### Chapter 1: A RUNAWAY REEF

The year 1866 was marked by a bizarre development, an unexplained and downright inexplicable phenomenon that surely no one has forgotten. Without getting into those rumors that upset civilians in the seaports and deranged the public mind even far inland, it must be said that professional seamen were especially alarmed. Traders, shipowners, captains of vessels, skippers, and master mariners from Europe and America, naval officers from every country, and at their heels the various national governments on these two continents, were all extremely disturbed by the business.

In essence, over a period of time several ships had encountered 'an enormous thing' at sea, a long spindle-shaped object, sometimes giving off a phosphorescent glow, infinitely bigger and faster than any whale. The relevant data on this apparition, as recorded in various logbooks, agreed pretty closely as to the structure of the object or creature in question, its unprecedented speed of movement, its startling locomotive power, and the unique vitality withwhich it seemed to be gifted. If it was a cetacean, it exceeded in bulk any whale previously classified by science. No naturalist, neither Cuvier nor Lacépède, neither Professor Dumeril nor Professor de Quatrefages, would have accepted the existence of such a monster sight unseen -- specifically, unseen by their own scientific eyes.

Striking an average of observations taken at different times -- rejecting those timid estimates that gave the object a length of 200 feet, and ignoring those exaggerated views that saw it as a mile wide and three long--you could still assert that this phenomenal creature greatly exceeded the dimensions of anything then known to ichthyologists, if it existed at all.

Now then, it did exist, this was an undeniable fact; and since the human mind dotes on objects of wonder, you can understand the worldwide excitement caused by this unearthly apparition. As for relegating it to the realm of fiction, that charge had to be dropped.

In essence, on July 20, 1866, the steamer Governor Higginson, from the Calcutta & Burnach Steam Navigation Co., encountered this moving mass five miles off the eastern shores of Australia. Captain Baker at first thought he was in the presence of an unknown reef; he was even about to fix its exact position when two waterspouts shot out of thisinexplicable object and sprang hissing into the air some 150 feet. So, unless this reef was subject to the intermittent eruptions of a geyser, the Governor Higginson had fair and honest dealings with some aquatic mammal, until then unknown, that could spurt from its blowholes waterspouts mixed with air and steam.

Similar events were likewise observed in Pacific seas, on July 23 of the same year, by the Christopher Columbus from the West India & Pacific Steam Navigation Co. Consequently, this extraordinary cetacean could transfer itself from one locality to another with startling swiftness, since within an interval of just three days, the Governor Higginson and the Christopher Columbus had observed it at two positions on the charts separated by a distance of more than 700 nautical leagues.

Fifteen days later and 2,000 leagues farther, the Helvetia from the Compagnie Nationale and the Shannon from the Royal Mail line, running on opposite tacks in that part of the Atlantic lying between the United States and Europe, respectively signaled each other that the monster had been sighted in latitude 42 degrees 15' north and longitude 60 degrees 35' west of the meridian of Greenwich. From their simultaneous observations, they were able to estimate the mammal's minimum length at more than 350 English feet; this was because both the Shannon and the Helvetia were of smaller dimensions, although each measured 100 meters stem to stern. Now then, the biggest whales, those rorqual whales that frequent the waterways of the Aleutian Islands, have never exceeded a length of 56 meters--if they reach even that.

One after another, reports arrived that would profoundly affect public opinion: new observations taken by the transatlantic liner Pereire, the Inman line's Etna running afoul of the monster, an official report drawn up by officers on the French frigate Normandy, dead-earnest reckonings obtained by the general staff of Commodore Fitz-James aboard the Lord Clyde. In lighthearted countries, people joked about this phenomenon, but such serious, practical countries as England, America, and Germany were deeply concerned.

In every big city the monster was the latest rage; they sang about it in the coffee houses, they ridiculed it in the

newspapers, they dramatized it in the theaters. The tabloids found it a fine opportunity for hatching all sorts of hoaxes. In those newspapers short of copy, you saw the reappearance of every gigantic imaginary creature, from 'Moby Dick,' that dreadful white whale from the High Arctic regions, to the stupendous kraken whose tentacles could entwine a 500-ton craft and drag it into the ocean depths. They even reprinted reports from ancient times: the views of Aristotle and Pliny accepting the existence of such monsters, then the Norwegian stories of Bishop Pontoppidan, the narratives of Paul Egede, and finally the reports of Captain Harrington --whose good faith is above suspicion--in which he claims he saw, while aboard the Castilian in 1857, one of those enormous serpents that, until then, had frequented only the seas of France's old extremist newspaper, The Constitutionalist.

