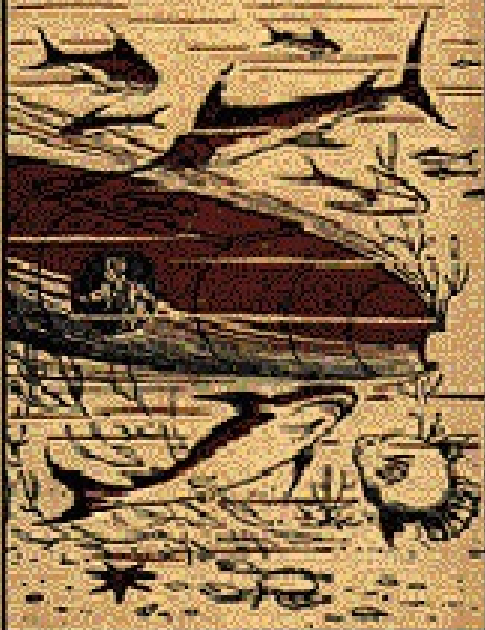


# UNDER THE OCEAN TO THE SOUTH POLE





# **Under the Ocean to the South Pole**

**Roy Rockwood**

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## About Rockwood:

Roy Rockwood is a pseudonym used by the Stratemeyer Syndicate (Tom Swift, Nancy Drew... ) for boy's adventure books.

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# WILL THE SHIP WORK?

"Hand me that wrench, Mark," called Professor Amos Henderson to a boy who stood near some complicated machinery over which the old man was working. The lad passed the tool over.

"Do you think the ship will work, Professor?" he asked.

"I hope so, Mark, I hope so," muttered the scientist as he tightened some bolts on what was perhaps the strangest combination of apparatus that had ever been put together. "There is no reason why she should not, and yet—"

The old man paused. Perhaps he feared that, after all, the submarine boat on which he had labored continuously for more than a year would be a failure.

"Is there anything more I can do now?" asked Mark.

"Not right away," replied the professor, without looking up from the work he was doing. "But I wish you and Jack would be around in about an hour. I am going to start the engine then, and I'll need you. If you see Washington outside send him to me."

Mark left the big room where the submarine boat had been in process of construction so long. Outside he met a boy about his own age, who was cleaning a rifle.

"How's it going, Mark?" asked this second youth, who was rather fat, and, if one could judge by his face, of a jolly disposition.

"The professor is going to try the engine in about an hour," replied Mark. "We must be on hand."

"I'll be there all right. But if there isn't anything else to do, let's shoot

at a target. I'll bet I can beat you."

"Bet you can't. Wait 'till I get my gun."

"Now don't yo' boys go to disportin' yo'seves in any disproportionable anticipation ob transposin' dem molecules of lead in a contiguous direction to yo' humble servant!" exclaimed a colored man, coming from behind the big shed at that moment, and seeing Mark and Jack with their rifles.

"I s'pose you mean to say, Washington," remarked Jack, "that you don't care to be shot at. Is that it?"

"Neber said nuffin truer in all yo' born days!" exclaimed Washington earnestly. "De infliction ob distress to de exterior portion ob—"

"The professor wants you," interrupted Mark, cutting off the colored man's flow of language.

"Yo' mind what I tole yo'," Washington muttered as he hurried into the work room.

Soon the reports of rifles indicated that the boys were trying to discover who was the best shot, a contest that waged with friendly interest for some time.

The big shed, where the submarine ship was being built, was located at a lonely spot on the coast of Maine. The nearest town was Easton, about ten miles away, and Professor Henderson had fixed on this location as one best suited to give him a chance to work secretly and unobserved on his wonderful invention.

The professor was a man about sixty-five years old, and, while of simple and kindly nature in many ways, yet, on the subjects of airships and submarines, he possessed a fund of knowledge. He was somewhat queer, as many persons may be who devote all their thoughts to one object, yet he was a man of fine character.

Some time before this story opens he had invented an electric airship in which he, with Mark Sampson, Jack Darrow and the colored man, Washington White, had made a trip to the frozen north.

Their adventures on that journey are told of in the first volume of this

series, entitled, "Through the Air to the North Pole, or, The Wonderful Cruise of the *Electric Monarch*."

The two boys, Mark then being fifteen and Jack a year older, had met the professor under peculiar circumstances. They were orphans, and, after knocking about the world a bit, had chanced to meet each other. They agreed to seek together such fortune as might chance to come to them.

While in the town of Freeport, N. Y., they were driven away by a constable, who said tramps were not allowed in the village. The boys jumped on a freight train, which broke in two and ran away down the mountain, and the lads were knocked senseless in the wreck that followed.

As it chanced Professor Henderson had erected nearby a big shop, where he was building his airship. He and Washington were on hand when the wreck occurred and they took the senseless boys to the airship shed.

The boys, after their recovery, accepted the invitation of the professor to go on a search for the north pole. As the airship was about to start Andy Sudds, an old hunter, and two men, Tom Smith and Bill Jones, who had been called in to assist at the flight, held on too long and were carried aloft.

Somewhat against their will the three latter made the trip, for the professor did not want to return to earth with them.

The party had many adventures on the voyage, having to fight savage animals and more savage Esquimaux. They reached the north pole, but in the midst of such a violent storm that the ship was overturned, and the discovery of the long-sought goal availed little. After many hardships, and a fierce fight to recover the possession of the ship, which had been seized by natives, the adventurers reached home.

Since then a little over a year had passed. The professor, having found he could successfully navigate the air, turned his attention to the water, and began to plan a craft that would sail beneath the

ocean.

To this end he had moved his machine shop to this lonely spot on the Maine coast. The two boys, who had grown no less fond of the old man than he of them, went with him, as did Washington White, the negro, who was a genius in his way, though somewhat inclined to use big words, of the meaning of which he knew little and cared less.

Andy Sudds, the old hunter, had also been induced to accompany the professor.

"I hunted game up north and in the air," said Andy, "and if there's a chance to shoot something under the water I'm the one to do it."

Needing more assistance than either the boys, Andy or Washington could give, the professor had engaged two young machinists, who, under a strict promise never to divulge any of the secrets of the submarine, had labored in its building.

Now the queer craft was almost finished. As it rested on the ways in the shed, it looked exactly like a big cigar, excepting that the top part was level, forming a platform.

The ship, which had been named the *Porpoise*, was eighty feet long, and twenty feet in diameter at the largest part. From that it tapered gradually, until the ends were reached. These consisted of flattened plates about three feet in diameter, with a hole in the center one foot in size.

Weary months of labor had been spent on the *Porpoise*, until now it was almost ready for a trial. The professor had discovered a new method of propulsion. Instead of propellers or paddle-wheels, he intended to send his craft ahead or to the rear, by means of a water cable.

Through the entire length of the ship ran a round hole or shaft, one foot in diameter. Within this was an endless screw worked by powerful engines. With a working model the professor had demonstrated that when the endless screw was revolved it acted on the water just as another sort of screw does in wood. The water coming in through the shaft served as a rope, so to speak, and the



screw, acting on it, pulled the craft ahead or to the rear, according to the direction in which the screw was revolved.

The submarine was a wonderful craft. It contained a powerful engine, electric motors and dynamos, and machinery of all kinds. The engine was a turbine, and steam was generated from heat furnished by the burning of a powerful gas, manufactured from sea water and chemicals. So there was no need to carry a supply of coal on the ship.

The interior of the vessel was divided into an engine-room, a kitchen, combination dining-room and parlor, bunk rooms, and a conning tower, or place for the steersman.

While the boys had been shooting at the target the professor and Washington had been putting the finishing touches to the engine, tightening nuts here and screwed up bolts there.

"I guess that will do," remarked the old inventor. "Call the boys, Washington."

The colored man went to the door and gave three blasts on a battered horn that hung from a string.

"Coming!" called Mark, as he and Jack ceased their marksmanship contest and approached the shed.

"Now boys, we'll see if she works so far," said the professor. "If she does, we'll give her a trial under water."

At the inventor's directions the boys started the gas to generating from the chemicals. Soon the hissing of steam told them that there was power in the boiler.

The professor entered the engine-room of the submarine. He looked over the various wheels, levers, handles, gages and attachments, satisfying himself that all were in proper shape and position.

"Three hundred pounds pressure," he muttered, glancing at the steam indicator. "That ought to be enough. Are you all ready, boys?"

"All ready!" cried Jack.

Of course the test was only one to see if the engine worked, for the

boat could not move until in the water.

The professor opened a valve. The steam filled the turbine with a hiss and throb. The *Porpoise* trembled. Then, with a cough and splutter of the exhaust pipes, the engine started. Slowly it went at first, but, as the professor admitted more steam, it revolved the long screw until it fairly hummed in the shaft.

"Hurrah! It works!" cried Mark.

"It does!" chimed in Jack.

"Gollyation! She suttinly am goin'!" yelled Washington.

"I think we may say it is a success," said the professor calmly, yet there was a note of exultation in his voice.

"Now that you've got her started, when are you goin' to put her in the water an' scoot along under the waves?" asked Andy Sudds.

"In about a week," replied the professor.

"And where are you goin' to head for?" went on the hunter.

"We're going under the ocean to the south pole!" exclaimed the inventor, as he shut off the engine.



# A LAND OF ICE

"The south pole?" exclaimed Mark.

"Way down dat way!" cried Washington.

"Can you do it?" asked Jack.

"That remains to be seen," replied the professor, answering them all at once. "I'm going to try, at any rate."

"Hurrah!" yelled Mark. "It will be better than going to the north pole, for we will be in no danger of freezing to death."

"Don't be so sure of that," interrupted the professor. "There is more ice at the south pole than at the north, according to all accounts. It is a place of great icebergs, immense floes and cold fogs. But there is land beyond the ice, I believe, and I am going to try to find it."

"It will be a longer voyage than to the north pole," said Jack.

"Jest de same," argued Washington, "de poles am at each end ob de world."

"Yes, but we're quite a way north of the equator now, and we'll have to cross that before we will be half way to the south pole," explained Jack. "But I guess the *Porpoise* can make good time."

"If the engine behaves under water as well as it did just now, we'll skim along," said the professor.

"And so you figure there's land down there to the south, do you?" asked old Andy.

"I do," replied the inventor. "I can't prove it, but I'm sure there is. I have read all the accounts of other explorers and from the signs they mention I am positive we shall find land if we ever get there. Land and

an open sea."

"And other things as well," muttered Andy, yet neither he nor any of them dreamed of the terrible and strange adventures they were to have.

The next few days were busy ones. Many little details remained to perfect in connection with the ship, and a lot of supplies and provisions had to be purchased, for the professor was determined to get all in readiness for the trip under the water. He believed firmly that his ship would work, though some of the others were not so positive.

"We'll put her into the water to-morrow," announced the inventor after supper one night. "Everything is complete as far as I can make it, and the only thing remaining is to see if she will float, sink when I want her to, and, what is most important, rise to the surface again. For," he added with a twinkle in his eye, "anybody can make a ship that will sink, but it isn't every one who can make one that will come to the surface again."

"Golly! I hope dis chile ain't goin' to git in no subicecream ship what'll stay down under de water so de fishes gits him!" exclaimed Washington, opening his eyes wide. "Dat's worser dan freezin!"

"Can't you swim?" asked Mark with a wink at Jack.

"Co'se I can swim, boy. I can swim like a starfish, but I can't wif ten thousand tons of a subicecream ship on my back."

"A sub-ice-cream ship is a new one," commented the professor with a smile. "It's a submarine, Washington."

"I can't see no difference," persisted the colored man. "Subicecream am good enough for me."

That night Mark and Jack were thinking so much of the proposed test of the ship the next day that they each dreamed they were sailing beneath the waves, and Jack woke Mark up by grabbing him about the neck during a particularly vivid part of the vision.

"What's the matter?" inquired Mark, sleepily.

