 1853 the Cunard company, whose privilege of carrying the mail had just been renewed, added successively to its fleet the Arabia, the Persia, the China, the Scotia, the Java, and the Russia, all first-rate ships and the biggest, after the Great Eastern, that had ever ploughed the seas. Thus, in 1867 the company owned twelve ships, eight of them paddle steamers and four of them propeller-driven.

I have supplied these very brief details so that everybody may be well aware of the importance of this shipping line, known throughout the world for its intelligent management. No oceangoing shipping concern has ever been so well run, and no business has ever been crowned with more success. Over the past twenty-six years, Cunard ships have crossed the Atlantic two thousand times without as much as a voyage ever being missed, or any delay being recorded, or a letter, man, or ship being lost. Moreover, in spite of the strong competition offered by France, passengers continue to choose the Cunard line in preference to all others, according to a survey of official records of recent years. When all this has been said, nobody will be surprised at the stir caused by the accident that happened to one of the company's finest steamers.

On the 13th of April, 1867, the sea was calm and the wind moderate, and the Scotia was situated in a longitude of 15° 12' and a latitude of 45° 37'. Her thousandhorsepower engines were driving her along at a speed of 13½ knots. Her paddles were treading the water with perfect rhythm and regularity. Her draught was twenty-two feet, and her displacement equal to 233,924.35 cubic

feet.

At 4:17 P.M., when the passengers were enjoying lunch in the great saloon, a slight shock was felt on the hull,

somewhat aft of the port paddle.

The Scotia had not struck, she had been struck, by something with a cutting or perforating edge. The collision had seemed so light that no one on board would have been alarmed but for the coal-trimmers, who rushed up onto the bridge shouting: "We're sinking! We're sinking!"

At first the passengers were very frightened, but Captain Anderson hastened to reassure them. Indeed, there was no question of any imminent danger, for the Scotia was divided into seven compartments by means of watertight bulkheads, and was thus able to withstand any leak.

Captain Anderson immediately went down into the hold, where he found that the fifth compartment had been flooded and the water was coming in so fast that the leak must be a considerable one. Most fortunately, this compartment did not contain the boilers; otherwise, the furnaces would have been extinguished at once. Captain Anderson had the engines stopped, and one