### Chapter 2: THE PROS AND CONS

During the period in which these developments were occurring, I had returned from a scientific undertaking organized to explore the Nebraska badlands in the United States. In my capacity as Assistant Professor at the Paris Museum of Natural History, I had been attached to this expedition by the French government. After spending six months in Nebraska, I arrived in New York laden with valuable collections near the end of March. My departure for France was set for early May. In the meantime, then, I was busy classifying my mineralogical, botanical, and zoological treasures when that incident took place with the Scotia.

I was perfectly abreast of this question, which was the big news of the day, and how could I not have been? I had read and reread every American and European newspaper without being any farther along. This mystery puzzled me. Finding it impossible to form any views, I drifted from one extreme to the other. Something was out there, that much was certain, and any doubting Thomas was invited to place his finger on the Scotia's wound.

When I arrived in New York, the question was at the boiling point. The hypothesis of a drifting islet or an elusive reef, put forward by people not quite in their right minds, was completely eliminated. And indeed, unless this reef had an engine in its belly, how could it move about with such prodigious speed?

Also discredited was the idea of a floating hull or some other enormous wreckage, and again because of this speed of movement.

So only two possible solutions to the question were left, creating two very distinct groups of supporters: on one side, those favoring a monster of colossal strength; on the other, those favoring an 'underwater boat' of tremendous motor power.

Now then, although the latter hypothesis was completely admissible, it couldn't stand up to inquiries conducted in both the New World and the Old. That a private individual had such a mechanism at his disposal was less than probable. Where and when had he built it, and how could he have built it in secret?

Only some government could own such an engine of destruction, and in these disaster-filled times, when men tax their ingenuity to build increasingly powerful aggressive weapons, it was possible that, unknown to the rest of the world, some nation could have been testing such a fearsome machine. The Chassepot rifle led to the torpedo, and the torpedo has led to this underwater battering ram, which in turn will lead to the world putting its foot down. At least I hope it will.

But this hypothesis of a war machine collapsed in the face of formal denials from the various governments. Since the public interest was at stake and transoceanic travel was suffering, the sincerity of these governments could not be doubted. Besides, how could the assembly of this underwater boat have escaped public notice? Keeping a secret under such circumstances would be difficult enough for an individual, and certainly impossible for a nation whose every move is under constant surveillance by rival powers.

So, after inquiries conducted in England, France, Russia, Prussia, Spain, Italy, America, and even Turkey, the hypothesis of an underwater Monitor was ultimately rejected.

After I arrived in New York, several people did me the honor of consulting me on the phenomenon in question. In France I had published a two-volume work, in quarto, entitled The Mysteries of the Great Ocean Depths. Well received in scholarly circles, this book had established me as a specialist in this pretty obscure field of natural history. My views were in demand. As long as I could deny the reality of the business, I confined myself to a flat 'no comment.' But soon, pinned to the wall, I had to explain myself straight out. And in this vein, 'the honorable Pierre Aronnax, Professor at the Paris Museum,' was summoned by The New York Herald to formulate his views no matter what.

I complied. Since I could no longer hold my tongue, I let it wag. I discussed the question in its every aspect, both political and scientific, and this is an excerpt from the well-padded article I published in the issue of April 30.

'Therefore,' I wrote, 'after examining these different hypotheses one by one, we are forced, every other supposition having been refuted, to accept the existence of an extremely powerful marine animal.

'The deepest parts of the ocean are totally unknown to us. No soundings have been able to reach them. What goes on in those distant depths? What creatures inhabit, or could inhabit, those regions twelve or fifteen miles beneath the surface of the water? What is the constitution of these animals? It's almost beyond conjecture.

'However, the solution to this problem submitted to me can take the form of a choice between two alternatives. 'Either we know every variety of creature populating our planet, or we do not.'If we do not know every one of them, if nature still keeps ichthyological secrets from us, nothing is more admissible than to accept the existence of fish or cetaceans of new species or even new genera, animals with a basically 'cast-iron' constitution that inhabit strata beyond the reach of our soundings, and which some development or other, an urge or a whim if you prefer, can bring to the upper level of the ocean for long intervals.

'If, on the other hand, we do know every living species, we must look for the animal in question among those marine creatures already cataloged, and in this event I would be inclined to accept the existence of a giant narwhale.