"I thought the ship turned over and spilled me out and I was drowning," explained Jack. "I grabbed the first thing I got hold of and

it happened to be you."

"Well, as long as you're safe you can go to sleep again," said Mark. "I dreamed I was chasing a whale with the *Porpoise*."

The boys were up early the next morning, and found the professor and Washington before them. The inventor was inspecting the track which had been built from the shed down to the water's edge to enable the *Porpoise* to slide into the ocean.

With him were the two machinists, Henry Watson and James Penson. They had been busy since daylight making the ways secure.

"She goes in after breakfast," announced the professor, "and I'm going to let you christen her, Washington."

"Me? I neber christened a ship," objected the colored man.

"Nothing like learning," remarked Mr. Henderson.

"Has you got the bottle ob wine?" asked Washington.

"I guess soda water will do," said the inventor. "Now look sharp, boys. Get your breakfasts and we'll see if the ship will come up to our expectations."

No one lingered over the meal. When it was finished the professor gave Washington a few instructions about breaking the bottle over the nose of the *Porpoise* as she slid down to the water, for there was no bow to such a queerly shaped vessel as the submarine.

At last all was in readiness. The two machinists knocked away the last of the retaining blocks and eased the ship slightly down the well-greased timbers of the ways.

"There she goes!" cried the professor. "Break the bottle, Washington!"

"In de name ob de Stars an' Stripes, in de name of liberty, de home of the free an' de land ob de brave, I names yo' *Mrs. Porpoise*!" cried the colored man, but he was so long getting the words out, and so slow in swinging the bottle of soda, that the ship was quite beyond his reach when he had finished his oration. He was not to be outdone, however, and, with a quick movement he hurled the bottle at the moving ship. It struck the blunt nose squarely, and

shivered to pieces.

"Three cheers for de south pole!" yelled Washington, and the others joined in.

The next instant the *Porpoise* was riding the waves of the little bay, dancing about as lightly as a cork, though, from the nature of her construction, she was quite low in the water, only about three feet of freeboard showing where the platform was located.

"Well, she floats, anyhow," remarked the professor. "Row out and fasten cables fore and aft," he went on, turning to the two machinists. In a few minutes the *Porpoise* was fastened to a small dock with strong ropes the two young men had carried out to her in rowboats.

"We will go aboard in a little while," the professor said. "I am anxious to see if she rides on an even keel and how the sinking tanks work."

Aided by the boys, he and Washington carried on board a number of tools and appliances. Then, with the two machinists, they all descended into the interior of the craft through the small manhole in the middle of the deck or platform.

Inside the *Porpoise*, the greater part of which was below the surface of the waves and consequently in darkness, the professor switched on the electric lights and then he proceeded to get up steam.

The propelling power of the craft has already been described. In order to make the ship sink beneath the water all that was necessary was to incline the rudder and open certain valves in the four tanks, when the water, rushing in, would sink her. There was a tank on either side, and one each fore and aft. If it was desired to sink straight down all four tanks were filled at once. If the professor wanted to descend slanting either to the front or back, only one of the end tanks was filled, according to the direction desired. The deflecting rudder also aided greatly in this movement.

To cause the ship to rise the tanks were emptied of the water by means of powerful pumps. The filling of the tanks, as well as the

emptying of them, the starting or stopping of the engine that moved the boat, as well as the control of most of the important machinery on the craft could be accomplished from the conning or steering tower, as well as from the engine-room.

There were numerous gages to tell the depth to which the ship had sunk, the steam pressure, density of the water, and other necessary details.

There were dynamos to make light, motors to run the pumps, and a great storage battery, so that in case of a breakdown to the turbine engine the craft could be run entirely by electricity for a time.

The cooking was all done by this useful current, and all that was necessary to make a cup of coffee or fry a beefsteak was to turn a small switch of the electric stove.

The professor was busy over the machine for generating gas, that furnished the heat to create steam. Soon a hissing told that it was working. In a few minutes the hum and throb of the engine told that it was ready to start.

"We are only going down a little way," the professor said, "and only going to travel a short distance under water for the first time. I think there is no danger, but if any of you want to back out, now is your chance."

No one seemed inclined to withdraw, though Mark said afterward he thought Washington got as pale as it is possible for a colored man to get.

"We will all put on life preservers," the inventor went on, "and one of you will be stationed near the emergency exit. In case anything goes wrong, and I cannot make the ship rise, by pulling the lever the top of the craft will be forced off, and, we can at least save our lives. I think we are all ready now. Mark, you clamp down the manhole cover, and Jack, after you close the conning tower station yourself at the emergency lever after we have donned the life preservers."

The cork jackets were adjusted and Mark clamped the manhole cover on. The professor took one last look at the various levers and



handles, and then turned the wheel that admitted water to all four tanks. There was a hissing sound as the sea water rushed in, and the *Porpoise* gave a sudden lurch.

Then they could all feel the submarine sinking. Down and down she went. Would she ever stop? Would the professor be able to raise her again? There were questions that troubled everyone.

Down and down the craft sunk, until by the gage it was indicated that she was twenty feet below the surface. Then the professor shut off the inrush of water and the *Porpoise* floated away below the surface of the waves.

There was a clicking sound and all the lights went out. The boys and Washington gave a gasp of terror. What did the sudden blackness mean.

"Open the side windows," called the professor's voice, and the two machinists obeyed. Heavy steel doors that covered plate glass windows in either side of the craft were pulled back, and a cry of astonishment broke from the boys.

They looked out and saw staring in at them, so close it seemed that they could touch them, scores of fishes that looked in through the glass bull's-eyes.

For the first time they realized that they were in the depths of the ocean.



# RUNNING DOWN A WARSHIP

"How do you like it?" asked the professor.

"Great!" exclaimed Jack.

"Fine!" cried Mark.

"It am simply coslostrousness!" exploded Washington. "'Nebber in all my born days did I eber expansionate on such a sight!"

"Wish I had a fishing pole and line," remarked Andy Sudds. "There's some pretty nice specimens out there."

"You'll see better ones than those before we finish our trip to the pole," remarked the professor. "Now we will try moving forward. I am going into the conning tower."

He turned on the lights once more, but the boys begged him to shut them off, as they could see out into the ocean when the interior of the ship was in darkness. So the professor obliged them.

In the tower he switched on the powerful searchlight that illuminated the path in front of him. Then he started the engine, slowly at first, and gradually increasing the speed. The *Porpoise* forged ahead, riding as evenly as an ordinary ship does on the surface.

The professor steered her about in a large circle, bringing her back to the starting point. She worked as smoothly as if she had been used to under-water service for years.

"Now," said the inventor, "we will see if we can go up to the surface again," and there came a little note of anxiety into his voice. He slowed down the engine and started the powerful pumps that were to empty the tanks. For a moment there was a feeling of terror in the

hearts of all. Would the pumps work?

Then, slowly but surely, those aboard the *Porpoise* felt her beginning to rise. Up and up she went as the tanks were emptied and the ship lightened.

Then, with a bounce like a rubber ball, the submarine shot upward to the surface and lay undulating on the waves caused by her emergence from the depths.

"Hurrah!" shouted Jack. "We're all right!"

"We shore am!" exclaimed Washington.

"It's a success!" Professor Henderson almost whispered. "The pumps worked. The *Porpoise* has fulfilled my greatest expectations!"

Then he steered the ship back to the dock, where she was moored, and the adventurers disembarked.

"One or two little details to attend to, and we'll be ready for the great trip," remarked the professor. "I want to give her a little harder trial before I trust her, though she seems to be first-rate."

They all went back to the combined machine shop and cabin, where they had lived during the building of the submarine. Dinner was prepared and, after the meal the two machinists approached the professor.

"I don't suppose you need us any more," remarked Henry Watson. "The ship is finished as far as we can do anything, and we may as well leave now. We have an offer to go to work in an electrical shop."

"I haven't said much to you about my plans," the professor replied, "but if you would like to remain in my employ, I can promise you an interesting trip."

"Thank you, but I prefer to work above ground," said James Pensen. "You have been very kind to us, and we would do anything we could for, but we don't want to take any long under-ocean trips if we can help it."

"Very well," answered the professor, though he seemed disappointed. "I will pay you what I owe you and you can go."

For some time after the departure of the two young machinists the

inventor seemed worried.

"Did you count on them staying with you?" asked Mark.

"I rather hoped they would," replied Mr. Henderson. "We need two more hands if we are to make the trip. They need not be machinists, but we will have to have someone, and I don't like to get strangers. They might talk too much about the ship."

At that instant there came a rap on the door. Washington answered it.

"Yas sir, Perfesser Henderson done lib here," he replied, in answer to a question from some one. "But he am bery busy jest at de present occasioness an' he'll be most extremely discommodated if yo' obtrude yo' presence on him at de conglomeration ob de statutory limitations, which am to say right now. Come again!"

"It's the same old Washington!" said someone outside, laughing heartily. "Just you tell the professor we want to see him most particular."

At the sound of the voice the professor started and Mark and Jack wondered where they had heard it before.

"Show the gentlemen in, Washington," called the inventor.

"Dere's two ob 'em," objected the colored man.

"Show them both in, then."

Washington opened the door of the cabin, and in came two men, who seemed much amused over something.

"What can I do for you?" asked the professor, in rather a sharp voice.

"He don't know us either, Tom," remarked the taller of the two.

"If it ain't Bill Jones and Tom Smith!" exclaimed Andy Sudds.

"Wa'al I'll be horn swoggled. Where'd ye come from?"

"Right from the farm," replied Bill. "And we've had a hard job locating you. I guess Washington didn't know us since we raised beards," and Bill stroked his wealth of brown whiskers.

"And I guess we sort of fooled the professor," went on Bill, "eh, Tom?"

"Right!" said Tom. "You see," he went on, "the farming business is almost over, as its coming on fall now, so Bill and I thought it would be a good time to hunt up the professor. We heard he was down in this neighborhood so we come by easy stages. We didn't have any time to stop and make our toilets, hence our beards."

"You've come at the right time," remarked the inventor, as he came forward to welcome the two young men. "Do you remember the trip you made with me to the north pole?"

"I guess we'll not forget it in a hurry," replied Bill.

"That's what made us hunt you up," put in Tom. "We hoped you might have something similar on foot."

"I have," answered the inventor.

"What is it?"

"A trip under the ocean!"

For an instant the two young men hesitated. It was a new proposition to them. Yet they recalled that they had come safely back from the journey through the air.

"Do you want to go along as part of the crew?" asked the inventor, after some further conversation.

"You can count on me!" cried Bill.

"And if Bill goes I'll go too!" exclaimed Tom.

"Under the seas or over the seas, it'll be all one to us if Professor Henderson sails the ship!" went on Bill. "We'll go!"

"Good!" ejaculated the professor. "You certainly came at just the right time."

As Tom Smith and Bill Jones were hungry a hasty meal was prepared for them, during the eating of which they told of their experiences since landing from the airship. They had been on a farm until fired with a desire to go roving once more.

For the next few days the professor, the boys, and the other four were busy making some improvements to the *Porpoise*. Tom and Bill were much astonished at their first sight of the queer craft, but they soon became accustomed to her, and said they preferred her to the

airship.

"To-morrow we are going on a little longer trip than our first trial," announced the inventor one evening. "We will be gone all day if nothing happens to make the stay more lengthy," he added grimly. "So, Washington, put plenty to eat aboard."

A little later, when supplies had been put on the *Porpoise*, and the machinery well overhauled, the professor explained that he intended making a trip, entirely under water, from the dock in the cove to a point off the Massachusetts coast and return.

Early the next morning all were aboard. To each one was assigned a particular station. Washington, with Mark as an assistant, was in the engine-room. Jack was to watch the various gages and registers to give warning of any danger. The professor, of course, would be in the conning tower and operate the craft. Andy was to be with him, to watch out, with his sharp eyes, for any danger that might loom up in the path of the searchlight. Tom and Bill were to be ready to help where needed.

With a hissing sound the water filled the tanks and the *Porpoise* sunk beneath the waves. The engine that worked the endless screw was started, and the threads, working on the water cable, shot the boat ahead.

"We're off!" yelled Washington.

About sixty feet below the surface the craft was sent along. Mile after mile was covered as shown by the patent log. The lights were turned off, and through the thick plate glass windows the strange inhabitants of the sea were observed.

"I think I'll go a little nearer the surface," said the professor to Andy. The inventor started the pumps that emptied the tanks. The craft rose slightly.

"Quick! Stop her!" shouted the old hunter, grasping the captain's arm.

Something black, like a grim shadow, loomed up in the dull glare of the searchlight.

"What is it?" cried the professor.

"We're goin' to hit somethin' hard!" yelled Andy.

"It's the hull of a ship!" exclaimed the inventor as he jammed the reversing lever hard over.

It was too late. The next instant the *Porpoise*, with a shock that made her shiver from stem to stern, collided with the steel side of a small warship.





## IN THE MIDST OF FIRE

"Pull the secondary emergency lever!" cried the professor through the speaking tube to Washington. "We must reach the surface at once!"

"Are we damaged?" asked Andy, scrambling to his feet, for the shock had knocked him down. The professor had not fallen because he clung to the steering wheel.

The ship gave a sudden lurch.

"We're sinking!" cried Bill, rushing to the conning tower from the engine-room.

"That's only the action of one of the emergency levers," said the professor calmly. "It forces compressed air into the tanks the more quickly to empty them of water. I think we are safe."

"What is it?" asked Mark, as, followed by Jack, he came forward.

"We tried to do the torpedo act to one of Uncle Sam's ships," explained Andy.

The electric lights had been switched on, and, with the *Porpoise* flooded with the bright beams, those on board waited anxiously for what was to happen next.

Suddenly an upward motion was experienced. The next instant the craft bounced out of the water and fell back in a smother of foam, shaking and shivering, alongside a small armored warship that was anchored about two miles and a half from shore.

"Open the manhole," commanded Mr. Henderson.

Mark sprang up the iron ladder that led to the opening in the deck of the *Porpoise* and threw back the cams that held the heavy iron in

place. Then he swung the cover back and stepped out on the small platform, followed by the professor, Andy and Jack. They looked up to find themselves observed by a curious throng that crowded to the rail of the warship.

[Illustration: A CURIOUS THRONG CROWDED TO THE RAIL OF THE WARSHIP.—Page 28.]

"What are you trying to do? Ram me with a new-fangled torpedo?" asked an angry voice, and a man in a gold laced uniform, who, from his importance plainly showed himself to be the captain of the ship, shook his fist at Mr. Henderson.

"I might ask what right your ship has to get in my path," replied the inventor. "It was all an accident."

"Mighty queer," muttered the naval commander. "Looks very suspicious. How do I know but what you're a torpedo from some foreign nation?"

"Because this is not a torpedo," replied Mr. Henderson. "It is a new submarine boat of my invention, and I was giving it a trial spin."

"I guess you'd better come aboard and do your explaining," went on the captain. "I don't like the looks of things. Lower a boat!" he shouted, "and bring those chaps to my cabin. I want to question them."

It did not suit Professor Henderson to have his plans upset in this fashion. Nor did he care to give a detailed description of his ship to officers of the war department. He had many valuable inventions that were not patented. So he determined to outwit the pompous commander of the cruiser.

The noise made in preparing the small boat for lowering over the side of the big ship could be plainly heard.

"Go below, all of you, and as quietly as you can," whispered Mr. Henderson.

Andy, Mark and Jack obeyed. At that instant the side of the warship was almost deserted, for the sailors who had gathered to observe the *Porpoise* had gone to lower the small boat.

No sooner had Jack, who was in the rear, disappeared through the manhole than the professor, with a quick jump, followed him.

"Here! Come back!" shouted the warship's captain as he saw Mr. Henderson's head disappearing from view. "Come back I say!"

But with a quick movement the inventor pulled down the manhole cover and clamped it. Then he sprang to the conning tower, and, with a jerk, opened the levers that admitted water to the tanks. The *Porpoise* began to sink slowly, and then more suddenly, so that, in less than a minute, she was out of sight beneath the waves, and the angry, gold-laced captain was staring in wonderment at the place where the submarine had been. The spot was marked only by a few bubbles and some foam.

"I guess he'll wait some time for an explanation," spoke Mr. Henderson, as he started the big screw and sent the *Porpoise* ahead at a swift pace.

"That was rather a narrow escape," observed Jack, standing at the foot of the conning tower stairs and talking to Andy and Mr. Henderson, who was steering.

"It certainly was," agreed the professor. "I have not yet become used to seeing things very far ahead in the dimness caused by being under water. But we'll soon get used to it. Luckily, the *Porpoise* was not damaged by the shock."

For several hours the *Porpoise* was kept on her course. She behaved handsomely, and nothing excepting slight and easily remedied defects were found. The professor steered well out to sea, increasing both the forward speed and the depth to which the vessel sank. Presently the craft came to a stop with a little jolt.

"What's the trouble?" asked Mark, somewhat alarmed.

"Nothing at all," replied the professor with a smile, as he stepped out of the conning tower and entered the engine-room. "I thought it was time for dinner so I stopped the ship. We are now resting on the ocean bed, about half a mile below the surface. Look!"

As he spoke he slid back the slides covering the plate glass

the windows. The boys saw that the ship rested in the midst of an immense forest of sea weed. Some of the stalks were as large around as trees. In and out among the snake-like, waving branches swam big fishes. It was a weird, but beautiful sight.

"Come, Washington, serve dinner," ordered Mr. Henderson, and the colored man soon had a good meal prepared. Few repasts have been eaten under such strange circumstances.

Desiring to be back at his secluded dock by nightfall, Captain Henderson soon started the *Porpoise* up again. Without any accidents the return trip was made and by nine o'clock the *Porpoise* rode safely at the dock where she had been launched.

The night was spent in the cabin on shore. Early the next morning Mr. Henderson paid a visit to the ship, to make a thorough examination by daylight, and see if the craft had suffered any damage.

"I think you and Mark will have to make a trip to town," he said to Jack at the breakfast table. "I need a new monkey wrench and some other tools and some small pieces of machinery. I'll give you a list of them, and you can bring them back in a valise, for they will be quite numerous."

After the meal the inventor made a record of what he needed and the boys started off.

"In case the machine shop does not have everything and you have to wait for something, you had better stay in the town all night," the captain of the *Porpoise* said. "It is quite a long trip and I don't want you traveling after dark. Put up at the hotel if you are delayed."

Provided with money for their purchase, and a large valise in which to carry them, the boys started off. They had to walk two miles to where a trolley line was built that ran to the town of Easton, where they were to get the tools and parts of machinery.

They made the trip safely and without incident. When they gave the machinist, to whom they had been directed by Mr. Henderson, the list of the things needed, the man looked puzzled.

"I'll have to make one piece," he said. "You'll have to wait for it. Can't promise it before to-morrow morning about eight o'clock."

"That will be all right," remarked Mark. "We'll call for it then."

So, bearing in mind Mr. Henderson's instructions, the boys engaged a room at the hotel, which was quite a large one, for Easton was a favorite summer resort and the town was filled with visitors. The lads strolled about the town, had their dinner, and then went for a bath in the surf. They retired early, for they were tired.

In the middle of the night Mark began to dream that he was on board the *Porpoise* and that the submarine blew up. There was a loud noise, he saw a bright flash of flame, and saw rolling clouds of smoke. So vivid was the vision that he thought he tried to leap out of the boat, and awoke with a jump, to find Jack shaking him.

"What's the matter?" inquired Mark.

"The hotel's on fire!" shouted Jack.

Mark sprang out of bed and with Jack rushed to the window, for their room was filled with thick smoke. They could see the dull glare of flames, which every moment were becoming brighter.

The next instant a loud explosion shook the building. It swayed and seemed likely to topple over. Outside the boys could hear excited shouts and the puffing and whistling of fire engines.

"Quick! Run!" yelled Mark. He opened the door leading into the corridor, but was driven back by a rush of flames and smoke that almost stifled him.

"We must try the fire escape!" shouted Mark.

"Don't forget the valise with the tools," exclaimed Jack, and Mark hastened to where he had placed it under the bed.

Then the two boys rushed to the balcony on which their front windows opened, and whence the fire escapes led down to the streets. The lads had only time to slip on their coats, trousers, shoes and caps.

As they were preparing to clamber down the iron ladders they heard someone on the balcony next to them shout:

"Here, you boys! Stop! I want you!"





## A GRAVE ACCUSATION

"We haven't time now!" yelled back Mark, looking in the direction of the voice, and seeing a short, stout man, who appeared greatly excited.

"Stop or I'll shoot!" the man exclaimed.

"The fire must have made him crazy," said Jack. "Go on, Mark, it's getting hot up above!"

Mark did not linger on the ladder and soon the two boys were in the street, surrounded by an excited crowd.

"Are you hurt?" asked several.

"I guess not," replied Mark. "What caused the fire?"

"Some sort of an explosion," answered a policeman. "Part of the hotel was blown up. If you boys wish you can go to a station house where you'll be comfortable until morning."

"I guess we will," said Mark.

They started to work their way through the crowd but did not notice that the strange man followed them. The fire was now burning fiercely, and once they had gotten clear of the press the lads halted to look at the spectacle.

The hotel was now a mass of flames and the firemen were kept busy. What with the puffing of engines, the whistling of the steamers, the roar of the flames, and the shouts of the crowd, pandemonium reigned.

The boys watched the fire for some time. Gradually the flames came under the control of the men and the leaping tongues died out.

"I guess we'd better go to the police station," suggested Jack.

Mark agreed this would be a good thing to do, as both of them felt rather chilly in the night air with only half of their clothes on. They inquired their way of the first policeman they saw, and he volunteered to escort them.

"Sure an' you'll have plenty of company," he said. "The hotel was full an' the people have no place to go except to the lock-up. Some swells will be glad to take a place behind the bars to-night I'm thinkin'. I wonder how some of those English aristocrats will like it?"

"English aristocrats?" repeated Jack. "Are any here?"

"Sure. There's a lot of them burned out. Lord Peckham was stoppin' at the hotel with a big crowd of people, an' their apartments was all destroyed. Some of 'em went to the police station."

The boys followed their uniformed guide through the streets of Easton, and were soon at the station house. There they were received by the sergeant in charge, while the matron gave them each a cup of hot coffee, a large pot of the beverage having been brewed.

"I'll have to give you boys one bed between you," said the sergeant. "We're rather crowded for room to-night."

"Anything will do us," said Jack with a laugh.

Just then there was some excitement at the entrance of the police station.

"I tell you they're in here! I will see them!" a voice exclaimed. "I want them arrested at once!"

"Go easy now," counseled the doorman as he tried to hold back a short, stout, excited man who was pushing his way into the station.

"There they are!" exclaimed the man, pointing to Jack and Mark.

"Why those boys are from the burned hotel," said the doorman.

"I know it! They are the very ones I want!"

"What do you of us?" spoke up Mark. He recognized the man as the one who had called to him as he and Jack were escaping.

"I charge you with being sons of James Darrow, the notorious English anarchist!" cried the little man, pointing his finger at the boys,

"and I accuse you of trying to kill Lord Peckham with a bomb, the explosion of which set fire to the hotel!"

For a moment the surprising charge so astonished every one that not a word was said. Then the little man, advancing toward the boys went on:

"I arrest you in the name of His Royal Highness, Edward VII, King of England, Scotland and Wales."

He threw back the lapel of his coat and showed a badge.