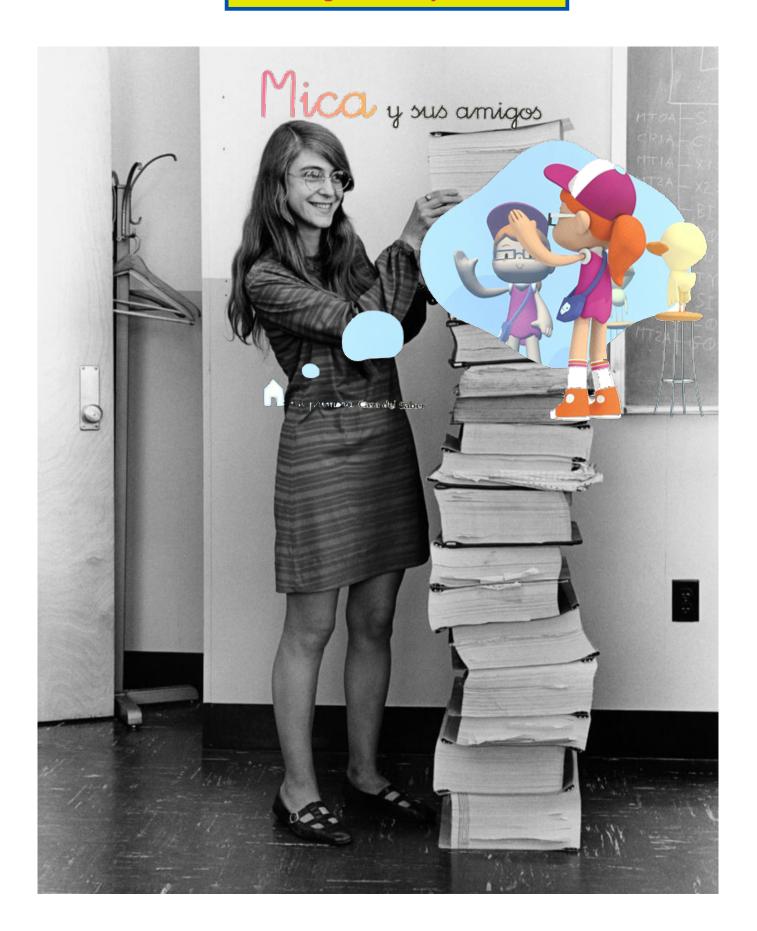
'The common narwhale, or sea unicorn, often reaches a length of sixty feet. Increase its dimensions fivefold or even tenfold, then give this cetacean a strength in proportion to its size while enlarging its offensive weapons, and you have the animal we're looking for. It would have the proportions determined by the officers of the Shannon, the instrument needed to perforate the Scotia, and the power to pierce a steamer's hull.

'In essence, the narwhale is armed with a sort of ivory sword, or lance, as certain naturalists have expressed it. It's a king-sized tooth as hard as steel. Some of these teeth have been found buried in the bodies of baleen whales, which the narwhale attacks with invariable success. Others have been wrenched, not without difficulty, from the undersides of vessels that narwhales have pierced clean through, as a gimlet pierces a wine barrel. The museum at the Faculty of Medicine in Paris owns one of these tusks with a length of 2.25 meters and a width at its base of forty-eight centimeters!

'All right then! Imagine this weapon to be ten times stronger and the animal ten times more powerful, launch it at a speed of twenty miles per hour, multiply its mass times its velocity, and you get just the collision we need to cause the specified catastrophe.

'So, until information becomes more abundant, I plump for a sea unicorn of colossal dimensions, no longer armed with a mere lance but with an actual spur, like ironclad frigates or those warships called 'rams,' whose mass and motor power it would possess simultaneously.

'This inexplicable phenomenon is thus explained away--unless it's something else entirely, which, despite everything that has been sighted, studied, explored and experienced, is still possible!'



To find out what's new in this tutorial, click <u>here</u>. The text here is written in flowing mode. Really? hum... ...this is awkward. Well <u>click me</u> to fly somewhere else!!!

In the 3 pages after the next one we will show tables, click *here* to go to the Basic Table. Or click *here* to go to the Improved Table. You can also see a <u>Fancy Table</u> by clicking on the underlined 'Fancy Table' text.



You can now easily print text mixing different styles: **bold**, *italic*, <u>underlined</u> or <u>all at once</u>!

You can also insert links on the text, such as this one, or on an image: click on the logo.

After this page you can find the previous two chapters of the book '20000 Leguas de viaje submarino'. Click in *here* to go to the 1st Chapter. Or *click in here* to go to the 2nd Chapter.

This text should be written using font Calligrapher-Regular of 18 points. This one is written using Calligrapher-Regular of 22 points,

Country	Capital	Area (sq km)	Pop. (thousands)
Austria	Vienna	83859	8075
Belgium	Brussels	30518	10192
Denmark	Copenhagen	43094	5295
Finland	Helsinki	304529	5147
France	Paris	543965	58728
Germany	Berlin	357022	82057
Greece	Athens	131625	10511
Ireland	Dublin	70723	3694
Italy	Roma	301316	57563
Luxembourg	Luxembourg	2586	424
Netherlands	Amsterdam	41526	15654
Portugal	Lisbon	91906	9957
Spain	Madrid	504790	39348
Sweden	Stockholm	410934	8839
United Kingdom	London	243820	58862

Country	Capital	Area (sq km)	Pop. (thousands)
Austria	Vienna	83,859	8,075
Belgium	Brussels	30,518	10,192
Denmark	Copenhagen	43,094	5,295
Finland	Helsinki	304,529	5,147
France	Paris	543,965	58,728
Germany	Berlin	357,022	82,057
Greece	Athens	131,625	10,511
Ireland	Dublin	70,723	3,694
Italy	Roma	301,316	57,563
Luxembourg	Luxembourg	2,586	424
Netherlands	Amsterdam	41,526	15,654
Portugal	Lisbon	91,906	9,957
Spain	Madrid	504,790	39,348
Sweden	Stockholm	410,934	8,839
United Kingdom	London	243,820	58,862

Country	Capital	Area (sq km)	Pop. (thousands)
Austria	Vienna	83,859	8,075
Belgium	Brussels	30,518	10,192
Denmark	Copenhagen	43,094	5,295
Finland	Helsinki	304,529	5,147
France	Paris	543,965	58,728
Germany	Berlin	357,022	82,057
Greece	Athens	131,625	10,511
Ireland	Dublin	70,723	3,694
Italy	Roma	301,316	57,563
Luxembourg	Luxembourg	2,586	424
Netherlands	Amsterdam	41,526	15,654
Portugal	Lisbon	91,906	9,957
Spain	Madrid	504,790	39,348
Sweden	Stockholm	410,934	8,839
United Kingdom	London	243,820	58,862

Country	Capital	Area (sq km)	Pop. (thousands)
Austria	Vienna	83,859	8,075
Belgium	Brussels	30,518	10,192
Denmark	Copenhagen	43,094	5,295
Finland	Helsinki	304,529	5,147
France	Paris	543,965	58,728
Germany	Berlin	357,022	82,057
Greece	Athens	131,625	10,511
Ireland	Dublin	70,723	3,694
Italy	Roma	301,316	57,563
Luxembourg	Luxembourg	2,586	424
Netherlands	Amsterdam	41,526	15,654
Portugal	Lisbon	91,906	9,957
Spain	Madrid	504,790	39,348
Sweden	Stockholm	410,934	8,839
United Kingdom	London	243,820	58,862

### Chapter 1 : A RUNAWAY REEF (in columns)

The year 1866 was marked by a bizarre development, downright unexplained and inexplicable phenomenon that surely no one has forgotten. Without getting into those rumors that upset civilians in the seaports and deranged the public mind even far inland, it must be said that professional seamen were especially alarmed. Traders. shipowners, captains of vessels, skippers, and master mariners from Europe and America, officers from every country, and at their heels the various national governments on these two continents, were all extremely disturbed by the business.

In essence, over a period of time several ships had encountered 'an enormous thing' at sea, a long spindle-shaped object, sometimes giving off a phosphorescent glow, infinitely bigger and faster than any whale.

The relevant data on this apparition, as recorded in various logbooks, agreed pretty closely as to the structure of the object or creature in question, unprecedented speed of movement, its startling locomotive power, and the unique vitality withwhich it seemed to be gifted. If it was a cetacean, it exceeded in bulk any whale previously classified by science. No naturalist, neither Cuvier nor Lacépède, neither Professor Dumeril nor Professor de Quatrefages, would have accepted the existence of such a monster sight unseen -- specifically, unseen by their own scientific eyes.

Striking an average of observations taken at different times -- rejecting those timid estimates that gave the

object a length of 200 feet, and ignoring those exaggerated views that saw it as a mile wide and three long--you could still assert that this phenomenal creature greatly exceeded the dimensions of anything then known ichthyologists, if it existed at all. Now then, it did exist, this was an

Now then, it did exist, this was an undeniable fact; and since the human mind dotes on objects of wonder, you can understand the worldwide excitement caused by this unearthly apparition. As for relegating it to the realm of fiction, that charge had to be dropped.