"King of England, Scotland and Wales, is it!" exclaimed the doorman with a twinkle in his eye. "An' why didn't ye say Ireland into the bargain."

"Ireland, of course," went on the little man. "I'm an officer of His Most Gracious Majesty," he added, "and I demand the assistance of the United States authorities in general and the police of Easton in particular in taking these desperate criminals into custody!"

"Hold your horses," advised the desk-sergeant. "Those boys are not liable to run away. They're to stay here over night, and if you have any charge to make against them why you'll have to come and see the judge in the morning."

"But they are sons of an anarchist! They are anarchists themselves!" exclaimed the man, "I must arrest them!"

"You're not going to arrest anybody," said the sergeant, "until you get a warrant from the judge. This isn't England."

"Then I'm going to stay with these boys the rest of the night," insisted the man. "I can't take any chances on their giving me the slip."

"This place is going to be crowded with people from the burned hotel," objected the sergeant. "There will be no room for you. Besides, how do I know these boys are anarchists?"

"Look in their valise," cried the stranger. "It is filled with bombs."

"You can't look in this satchel," exclaimed Jack, for he remembered the valise contained parts of the professor's secret machines.

"What did I tell you?" cried the Englishman with triumph in his tones. "They are the guilty ones. They are afraid to open their valise."

"We are, but not because it has bombs in it," said Mark. "It has parts of an unpatented machine and the owner does not want any one to see them," for Mark remembered Mr. Henderson's strict injunctions to let no one but the mechanist to whom they had gone catch a glimpse of the parts that were to be duplicated. The machinist was sworn to secrecy.

"It's none of our affair," said the sergeant, though he seemed a little impressed by the Englishman's words and the reluctance Mark and Jack showed to letting the valise be opened. "The boys will be here until morning, and then you can see the judge. Now you'll have to get out. You boys get to bed."

Muttering threats, the stranger went from the station house, and Mark and Jack, in response to a nod from the doorman, followed him upstairs to a part of the police station used to detain witnesses. They were shown to a small room with a single bed.

"Are ye really anarchists?" asked the doorman.

"Not a bit," replied Jack, and he told as much of their story as he dared.

"I was kind-of hopin' ye was," said the officer with a twinkle in his eye. "It wouldn't do any harm to scare that uppish Englishman a bit. Sure he an' his kind have done enough to poor old Ireland."

"I'm sorry we can't oblige you," said Mark with a laugh.

"I guess ye're all right," went on the doorman. "I hope ye sleep good the rest of the night."

Then he left them alone. What with the excitement of the fire and the startling accusation against them, the boys' brains were too excited to let them sleep much. They had a few fitful naps throughout the remainder of the night.

It was just getting daylight when Mark was awakened by some one shaking him.

"What is it?" he asked. "Another fire?"

"Not this time," replied a voice, and Mark, now that his eyes were fully opened, saw the doorman bending over him.

"What's the matter?" asked Jack waking up in his turn.

"Easy!" exclaimed the doorman in a whisper. "I happened to think ye might want to be leavin'."

"Leaving?" asked Mark in bewilderment.

"Yes. Ye know that Englishman is liable to be back any minute, an' he may make trouble for ye. I know ye're innocent lads, an' I'd hate to see ye mixed up in a mess with that fellow. So I slips up here early, an' ye can leave by the back door if ye want to, an' the officer of His Imperial Majesty, King Edward VII, will never know a thing about it."

"It looks like running away," objected Jack.

"Sure there's no charge agin ye," went on the doorman. "Ye're free to come an' go as far as we're concerned, an' ye'd better go whilst ye have the chance."

Jack reflected. It was true that the charge of the Englishman, baseless as it was, might make trouble for them, and cause them endless delays in getting back to Professor Henderson. Suddenly Jack made up his mind.

"Come on Mark," he said.



# ON A RUNAWAY TROLLEY

"Are you going to leave?" asked Mark.

"Certainly. There is no use staying here and getting mixed up in something that Englishman thinks we have done. It's easier to go away quietly and let him find out his mistake."

"All right," agreed Mark. "I wonder who he is, anyhow?"

"He thinks he owns the earth, whoever he is," returned Jack.

"He's some sort of a special detective traveling with Lord Peckham's party," explained the doorman. "He told us a lot about himself last night after you boys went to bed. He came back to inquire how early the judge would be here."

"He went on to tell how some English anarchists have vowed to kill Lord Peckham because he foreclosed a lot of mortgages on some poor people in Ireland where he owned property," added the doorman. "There was some sort of explosions in the hotel, near where Lord Peckham had his rooms. Maybe it was a bomb and, maybe ag'in it was only the boiler. Anyhow, this detective jumped to the conclusion that anarchists had done it, and he thinks you are responsible. But you'd better be goin' now. It's gettin' daylight."

So Mark and Jack, with what scanty clothes they had, and carrying their valise, went quietly out of the back door of the police station.

"We'd better go to the machine shop for the rest of the stuff," suggested Mark, "and then we can take the first trolley we see and get back to the professor."

Through quiet side streets the boys made their way toward the

machine shop. They were somewhat amused to think how they had fooled the detective, but they would not have felt so jolly had they seen the roughly dressed man who had darted after them as soon as they left the police station.

"I'll get you yet," the man muttered. "You needn't think to escape with the aid of these bloomin' American police."

The lads found the machinist just opening his shop though it was quite early. The pieces of apparatus were finished and, after paying for them Mark put the parts in the valise.

"Quite a fire in town," observed the machinist.

"Yes," answered Mark, not wishing to get into a long conversation.

"Heard the hotel was blowed up by anarchists and that the police are after 'em," proceeded the man.

"I believe I did hear something like that," admitted Mark. "I guess we'll be going."

He signalled to Jack, and the two hurried out of the shop. As they did so, the trampish-looking man glided from behind a tree where he had been hiding and took after them.

"Say," exclaimed Jack, "I forgot we haven't had any breakfast yet."

"That's so," said Mark, rubbing his stomach and making a wry face.

Near by was a bakery, and there the lads got some coffee and rolls which tasted fine. When they finished their simple meal a trolley came past and they ran to catch it. So did the man who had been following them, but this person bore no resemblance to the spruce little detective who had wanted to arrest the boys.

"A couple of hours now and we'll be back at the cabin," spoke Mark. "My, but I must say we have had strenuous times since we started away!"

There were few passengers on the trolley so early in the morning and not many stops to make, so the motorman turned on the power full and made the vehicle speed along.

Mile after mile was covered and finally the car reached the top of a



long hill. At the foot of the line came to an end, and the boys had a two mile tramp before them to reach the lonely spot where the *Porpoise* was docked.

Down the hill the car started. The motorman shut off the electricity and let the vehicle run by its weight.

Faster and faster it ran, the dust flying in a cloud about it.

"Better put the brakes on a bit," called the conductor. "It's gettin' kinder speedy, Hank!"

The motorman twisted the handle. There was a grinding noise as the shoes took hold on the wheels. Then a chain snapped and the car seemed to leap ahead.

"The brake's busted! I can't stop the car!" yelled the motorman.

Vainly he twisted at the handle. Then, seeing he could not stop the trolley car he made a desperate jump off the vehicle and landed in a heap on the side of the road, rolling over and over.

"Reverse the current!" cried one of the passengers, to the conductor. "That ought to stop her!"

The conductor made his way to the front platform and turned the reversing lever. Then he applied the current. But it was no use. With a blinding flash and a report like that of a gun a fuse blew out, and that crippled the car completely so far as the electric current was concerned.

"Everybody jump!" cried the conductor. "There's a curve at the foot of the hill, and we'll all be killed if we stay on!"

One by one the passengers leaped from the car. Several were badly hurt by the falls they got. Meanwhile the trolley was tearing down the hill at a terrific rate of speed.

"Shall we jump?" asked Mark of Jack.

"We'll be killed if we do," was Jack's answer.

"And we'll be killed if we stay aboard," said Mark.

"Not if I can help it," cried Jack as he started for the rear platform.

"What are you going to do?" asked Mark.

"Put on the other brake. They never thought to try this one! Maybe it

will work and stop the car!"

Then Mark saw what Jack was up to and went to help him. The shabbily dressed man seemed undecided what to do. He stood up, holding to the straps to prevent himself from being tossed from side to side as the runaway trolley swayed. He watched the boys curiously.

The lads, reaching the rear platform, twisted at the brake handle with all their strength. They could feel that the chain was still intact. But would the shoes grip the wheels with force sufficient to stop the car?

There was a shrill screech as the brakes were applied by the boys. With all their might they turned the handle, winding the chain up tighter and tighter. At last they could not budge it another inch. Then they waited anxiously.

The car never slackened its speed. So great was the momentum that had both sets of brakes been in working order it is doubtful whether they would have stopped the vehicle. The speed was so great now that one of the journals became hot and the oily waste that was packed in it caught fire, making what railroad men term a "hot box".

"I guess we're done for," groaned Mark.

"We certainly haven't checked the speed any," Jack admitted. "But wait a minute."

He began stamping on the floor of the platform.

"What you doing?" cried Mark, for he had to shout to make his voice heard above the roar and rattle of the car.

"Putting on the sand," replied Jack, as he kicked at the plunger which, being depressed, let a stream of fine gravel out on the rails. "The wheels are gripped I think, and are slipping on the rails. This may help some."

"Let me give you a hand," exclaimed a voice, and the boys turned to see the shabby man standing with them on the platform. He grasped the brake handle, and gave it an additional turn. His strength seemed remarkable for so small a man.

The speed of the car was checked a little, but the vehicle was still

speeding along at a rate that would soon bring it to destruction if not halted before the curve was reached.

"That's a little better," observed Mark. "It's a good thing you were here."

"Good for me, not so good for you," said the man with a peculiar smile.

"What do you mean?" asked Mark.

"I mean that I shall have to place you under arrest for attempting to assassinate Lord Peckham!" exclaimed the man. "I am Detective Ducket, of Scotland Yard!"

He stripped off a false beard he had donned, and threw back his coat, displaying his shield. He was the same man who had attempted to arrest the boys in the police station at Easton.

"I've got you just where I want you now," Detective Ducket went on. "There are none of those blooming American police to interfere."

The next instant the car gave a sudden lurch. Then it seemed to rise up in the air. Jack felt himself flying through space, and he observed Mark, who was clinging to the valise, following him.

There was a terrific crash, a ripping, tearing splintering sound, and the runaway trolley smashed into a big oak tree at the foot of the hill. The vehicle had completely jumped the track at the sharp curve.

Jack's eyes grew dim, and he seemed to be sinking down in some dark pool of water. He heard a splashing beside him and began to strike out, trying to swim. He seemed to be choking. Then the blessed air and daylight came to him, and he found he was floating on the surface of a pond.

He dashed the water from his eyes and saw, over on the bank, the wreck of the trolley. Then he noticed that Mark was swimming beside him.

"What happened?" asked Jack.

"A little of everything," panted Mark. "Lucky we weren't killed. We must have been flung off the rear platform into this duck pond."

The boys soon made their way to shore, unhurt except for the

wetting. The fall into the water had saved their lives.

"Where's the valise of machinery?" asked Jack.

"There it is," answered Mark pointing to where it had fallen at the back of the pond.

"And what became of Detective Ducket?"

"He's here, at your service!" exclaimed a voice. "Consider yourselves under arrest and don't you dare to leave this place without me."

The boys looked in the direction of the sound and saw the English officer lying on the grass not far away. He seemed in pain, but had raised himself on his elbow and was pointing his finger sternly at the boys.



# OFF FOR THE SOUTH POLE

"Are you hurt?" asked Jack.

"I think my leg is broken, but otherwise I'm not damaged," replied the detective. "Even if I am disabled, it makes no difference, you are my prisoners. I command you to stay here until help comes."

The boys did not know what to do. They did not like to see even an enemy suffer, but, at the same time, they knew he had no right to arrest them.