In essence, on July 20, 1866, the steamer Governor Higginson, from the Calcutta & Burnach Steam Navigation Co., encountered this moving mass five miles off the eastern shores of Australia. Captain Baker at first thought he was in the presence of an unknown reef; he was even about to fix its when exact position two waterspouts shot thisinexplicable object and sprang hissing into the air some 150 feet. So, unless this reef was subject to the intermittent eruptions of a geyser, the Governor Higginson had fair and honest dealings with some aquatic mammal, until then unknown, that could spurt from its blowholes waterspouts mixed with air and steam.

Similar events were likewise observed in Pacific seas, on July 23 of the same year, by the Christopher Columbus from the West India & Pacific Steam Navigation Co. Consequently, this extraordinary cetacean could transfer itself from one locality to another with startling swiftness, since within an interval of just

three days, the Governor Higginson and the Christopher Columbus had observed it at two positions on the charts separated by a distance of more than 700 nautical leagues.

Fifteen days later and 2,000 leagues farther, the Helvetia from the Compagnie Nationale and the Shannon from the Royal Mail line, running on opposite tacks in that part of the Atlantic lying between the United States and Europe, respectively signaled each other that the monster had been sighted in latitude 42 degrees 15' north and longitude 60 degrees 35' west of the meridian of Greenwich. From their simultaneous observations, they were able to estimate the mammal's minimum length at more than 350 English feet; this was because both the Shannon and the Helvetia were of smaller dimensions. although each measured 100 meters stem to stern. Now then, the biggest whales, those rorqual whales that frequent the waterways of the Aleutian Islands, have never exceeded a length of 56 meters--if they reach even that.

One after another, reports arrived that would profoundly affect public opinion: new observations taken by the transatlantic liner Pereire, the Inman line's Etna running afoul of the monster, an official report drawn up by officers on the French frigate Normandy, dead-earnest reckonings obtained by the general staff of Commodore Fitz-James aboard the Lord Clyde. In lighthearted countries, people joked about this phenomenon, but such serious, practical countries as England, America, and Germany

were deeply concerned.

In every big city the monster was the latest rage; they sang about it in the coffee houses, they ridiculed it in the newspapers, dramatized it in the theaters. The tabloids found it a fine opportunity for hatching all sorts of hoaxes. In those newspapers short of copy, you saw the reappearance of every gigantic imaginary creature, from 'Moby Dick,' that dreadful white whale from the High Arctic regions, to the stupendous kraken whose tentacles could entwine a 500-ton craft and drag it into the ocean depths. They even reprinted reports from ancient times: the views of Aristotle and Pliny accepting the existence of such monsters, then the Norwegian stories of Bishop Pontoppidan, the narratives of Paul Egede, and finally the reports of Captain Harrington -- whose good faith is above suspicion--in which he claims he saw, while aboard the Castilian in 1857, one of those enormous serpents that, until then, had frequented only the seas of France's old extremist newspaper, The Constitutionalist.

### Chapter 2: THE PROS AND CONS (in columns)

During the period in which these developments were occurring, I had returned from a scientific undertaking organized to explore the Nebraska badlands in the United States. In my capacity as Assistant Professor at the Paris Museum of Natural History, I had been attached to this expedition by the French government. After spending six months in Nebraska, I arrived in New York laden with valuable collections near the end of March. My departure for France was set for early May. In the meantime, then, I was busy mineralogical, classifying my botanical, and zoological treasures when that incident took place with the Scotia.

I was perfectly abreast of this question, which was the big news of the day, and how could I not have been? I had read and reread every American and European newspaper without being farther along. This mystery puzzled me. Finding it impossible to form any views, I drifted from extreme one to the Something was out there, that much was certain. and doubting Thomas was invited to place his finger on the Scotia's wound

When I arrived in New York, the question was at the boiling point. The hypothesis of a drifting islet or an elusive reef, put forward by people not quite in their right minds, was completely eliminated. And indeed, unless this reef had an engine in its belly, how could it move about with such prodigious speed?

Also discredited was the idea of a floating hull or some other

enormous wreckage, and again because of this speed of movement.

So only two possible solutions to the question were left, creating two very distinct groups of supporters: on one side, those favoring a monster of colossal strength; on the other, those favoring an 'underwater boat' of tremendous motor power.