"Here comes a wagon," said Mark, catching the sound of wheels.

"Well, fo' de land sakes! Gollyation! What terrible catafterme hab occurred in dis unapproachable manner?" a voice demanded.

"It's Washington!" cried Mark, as he saw Professor Henderson's colored assistant driving along the road.

"Dat's who it am!" exclaimed Washington as he noticed the boys. "My! My! But am you boff dead?"

"No, only one of us," said Mark with a laugh, as he and Jack ran toward the wagon.

"Ha! Ha! Dat's one ob yo' jokes," said Washington. "But hurry up, boys. De pefessor he done sent me to meet you. He reckoned you'd becomin' ober on an early trolley. He's in a hurry to git away."

"Don't you boys dare to leave!" exclaimed Detective Duckett.

"Who's dat?" asked Washington.

"Never mind," said Mark. "He was hurt in the trolley smash, but not badly. We'll send help, from the first farm house we come to. Come on, Washington, we'll go with you."

The boys jumped into the wagon, and Washington started off. He explained that the inventor was anxious to make a start that day, as there would be an unusually high tide which would be followed a little later by a low one, and that would make it difficult to cross the harbor bar.

"So I hired dis wagon an' come after you," said the colored man.

At the first house they came to the boys stopped and told about the accident. The farmer agreed to go and get the detective and the others who were hurt and take them to a hospital.

"I guess we're rid of that detective now," observed Jack, as they started off again.

"Yes, but we're getting away under a cloud on our characters," said Mark. "I'd like to stay and see the thing through, if we had time."

"But we can't, and there's no use worrying over it," spoke Jack.

In a short time they were at the inventor's cabin, and related to Mr. Henderson all that had occurred.

"Well I guess your detective friend will have a hard time to find you in a few hours," said the old man. "We start on our trip for the south pole this evening."

There were busy times for the next few hours. Many supplies had to be placed on board, and, while the boys, with Tom and Bill, saw to this, the professor and Washington were occupied with putting the last touches to the submarine boat's machinery.

Most of the supplies from the cabin were placed in the *Porpoise*, including food and clothing and a good quantity of minerals that, with sea water, generated the gas that made steam.

An early supper was made on shore, as the professor said they might be so busy for the first few hours of the starting trip that they would get no chance to eat. Then the cabin and buildings where the submarine had been built, were securely fastened.

"I guess we're all ready," announced the professor, taking a last look around.

One by one they went aboard the *Porpoise* crawling down through

the man hole. The inventor was the last one to enter. He clamped the cover on by means of the cam levers and switched on the electric lights. Then he took his place in the conning tower with Andy Sudds.

"Forward, to the South Pole!" exclaimed Mr. Henderson.

With a turn of his wrist the inventor started the engines. The big screw in the shaft revolved, pulling the water in at one end of the craft and sending it out in a swirling stream at the other. The trip was fairly begun.

For several miles the *Porpoise* glided along on the surface of the ocean. It was a calm evening, and the boys down in the cabin of the craft could look into the reflecting mirrors on the wall, which were connected with observation magnifying glasses in the conning tower, and view what was going on, though their heads were below the surface of the sea.

As it grew darker the view of shore and water faded away. The engine kept up its speed with Washington to see to it every now and then, oiling the bearings, some of which did not run quite smoothly because of their newness.

"I'll send her down a bit now," observed the professor. "I don't want to run into any more warships or scare the crews by making them think we are a foreign torpedo boat."

He opened the sea cocks in the ballast tanks and soon the *Porpoise* sunk about two hundred feet beneath the waves. The craft, which had been pitching and tossing under the influence of a ground swell, became more steady and quiet once it left the surface.

The searchlight in the conning tower was turned on, and in the glare of it Andy and the professor were able to steer properly, aided by the compass which gave them the true southern course.

It was now quite dark. Additional electric lights were switched on in the cabin, engine and dining room. Andy came out of the conning tower and announced that Captain Henderson wanted Washington to get supper.

All the cooking was done by electricity, and, in addition to a supply



of the usual and ordinary kinds of food, there was a big lot of patent condensed victuals to draw on. Soup, broiled steak, potatoes, hot biscuits, rice pudding and coffee made up the repast which was enjoyed by all.

Toward the close of the meal Professor Henderson began to sniff the air of the cabin.

"What's the matter? Do you smell a storm brewing?" asked Andy.

"No, but the air is not as fresh as it should be," replied the inventor. "Washington, release a little more of the supply from the compression tanks."

The ship, which had been left to steer itself automatically while the professor was absent from the conning tower, was moving along at about half speed. The gage showed they were going at twenty miles an hour, and were three hundred feet below the surface.

"Washington and I will share the first night's watch between us," said the inventor, after the supper things had been cleared away. "There will not be much to do, as the ship will steer automatically in whatever direction I set her. Still I want to see how she behaves. The rest of you might as well go to your bunks."

The two boys were especially glad of a chance to go to bed, as they had had but little sleep the night before on account of the fire. So they lost no time in undressing and rolling up in the blankets, for it was quite cool so far down under the water.

"Well, we've slept on the earth, above the earth and now we're under the waters," observed Jack.

"There's only one place more to spend your time taking a snooze," said Mark.

"Where's that?"

"Inside the earth."

Then they fell asleep. During the night and the next day the *Porpoise* forged on underneath the waves. Washington relieved Mr. Henderson in the conning tower and reported the machinery to be working well.

"Keep her headed due south," was the order of the inventor, and the colored man did so.

It was about four o'clock one morning that Washington felt a slight jar to the submarine.

"Hope we ain't goin' to hit no more battleships," he said.

He glanced at the speed-indicating gage. To his surprise it stood at zero. The craft was not moving forward a foot! Yet the engines were going at half speed!

In great alarm Washington shut off the power and ran to acquaint Professor Henderson with the news.

"Suffin's ketched us!" cried the colored man.

"Nonsense!" said the inventor, yet he seemed alarmed as he slipped on his clothes and hastened to the conning tower.

He peered ahead along the path of water illuminated by the glare of the searchlight, but nothing was to be seen. Then he started the engine, increasing the speed gradually until the big screw in the shaft revolved more than one thousand times a minute. Still the *Porpoise* never stirred. She remained in the same position, as if some giant hand grasped her.

"Reverse the engine," said the professor.

Washington did so. To the surprise of both of them the ship shot backward like a frightened crab.

"Now forward!" exclaimed the old inventor.

But this time the *Porpoise* did not move. It was as if she was up against a stone wall.

"What's the matter?" asked Mark, who had been awakened by the excitement on board.

"I do not know," replied Mr. Henderson gravely. "Something mysterious has occurred. We can go no further!"



# ASHORE IN THE DARK

"Stop the engine," the captain commanded after he had peered through the lens in the conning tower for some time. "We must see what is the matter."

He glanced at the depth gage and noted that they were now four hundred feet below the surface. Then he consulted some charts.

"There is a depth of one thousand feet about here," he remarked. "Lower the ship, Washington. Let us see if by getting on the ocean bed we can get away from this obstruction."

The colored man opened wider the sea cocks by which the tanks were filled. The increased ballast sunk the *Porpoise* still lower, and, in a few minutes a slight jar told the navigators that they were on the bottom of the ocean.

"Now we will see if we have cleared the obstruction," said the professor.

He started the big screw to revolving, but the ship did not move. It shivered and trembled throughout its length but remained stationary.

"Maybe dar's a debil fish what hab circumulated dis ship in de exterior portion ob his anatomy," suggested Washington, rolling his eyes until only the whites were visible.

"I presume you mean that a giant squid or cuttle fish has attacked us," spoke the professor.

"Yas, sir," replied Washington.

"That's nonsense," went on the inventor. "However, we must make an investigation."

"How are you going to do it?" asked Mark. "You can't see the end of the tube from inside the ship, and, even if we went to the surface it would still be under water."

"We are going to look at it while here, under the ocean," said the inventor.

"Well, maybe you're a good swimmer," put in Jack, "but I don't believe you can stay under, in this depth of water, long enough to see what the trouble is."

"I think I can," answered Mr. Henderson.

"How?"

"I'll show you. Washington, bring out the diving suits."

The colored man, his eyes growing bigger every minute, went to a locker and brought out what seemed quite a complicated bit of apparatus.

"With the aid of these," said the professor, "I will be able to go out, walk along the ocean bed, and investigate the mystery. Do you boys want to come along?"

"Is it safe?" asked Mark, who was inclined to be cautious.

"As safe as any part of this under-sea voyage," replied the professor. "These diving suits are something I have not told you about," he went on. "They are my own invention. Besides the regular rubber suits there is an interlining of steel,—something like the ancient suits of chain mail—to withstand the great pressure of water. Then, instead of being dependent on a supply of air, pumped into the helmet from an apparatus in a boat on the surface, each person carries his own air supply with him."

"How is that?" asked Jack, and Mark also asked the question.

"Simply by attaching a little tank of the compressed gas to the shoulder piece of the suit," said the inventor. "There is enough air in the tank to last for nearly a day. It is admitted to the helmet as needed by means of automatic valves. In other respects the diving suit is the same as the ordinary kind, except that there is a small searchlight, fed by a storage battery, on top of the helmet."

In spite of their fears at venturing out under the great ocean, the two boys were anxious to try the suits. So, after some hesitation, they donned them.

"Here, take these with you," said the professor, before their helmets were screwed on. He held out what looked like long sticks.

"What are they?" asked Jack.

"Electric guns," replied the professor. "But come on now, we have no time to lose."

Further conversation was impossible, for the boys had their heavy copper helmets on, and they were as tightly enclosed as if inside a box. They grasped their weapons and waited for the next move.

The professor led the way to the stern of the ship. The boys found it hard to walk, as they were weighted down by the heavy suits, and also the boots, the soles of which were of lead.

They followed the inventor into what seemed a small room. Inside they found themselves in darkness. There was a clanking sound as Washington fastened and clamped the door shut. Then came a hissing.

The boys felt water rising about them. They could experience its coldness, even through the diving suits. They were much afraid, but the professor put a reassuring hand on their shoulders.

They seemed to feel a great weight. It gradually lessened, however, and, in a few minutes, they saw something move in front of them. The professor pushed them gently forward.

In another instant they were walking on the bed of the ocean, having stepped from the *Porpoise*. They had gone into a locked compartment, the inner door of which had been tightly closed, after which water from outside had been gradually admitted until the pressure was equal, and then the boys and the professor had merely to emerge out into the bottom of the sea when the outer portal was swung aside by Washington, who worked the lever from inside.

The boys were in intense darkness, but, suddenly a light glowed about them, and they saw that the professor had switched on his

miniature search lamp. They remembered how he had told them to work the apparatus, and soon tiny gleams shot out from their helmets.

The professor pointed ahead, for not a sound could be heard, and the boys followed him.

It was a new sensation, this walking along the bed of the ocean. At first the great pressure of water, even though the steel lined diving suits kept most of it off, was unpleasant. Gradually, however, the boys became used to it. They had to move slowly, for the water was denser than the air and impeded their progress.

In a few minutes they reached the forward end of the *Porpoise*. Now they were to solve the mystery of what had stopped the submarine. For a few moments they could distinguish nothing.

Suddenly the boys felt the professor grasping their arms. They looked in the direction he pointed. There in the diffused glare from the search light and the illumination of their helmet lamps they saw, wrapped about the forward shaft opening a gigantic squid or devil fish. Its soft, jelly-like body completely covered the opening of the shaft preventing any water from entering, and thus stopping any forward motion to the ship.

This was what had caused all the trouble. The *Porpoise* had run into the monster, who feeling what it must have thought an enemy, had grasped the submarine with its long sinuous arms.

The professor hesitated a moment. Then he slowly raised his electrical gun, and took aim at the hideous mass. The boys followed his example. At Mr. Henderson's signal they all fired together.

From the muzzles of the guns darted small barbs that carried with them a strong shock of electricity, from storage batteries in the shoulder pieces of the weapons. Three of them were enough to produce death in an animal as large as a whale.

The devil fish quivered. Then the water about it suddenly grew black, and the boys and the professor were in dense darkness, for the squid had dyed the ocean with a dark liquid from the sack it carried for the purpose.

The explorers groped their way to the left, having fortunately grasped hands after firing their guns, to prevent being separated in case the terrible fish began a death struggle.

Luckily Professor Henderson went in the right direction and managed to locate the *Porpoise*. Then, feeling along her steel sides, he led the boys through the inky blackness to the water chamber by which entrance could be had to the interior.

In a few minutes all three were safely inside and had removed their diving suits. The others crowded about, anxious to learn what had happened. The inventor related it briefly.

Once more the engines were started. This time there was no hanging back on the part of the *Porpoise*. The big screw revolved, the water came in the shaft and was thrust out of the rear end, making a current that sent the craft ahead swiftly. The gigantic fish had been killed, and its body no longer obstructed progress.

"Now we'll rise to the surface and see how it feels to sail along that way for a while," said the professor as he started the pumps that emptied the tanks. In a little while the ship was floating on the waves.

It was now night, and the clouds overhead made it so dark that it was hard to see ten feet in advance. The professor did not want to use the searchlight for he did not care to have his presence discovered by curious persons. So he ran the ship at half speed.

"Where are we now?" asked Mark, who had entered the conning tower, where the professor was steering.

"Somewhere's off the coast of South Carolina," replied the inventor.

The next instant there was a sudden shock and jar. The ship quivered from stem to stern, and came to an abrupt stop.

"We've hit something!" exclaimed the professor, shutting down the engines with a jerk of the lever.





# A PRICE ON THEIR HEADS

On board the *Porpoise* there was great excitement. Washington, with Andy, Tom, Bill and Jack came running from the engine room.

"What is it?" cried Jack.

"I don't know," answered the professor as calmly as he could.

"We'll soon see, however."

He switched on the searchlight and peered from the conning tower.

"Can you see anything?" asked Andy, anxiously.

"I can," announced the inventor.

"What?"

"Land," replied Mr. Henderson. "We've hit the coast."

"I hope we ain't done no damage," put in Washington.

"Do you mean to the coast or to us?" asked the professor, with a smile. "I guess there isn't much danger in ramming the shore excepting to the *Porpoise*. However, we do not seem to be in any immediate trouble."

He tested various wheels and levers, and announced that, aside from the jar, which might have started some of the machinery, the *Porpoise* was unharmed.

The cover of the man-hole was loosened and, one after another, the adventurers crawled out on the small deck or platform. It took them a little while to become accustomed to the darkness, but soon they were able to make out that they had run on the muddy bank of the ocean beach. The tide was low and the *Porpoise* had rammed her nose well into the soft muck, which accounted for the lack of

damage.

"Well, I guess there is nothing to do excepting to wait for morning," said Mr. Henderson. "It doesn't look like a very lively neighborhood about here. I don't believe we'll be disturbed."

Save for the splash and lapping of the waves and the sound of the wind, it was as quiet as the proverbial graveyard. Not a light showed on shore, and the gleam from the search lamp of the *Porpoise* cut the darkness like a small moonbeam.

"If there's nothing to do I'm going to turn in," said Andy. "I'm tired."

The professor said this was a good suggestion, and, leaving instructions that Washington and Bill were to divide the night's watch between them, the inventor sought his bunk.

The boys remained on deck a few minutes longer.

"We certainly are getting our share of adventures," remarked Jack.

"I should say so," answered Mark.

"Gollyation yes!" exclaimed Washington. "You-uns done most been eat by dat air koslostrous specimen ob a parralleledon! I'm glad I didn't go. But I'se brave enough!"

"What's that?" asked Mark suddenly, pointing to an object floating on the water.

Washington turned to behold something white drifting along.

"Oh my good land ob mercy! It's a ghost!" the colored man yelled. "It's a ghost! Land a' massy! Hide me some where, quick!"

Washington fell on his knees and stretched up his clasped hands in supplication. The boys gazed curiously at the white object that was slowly floating toward the stranded ship.

It rose and fell on the waves, with an odd motion.

"I wonder what it is," said Mark.

"We'll soon see," spoke Jack. "It's coming this way."

"Don't go near it! Don't touch it, boys!" pleaded Washington. "It'll put de evil eye on yo', suah! Turn yo' haid away!"

But the boys were not so easily frightened. The white thing did look queer, but Jack reasoned correctly that the darkness of the night

apprehended it, and made it appear stranger than it probably was.

"I'm going to try to get it," said Mark.

The white thing was now quite close. It resembled a bundle of rags, floating on top of the water, and, as it came nearer, it seemed to take on a curious form.

"It's a baby! It's de ghost ob a little dead baby!" cried the colored man. "Let it alone, I tell you!"

Indeed, now that Washington had suggested it, the boys could see a resemblance to a child in the white object. But this did not deter them. Jack secured a boat hook from where it was fastened to the platform. With it he gently poked at the white thing. The object seemed to collapse and Jack was conscious of a strange feeling. Then, with slow motions, he drew it close to the side of the ship.

Lying on his face he was able to get a good look at the thing. He muttered an exclamation.

"What is it?" cried Mark.

"Nothing but a newspaper!" announced Jack with a laugh, as he threw it on the deck. "All our trouble for nothing."

"I shore thought it were a ghost," cried Washington as he got up from his knees.

The boys went to their bunks. They were the first ones awake the next morning, and Jack followed Mark on deck.

"There's the paper you rescued from drowning," said Mark.

"So it is," came from Jack. "I wonder if there's any news in it."

The sheet had dried out and Jack spread it open. No sooner had he scanned the first page than he uttered a whistle.

"Something startling?" asked Mark.

"Startling! I guess yes! Look here!"

Mark looked over Jack's shoulder. Staring at them, from amid a mass of other news was the announcement in big black type:

**REWARD FOR BOY ANARCHISTS!**

Then followed an account of the burning of the hotel at Easton, a vivid description with pictures, of how it had been blown up in an

attempt to assassinate Lord Peckham, and how the two boys, sons of an English anarchist, had escaped.

The rest of the story was given over to a description which Jack and Mark could see was meant for them though it was incorrect in several particulars. How the boys had escaped the detective, through the trolley car mishap, was related, and then came the startling announcement that the hotel authorities had offered a reward of \$1,000 for the capture of either or both of the boy anarchists. To this Lord Peckham had added an equal sum.

"Well, it looks as if we were of some importance in the world," remarked Jack.

"Rather," agreed Mark. "Think of having a price on our heads! Well, that detective certainly is a hustler. When is that paper dated?"

Jack looked and saw that the sheet had been issued in Charleston the day previous. It had probably been thrown overboard from some steamer, and had drifted toward shore.

While the boys were speculating over the matter Professor Henderson came on deck. He saw something was up, and soon had the whole story from the boys.

"I shouldn't worry about it," said the inventor. "They've got to catch you first, and it isn't like running away when you know you are guilty. You boys had no more to do with the fire than the man in the moon. And we'll soon be beyond the reach of rewards and newspapers."

Nevertheless, the boys brooded over the matter. It seemed that they were still under a cloud, and they wished very much that it could be cleared away.

However there were soon busy times. The rising tide floated the boat, and soon it was riding safely at anchor. The professor needed some small bits of machinery, and had decided to send the boys to the nearest town for them. But the news in the paper changed his plans, and he sent Bill and Washington, who soon returned with the needed articles.

"Now we'll make another start," said Mr. Henderson, as soon as all

were on board once more. "This time I hope we will keep on until we reach the south pole!"

He started the engine, the *Porpoise* sank beneath the waves, and with a hum of the big screw that throbbed and vibrated, was away again.



## ATTACKED BY A MONSTER

For several days the *Porpoise* plowed her way beneath the surface of the ocean. Obedient to the directing hand of Professor Henderson she rose or sank as the tanks were emptied or filled. He put the craft through several rather difficult movements to test her under all conditions. In each one she was a success.

Dinner was sometimes eaten five hundred feet below the surface. Then while Washington washed the dishes and cleaned up the galley, Jack and Mark looked from the side windows at the strange life under water.

They were getting farther south now and the water was warmer as the equator was approached. This produced a great variety of animal life, and the ocean fairly swarmed with fishes, big and little, strange and curious that could be seen from the glass bull's-eyes.

Great sharks swam up alongside of the *Porpoise*, keeping pace with her in spite of her speed. Their cruel tigerish eyes and ugly mouths made the boys shudder as they looked at the creatures. Then came odd creatures that seemed neither of the land or sea, but which swam along with their horrible bodies flapping up against the glass. One and all, the inhabitants of the ocean seemed to resent the intrusion of the submarine.

One day the boys turned the light out in the cabin and sat in the darkness the better to observe the fishes. The sea, in the vicinity of the ship, was illuminated with a sort of glow that diffused from the searchlight.



Suddenly, as the boys were watching, there came athud on the glass window at the port side. They glanced in that direction to see some horrible thing peering in at them through the window.

At first they were greatly frightened. Two big eyes of green, with rims of what looked like red fire, stared at them, and, there was an ugly mouth lined with three rows of teeth.

"It's only a fish," said Mark.

"Well, I wouldn't like to meet it outside," said Jack. "I'd rather be here. My, but it's a nasty sight!"

"Let's give Washington a little scare," suggested Mark.

"How?"

"We'll go out and tell him some one in the cabin wants to see him. The fish will stay there. See, it is fastened to the glass by some sort of suction arrangement, like the octopus fish have on their arms. Then we'll look in and see what Wash does."

Jack agreed to the plan. The boys left the cabin, and Mark called to the colored man, who was in the engine room.

"I'll go right instanter this minute," said Washington. "Don't no grass grow under dis chile's feet!"

"Now listen," said Mark as he and Jack tiptoed after the colored man.

Washington had no sooner entered the darkened cabin, and caught sight of the horrible staring red and green eyes looking straight at him, than he let out a yell that could be heard all over the ship. Then the colored man dropped on his knees and began to implore:

"Good please Mr. Satan fish, doan take Washington White," he begged. "It's all a mistake. I didn't do nuffin. Good please Mr. Satan fish, take some one else. It's disproportionate to de circumulation ob de interiorness ob dis subicecream ship, so kindly pass me by dis time!"

"What's the matter?" asked Amos Henderson, as he came hurrying into the cabin, seeking the cause for Washington's loud cry.

Jack and Mark, who came in at that juncture, were a little bit ashamed of the trick they had played.

"What is the trouble?" repeated Mr. Henderson.

"We's all goin' to be devoured alibe!" cried Washington pointing to the fish, that still clung to the glass.

"Ah, a sucker fish!" remarked the inventor. "A large specimen, too. Don't be afraid Washington, it can't hurt you."

"He looks like he could," said the colored man. "Look at dem teef!"

Indeed the creature's mouth was a horrible sight, as it opened and shut.

"I'll show you how to get rid of him," said the professor.

He turned on the electric lights in the cabin, flooding the room with a bright glow. The big fish darted off, and, when the lights were turned out again, the terrible eyes did not reappear, much to their satisfaction.

"The lights scared it away," remarked the inventor. "But you mustn't get frightened so easily, Washington. You'll see stranger sights than that before you're through with this voyage."

"Oh I wasn't 'fraid," spoke up Washington. "I were jest 'stonished, dat's all."

"What did you get down on your knees for?" asked Mark with a grin.

"I might hab been lookin' for my collar button, for all you knows," replied Washington, with an air of great dignity, and went back to the engine room.

For several days after this the *Porpoise* continued on her way south. Now and then appearing on the surface to renew the supply of fresh air, and again skimming along under the surface, or deep down, the strange craft kept on. It grew much warmer, and even when some distance below the surface the heat could be felt in an uncomfortable manner.