Now then, although the latter hypothesis was completely admissible, it couldn't stand up to inquiries conducted in both the New World and the Old. That a private individual had such a mechanism at his disposal was less than probable. Where and when had he built it, and how could he have built it in secret?

Only some government could own such an engine of destruction, and in these disaster-filled times, when men tax their ingenuity to build increasingly powerful aggressive weapons, it was possible that, unknown to the rest of the world, some nation could have been testing such a fearsome machine. The Chassepot rifle led to the torpedo, and the torpedo has led to this underwater battering ram, which in turn will lead to the world putting its foot down. At least I hope it will.

But this hypothesis of a war machine collapsed in the face of formal denials from the various governments. Since the public interest was at stake and transoceanic travel was suffering, the sincerity of these governments could not be doubted. Besides, how could the assembly of this underwater boat have escaped public notice? Keeping a secret

under such circumstances would be difficult enough for an individual, and certainly impossible for a nation whose every move is under constant surveillance by rival powers.

So, after inquiries conducted in England, France, Russia, Prussia, Spain, Italy, America, and even Turkey, the hypothesis of an underwater Monitor was ultimately rejected.

After I arrived in New York, several people did me the honor of consulting me on the phenomenon in question. In France I had published a two-volume work, in quarto, entitled The Mysteries of the Great Ocean Depths. Well received in scholarly circles, this book had established me as a specialist in this pretty obscure field of natural history. My views were in demand. As long as I could deny the reality of the business, I confined myself to a flat 'no comment.' But soon, pinned to the wall, I had to explain myself straight out. And in this vein, 'the honorable Pierre Aronnax. Professor at the Paris Museum.' was summoned by The New York Herald to formulate his views no matter what.

I complied. Since I could no longer hold my tongue, I let it wag. I discussed the question in its every aspect, both political and scientific, and this is an excerpt from the well-padded article I published in the issue of April 30.

'Therefore,' I wrote, 'after examining these different hypotheses one by one, we are forced, every other supposition having been refuted, to accept the

existence of an extremely powerful marine animal.

'The deepest parts of the ocean are totally unknown to us. No soundings have been able to reach them. What goes on in those distant depths? What creatures inhabit, or could inhabit, those regions twelve or fifteen miles beneath the surface of the water? What is the constitution of these animals? It's almost beyond conjecture.

'However, the solution to this problem submitted to me can take the form of a choice between two alternatives.

'Either we know every variety of creature populating our planet, or we do not.'If we do not know every one of them, if nature still keeps ichthyological secrets from us, nothing is more admissible than to accept the existence of fish or cetaceans of new species or even new genera, animals with a basically 'cast-iron' constitution that inhabit strata beyond the reach of our soundings, and which some development or other, an urge or a whim if you prefer, can bring to the upper level of the ocean for long intervals.

'If, on the other hand, we do know every living species, we must look for the animal in question among those marine creatures already cataloged, and in this event I would be inclined to accept the existence of a giant narwhale.

'The common narwhale, or sea unicorn, often reaches a length of sixty feet. Increase its dimensions fivefold or even tenfold, then give this cetacean a strength in proportion to its size while enlarging its offensive weapons, and you have the animal we're looking for. It would have the

proportions determined by the officers of the Shannon, the instrument needed to perforate the Scotia, and the power to pierce a steamer's hull.

'In essence, the narwhale is armed with a sort of ivory sword, or lance, as certain naturalists have expressed it. It's a king-sized tooth as hard as steel. Some of these teeth have been found buried in the bodies of baleen whales, which the narwhale attacks with invariable success. Others have been wrenched, not without difficulty, from the undersides of vessels that narwhales have pierced clean through, as a gimlet pierces a wine barrel. The museum at the Faculty of Medicine in Paris owns one of these tusks with a length of 2.25 meters and a width at its base of forty-eight centimeters!

'All right then! Imagine this weapon to be ten times stronger and the animal ten times more powerful, launch it at a speed of twenty miles per hour, multiply its mass times its velocity, and you get just the collision we need to cause the specified catastrophe.

'So, until information becomes more abundant, I plump for a sea unicorn of colossal dimensions, no longer armed with a mere lance but with an actual spur, like ironclad frigates or those warships called 'rams,' whose mass and motor power it would possess simultaneously.

'This inexplicable phenomenon is thus explained away--unless it's something else entirely, which, despite everything that has been sighted, studied, explored and experienced, is still possible!'