"We're getting near the equator," explained the professor.

One afternoon, when dinner had just been finished, and the ship,

under the direction of Washington, was gliding along well under the sea, there came a sudden shock.

"We've hit something!" exclaimed Mr. Henderson as he jumped for the conning tower. The shock was repeated.

"What was it?" asked someone.

"Shut down the engine!" yelled the inventor to the colored man. "What do you want to go on ramming an object after you've once hit it? Slow down the engine!"

"Power's shut off!" cried Washington. "We didn't hit nothin'! Something hit us!"

"What do you mean?" asked Mr. Henderson.

"Somethin's rammin' us," went on Washington.

"It must be a big monster. I was sterrin' along an' there was nothin' in de road, when all of a suddint, ker-plunk! We's hit. Look ahead, an' you can't see nothin'!"

The professor, and the boys, who had followed him, gazed out of the conning tower window. There was nothing forward but a vast expanse of water.

The next instant the ship careened as something struck her a violent blow on the port side. Everyone almost toppled over from the force of the impact.

"Dar he goes agin!" cried Washington.

"We're attacked by a whale!" said the professor. "We must rise to the surface or it may damage the ship."

"If it's a whale I'd like to get a shot at it," put in Andy Sudds, from the foot of the companion ladder leading into the tower.

"I don't know that it is a whale," went on the inventor. "But it must be something very big and strong."

"It's a monster of some sort," put in Andy, "and I want a chance at him."

"It's too risky," murmured the professor. "We couldn't get down to bottom here, as the water is several miles deep, and the pressure would crush the *Porpoise*, strong as she is."

Once more came a terrible blow and the ship rocked in a swirl of foam beneath the waves. In quick succession two more fierce onslaughts were made by the unseen monster.

"We'll have to do something," muttered Andy.

"You're right," agreed the professor. "Our only chance is to rise to the surface, for I do not believe the creature will follow us there. Empty the tanks, Washington."

The colored man started the pumps, and the professor watched the gages that told the depth of the craft. The pointer should have begun to swing around in a few seconds after the tanks began to empty. Instead it remained stationary.

"Strange," said Mr. Henderson. "I wonder if anything is wrong with the machinery."

"More like the whale, or whatever it is, is on top of the boat, holding her down," suggested Andy.

There was no doubt of this a moment later, for there were several violent blows on the upper part of the *Porpoise*.

The crew of the submarine were held prisoners below the surface by the unknown monster!

For a few minutes the thought of the awful fate that would be theirs if the ship should be wrecked under the water made each one speechless. As they stood looking at each other, not knowing what to do, the attack was renewed on the port side.

The big fish, whale or whatever it was, kept pounding away.

"I have an idea!" cried Andy suddenly.

"What is it?" asked the professor quickly.

"Let me put a diving dress on," began the old hunter.

"I tell you we can't sink to the bottom in this depth of water," interrupted the professor.

"We don't need to," put in Andy. "All I want is a diving suit and a chance to stand out in the diving chamber. I guess I can fix Mr. Whale, if I have one of those electric guns."

"Quick! Get a diving suit, Washington!" cried Mr. Henderson. He

saw what the old hunter planned to do.

In a few minutes Andy was dressed in the suit. The attacks of the monster had redoubled in frequency, and the ship rocked as in a storm.

Andy stepped into the diving chamber, clasping the electric gun. The inner door was tightly closed and then the sea cocks that admitted water from the outside were opened. When the pressure inside the chamber was equal to that of the ocean outside some one pulled the lever that opened the outer door.

Andy knew better than to step outside. He remained in the chamber, like a sentinel hid in the embrasure of a wall, for the chamber was a sort of big dent in the side of the *Porpoise*.

Once more the ship rocked from a terrific blow, and the old hunter was nearly thrown out and into the fathomless depths below.

He clung to the door lever and peered out. Through the big glass eyes of his copper helmet he saw headed straight at him a whale that seemed larger than the submarine.



# CAUGHT IN A SEA OF GRASS

"It's all up with me and the ship, too," thought Andy as he stood in the small chamber and watched the oncoming of the monster.

However, he was not going to die without a fight, so he raised the electric gun. Yet he knew it was a most forlorn chance.

He aimed straight down the big open mouth and pulled the trigger. The next instant the water all about him was a mass of foam, through which he could dimly see that the whale had halted.

And, as the old hunter watched, in awe and fear at what he saw, he noted that instead of one monster there seemed to be a pair. Together they were threshing the sea into a bloody foam.

Then, turning on the searchlight in his helmet, Andy beheld a terrible sight. The whale had been attacked by a gigantic swordfish at the moment the hunter had fired the shot, and it was that, and not the electric bullet, that had stopped the infuriated animal's rush at the ship.

Ancient enemies, the whale and swordfish, had met in mortal combat. The swordfish had engaged the whale just as it was about to strike what would probably have been a blow that would have disabled the submarine, for with the door of the diving chamber open, the onslaught might not have been withstood.

Rushing here and there, the whale seeking to destroy his enemy with a sweep of the enormous flukes, and the swordfish plunging his bony weapon again and again into the whale, the two monsters fought until the water about the ship was a mass of foam and blood.

Such as he wanted to see the end of the fight, Andy knew it was dangerous to remain longer with the door open.

He closed it, pressed the lever which started the pumps, forcing the water from the chamber and, in a few minutes, emerged into the interior of the ship.

Mr. Henderson, realizing that something out of the ordinary was going on, had opened the slides of the bull's-eye windows, and those in the submarine saw part of the fight between the whale and swordfish.

As soon as Andy had removed his diving suit he advised that the ship be sent to the surface, as there might be danger should the monsters get too close in their struggles.

Accordingly the pumps, which had been stopped when it was found impossible to raise the ship, because of the weight of the whale, were started and the *Porpoise* was soon on the surface.

The manhole cover was opened and Andy, with Jack and Mark, went out on deck. They had no sooner stepped out on the platform than there was a commotion in the water.

"They're going to fight up here!" exclaimed Mark.

A big body shot upward and fell back with a splash, rocking the submarine.

"There's the whale," observed Andy. "But I reckon he won't fight any more. He's dead."

It was so. The swordfish had conquered, and the lifeless body of the whale floated on top of the water, only to sink a little later.

"It was a great battle," said Jack. "I'm glad I was inside the ship."

The course was due south, and every minute it seemed to the boys that it was getting warmer, for they were approaching the equator. Every hour brought them nearer the south pole, though they were still several thousand miles from it.

After a while quite a wind sprang up, and as the sea roughened the professor decided to go down under the surface. The *Porpoise* sunk as the tanks filled and, in a little while, the submarine was in calm



water, and was forging ahead at three-quarter speed.

It was three days after the adventure with the whale when, as the ship was going along at a good rate, that there seemed to be a gradual slacking in the progress.

"I wonder what Washington is slowing down for," said the professor rising from the dinner table at which all save the colored man had been sitting. "I told him to keep right on. He must have seen something ahead. I'll take a look."

The inventor went to the conning tower, where Washington was steering.

"What are you stopping for?" he asked.

"I'm not slowin' down," replied the colored man. "Guess another ob dem debil fishes has grabbed holt ob de ship. Dey suttinly am de most koslostrous conglomerations ob inconsequence dat I eber see."

"You must keep your big words for another time," remarked Mr. Henderson, who seemed worried. "Hurry to the engine-room and see if the machinery is all right. We certainly are slowing down, from some cause or other."

The *Porpoise* was now scarcely moving, though from the vibration it was evident that the engines were working almost at top speed. Washington came back and reported that the big screw was revolving properly and that all the machinery was working well.

"Then we're caught in something," said the professor. "Shut off the power, Washington, I don't want to strain things."

The ship was now scarcely making a foot a minute, and, a little later, when the colored man had turned off the engine, the submarine became stationary, merely undulating with the roll and heave of the ocean.

Hurrying to the cabin, Captain Henderson opened the side window shutters, turned off the electric lights and peered out.

"I can't see anything," he said. "Yet I should be able to, as we are not very deep."

The gage showed that the ship was submerged only thirty feet, and at that depth there should have been no difficulty in seeing, at least dimly, objects under water. But the windows showed as black as night.

"Bring me one of the portable searchlights," called Mr. Henderson.

Washington brought one, operated by a storage battery. Holding it so the reflector cast the beams out of the bull's-eye and into the water on the opposite side, the inventor peered forth.

"I was afraid of this!" he murmured.

"What is it?" asked Jack.

"We are caught in the Sargasso Sea," replied Mr. Henderson.

"The Sargasso Sea?" repeated Mark, in a questioning tone. "What is that?"

"It is a great sea of grass," replied the captain. "An immense ocean of sea weed, that sometimes floats on the surface and sometimes a little below. The stalks or blades of the grass are very long and closely matted together."

"Is there any danger?" asked Andy in some alarm.

"Very much," answered the professor quietly. "A ship, once fairly entangled in the grass or sea weed, seldom gets out. If it is a sailing ship the weed clings to the rudder, making steerage impossible, and even in a strong wind the ship cannot get free of the mass. The grass winds about the propellers of steamships, and holds them as tight as in a vise.

"Sometimes a great storm may tear the mass of weed loose from the bottom of the ocean, and then the ship is free. But the Sargasso Sea is the graveyard of many a fine vessel."

The pumps were set going. Anxiously everyone watched the gage. The pointer never moved, but remained at thirty feet. The *Porpoise* was caught.

"Well, since we can't go up, let us see if we can go down," said the inventor. "Perhaps we can dive under the sea weed."

The cocks of the tanks were opened and the water rushed in.

Under the weight of it the ship should have sunk to the bottom. Instead it remained just where it was, thirty feet below the surface.

"Try the screw again," suggested Andy, "Maybe we can back out."

The big propeller in the tube was started going in a reverse direction, but the *Porpoise* only moved a few feet and then stopped. To go forward was equally impossible.

The submarine was held fast in the grip of the long, sinuous, snake-like fingers of the terrible sea grass. Weak as one strand was, the thousands combined served to fasten the ship as securely as wire cables would have done. The weeds had entangled themselves all around the craft and refused to let go.

"Well," remarked Mr. Henderson when all efforts had failed. "We must think of a new plan."

He spoke cheerfully, for he did not want the boys and other members of the crew to know how worried he was. This was a danger he had never counted on when he planned to go to the south pole.

"There is no great hurry," Mr. Henderson went on in a few minutes. "We can stay here for several days if need be, and by that time a storm may tear the grass loose."

"If we had our old hay sythes here," spoke Bill, "me an' Tom could put on divin' suits an' go out an' cut the sea weed."

"I'm afraid that wouldn't work," answered Mr. Henderson. "I'll think up some plan, soon."

He started toward the engine room to look over the machinery. He was met by Washington, who seemed much alarmed.

"What's the matter?" asked the inventor.

"De air tank hab busted an' all de air is escapin' out!" cried the colored man. "We'll all smothercate!"



## FIRE ON BOARD

The professor jumped past Washington and hurried into the room where the tanks were kept, carrying the reserve supply of air for breathing when the ship was under water. A loud hissing told that the leak was a large one.

"Quick! Bring me some tools and a steel plug," shouted the captain.

Mark hurried in with the things the professor wanted. But before the plug could be put in the hole the air stopped hissing.

"The leak is fixed!" cried Jack.

"No," said the professor in a strange voice.

"But the air no longer rushes out."

"For a good reason, there is no longer any air to rush out. It is all gone!"

"Do you mean to say that all the reserve stock has been lost?" exclaimed Andy.

"I fear so. The leak must have been a bad one. The air was stored in tanks under pressure, and, as you know, we released it as we needed it. Now it is all gone."

"All? Then we shall smother," said Jack, and his voice trembled.

"Not at once," went on Mr. Henderson in a calm voice. "There is enough air in the entire ship, including that which has leaked from the tanks to last us five hours. After that——" he paused and looked at his watch.

"Well?" asked Andy. "After that?"

"There is enough stored in the small tanks of the diving suits to last another two hours, perhaps. Seven hours in all."

"Then what?" asked Mark.

"We shall smother to death," said the professor in a low tone. "That is," he went on, "unless before that time we can raise the *Porpoise* to the surface of the sea and get a fresh supply of air."

"Then we must work to raise the ship," put in Bill. "Let' get out and see if we can't cut through the sea weed."

"It would be useless," said Mr. Henderson. "We can only depend on the power of the ship herself. But do not be discouraged. We may escape. Come, Washington, start the engine again. By keeping it going constantly we can, perhaps, break loose from the grass. It is our only hope."

Steadily the machinery worked. It might as well have remained stationary, however, as far as any noticeable effect was made on the boat's progress. The grass of the Sargasso Sea held the *Porpoise* in a firm grasp.

Four hours passed. There was nothing to do but wait and see what would happen. It all depended on the engines. Silently the navigators of the realms under the ocean sat and hoped. Now and then the professor would go to the engine room to adjust the machines.

The atmosphere in the cabin was growing noticeably heavier. The boys' heads began to ring with strange noises, and there was a tightness across their chests. The lack of fresh air was beginning to tell.

"We might as well use that in the diving suit reservoirs," remarked the professor. "We will feel better, at least for a little while."

The helmets of the suits were brought in, and the vapor released from the small tanks. A change was at once noticed. The old stale air in the cabin was forced out of the exhaust pipes, and the fresh took its place. Every one felt better.

Faster and faster revolved the big screw. The ship vibrated more and more. Yet it did not move, nor did it rise. The crew were still

prisoners beneath the water.

For an hour or so conditions were fairly comfortable. Then the same unpleasantness was experienced as was noticed before.

"If we could only open a window," sighed Mark, "and let in a lot of fresh air, how nice it would be."

The air rapidly became more foul. Soon Washington was gasping for breath. Tom and Bill showed signs of uneasiness.

"Lie down on the floor," counseled the professor. "You will find the air a little fresher down there."

They all did as he advised, the inventor himself stretching out at full length. A little relief was experienced.

They knew it could not last long. Even the professor seemed to have given up hope. The engine was not going to free the ship in time to save the lives of those on board.

Washington crawled to the engine room, as some of the bearings needed oiling. The professor seemed in despair. He opened one of the slides that covered the glass bulls eye windows. Then he turned off the electric lights. The opening was black, showing that the sea of grass still surrounded them. With a groan Mr. Henderson turned aside. The last hope was gone. He sank down on the floor of the darkened cabin.

Just then Mark happened to look at the bull's-eye. He saw a glimmer of light. Then he noticed several fishes swimming about. The water was clear. The grass had disappeared from the vicinity of the window.

"Look!" cried Mark to the professor.

The inventor peered forth. As he did so he uttered a cry. Then he staggered rather than ran to the engine room.

"What are you doing?" he called to Washington.

"I jest let some ob de sulphuric acid out ob de storage battery tank," replied the colored man.

"That's it! That's it!" exclaimed the professor. "Quick, let some more out, Washington. Let out all there is in that tank. It will save our

lives."

Wonderingly Washington obeyed. The air in the ship was growing more foul every second. It was hard to breathe even on the floor, and all were gasping for breath. A few minutes more and they would all become unconscious and death would come in a little while if the air was not freshened.

The professor staggered back to the main cabin. He looked out of the bull's-eye windows. Then he exclaimed:

"See, it is getting lighter! Thank Heaven we are saved!"

The next instant the ship began to move backward. Then with increasing speed it pulled out of the grip of the long grass, and in another minute was floating on top of the water, at the edge of the Sargasso Sea.

"Quick! Open the man hole cover!" said Amos Henderson.

Washington threw back the lever cams, and in rushed the fresh air. It was a blessed relief from the terrible oppressiveness of the foul atmosphere of the boat. They all breathed deeply, and, in a few minutes the effects of their long imprisonment had passed off.

They went out on the small deck. It was getting dusk, and the reflection of the red sunset shone brightly on the heaving water.

"I 'spected I'd neber see dis again," said Washington. "Thought suah I was a gone chicken!"

"We had a most fortunate escape," said the professor. "You did the trick for us when you let the acid run from that tank into the sea. It mingled with the water and burned or ate through the stems of the grass so they no longer held the ship. I saw what had happened as soon as I looked out of the bull's-eye, and that's why I had you turn out all the acid you could. It was just as if liquid fire had touched the sea weed and burnt it off."

"Golly!" exclaimed Washington. "Fust I know I'll be a perffessor myself!"

Supper was eaten with the ship on the surface of the ocean, for it was impossible to go below until the leak in the air tanks had been



repaired. Work was begun on this the next day, and though it proved a difficult job it was accomplished by Mr. Henderson and the boys.

There were several minor repairs to be made to the machinery, and it was a week before all was in readiness for another descent beneath the waves. In the meanwhile the craft had moved slowly southward on the surface, where no very great speed was possible.

Toward evening, on the seventh day after their adventure with the Sargasso Sea, the travelers closed the man hole, and with air tanks well filled slowly sank beneath the waves. Supper was eaten at a depth of sixty feet, and after the meal, while Washington was washing the dishes, the others sat and looked out through the bull's-eyes at the big fishes which floated past.

"I wouldn't like to catch one of them air things on my hook an' line," observed Bill, as a particularly large fish went past. "I reckon I'd have trouble landin' him."

"More likely he'd pull you in," said Mark.

For several minutes they watched the strange procession of deep-sea life. Presently Jack, who was sitting near the engine room door, sprang up. At the same instant there was the sound of an explosion.

"What's the matter?" cried the professor.

"Come quick!" yelled Washington.

"It's a fire!" yelled Jack. "One of the electrical fuses has blown out, and the ship is on fire!"



# THE GHOST OF THE SUBMARINE

They all rushed toward the engine room. It was dark, because the lights had gone out all over the ship, and they could see only by the glare of the flames, which were increasing.

"Light one of the oil lanterns!" called the professor, and Bill did so.

"Unreel the hose," the inventor continued, and Mark and Jack ran to do this.

In a few minutes the line was stretched into the engine room, and water was being thrown on the flames, for Washington had started the pump as soon as he saw the conflagration.

The fire was in one corner, near the electrical switch board, and had been caused by the blowing out of one of the fuses, which occasioned the little explosion. The wood work near the switches was blazing fiercely, and soon the ship was filled with smoke.

"Empty the ballast tanks!" called the professor. "We must rise to the surface!"

"We'll all be burned up!" cried Tom. "First we nearly smother and then we get on fire. Never saw such luck!"

With a rush the *Porpoise* began to rise, as her tanks were lightened. With steady hands, though with fear in their hearts, Jack and Mark continued to play the water on the flames, while the professor and Washington got out a second line and aided them.

"The fire is dying out!" exclaimed Mr. Henderson. "We'll soon get the best of it."

In five minutes the worst was over, though it had been an anxious

time, and one of danger. The ship came to the surface, and the open man-hole let out the thick smoke that had nearly suffocated the travelers.

As soon as it was cool enough in the engine room an examination was made of the damage done. It was not as bad as the professor had feared, and the running part of the ship was not harmed. A new fuse was put in and the electric lights turned on.

The night was spent with the ship floating on the surface of the ocean, only enough speed being kept up to give her steerage way. The professor did not want to go below the waves until he had repaired the switch board.

Watch was kept, for, though they were out of the regular line of ocean travel, there was no telling when a vessel might come along and run them down, for the *Porpoise* did not show above the waves more than a few feet, and carried no lights.

Mark had the watch just after midnight, and was sitting in the conning tower, the door of which opened out on the small deck. He had swept the surface of the water with powerful glasses and was sure there were no ships in sight. So, feeling that he would like to stretch his legs, he walked up and down on the platform.

He had reached the after end, and was about to turn and go back, when he was startled to see between him and the conning tower a white object. At first Mark thought it was a cloud of mist, or something the matter with his eyes. He rubbed them, but the object did not disappear.

Then it moved, and, to his horror Mark saw that it had the shape of a man, tall and thin. The two arms were outstretched, and to Mark's imagination seemed to be pointed toward him.

In spite of trying not to be, Mark was frightened.

He did not believe in ghosts, and had always felt that all stories about them were due to persons' imaginations. Now he saw something that was hard to explain.

As he watched it, the white object turned and glided without

making the slightest noise, toward the conning tower. It entered and Mark breathed a sigh of relief.

Perhaps, after all, it was some one from down in the cabin, maybe the professor himself in his night shirt, who had come up to see that all was right.

"I'll go and look," said Mark to himself.

He had to nerve himself for the ordeal, as, in spite of assuring himself that there were no such things as ghosts, he was frightened.

It was absolutely quiet. The only sound was the gentle swish of the water against the sides of the ship. The engine was running so slowly that it caused no noise.

Half way on his journey to the conning tower Mark paused. There, advancing toward him, was the white object. With outstretched arms it glided nearer and nearer until Mark's heart was beating as if it would burst through his ribs. His mouth was dry and he could not have cried out had he tried.

There was a splash in the water off to the left as some big fish sprang out and dropped back again. Involuntarily Mark turned in that direction. Then he thought of the ghost and looked for it again. To his surprise the white object was nowhere to be seen!

The boy waited a few minutes, and then, screwing up his courage, he went to the tower. There was no one inside, and, along the length of deck nothing was to be seen of the ghost.

"I wonder if I have been asleep and dreaming," the boy asked himself. He gave his leg a pinch, and the sensation of pain told him he was not slumbering.

"Well, I'll say nothing about it," Mark went on to himself. "They'll only laugh at me."

Entering the tower Mark looked for the glasses in order to make another observation. He could not find them, yet he was sure he had left them on a shelf in the tower.

"I wonder if the ghost took them," he said.

He heard some one coming up the iron stairs of the small

companionway that led down into the interior of the ship through the man-hole. At first he thought it was his queer midnight visitor returning. Then the head and shoulders of Jack appeared.

"I've come to relieve you," said Jack. "Your watch is up; it's two o'clock. Here are the night glasses. I found them on the cabin table. I thought you had them with you."

"I did," replied Mark.

"Then how did they get below?"

"I—I don't know," said Mark.

The mystery was deepening, yet he did not want to tell Jack just yet.

"Well, that's queer," remarked Jack. "Maybe the captain came up and got them while you were asleep."

"I didn't go to sleep," answered Mark rather crossly.

Jack said nothing more, but took his place in the conning tower, while Mark went below. Thinking to discover if the ghost might by any chance have been one of the persons on the *Porpoise*, Mark looked into each bunk. From the captain to Washington, all the inmates were peacefully slumbering.

"Queer," murmured Jack, as he took a look into the engine room before turning in. The engine needed no attention, as it worked automatically, and all there was to do was to steer the ship. Even this needed little care as the course was a straight one, and the wheel could be locked, leaving the lookout little to do.

"Did you see anything during your watch?" asked Mark of Jack the next morning.

"See anything? What do you mean?"

"I mean anything unusual."

"Nothing, only a school of porpoises went past and gave me a little scare. They were like a lot of water kittens at play."

Mark concluded he would say nothing of the white visitor until he ascertained whether any one else had seen it.

It was several nights later, when the ship was once more

proceeding slowly along the surface of the water, that the ghost again appeared. This time Washington had the midnight watch.

But the colored man was not one to remain quiet when he had such a scary visitor, and his yells aroused the ship.

"It's a ghostess! A big white ghostess!" yelled Washington. "I don seen it wid my eyes, an' it waved his arms at me. I's goin' to die suah!"

"What's all this nonsense?" demanded the professor sternly. Then Washington, more or less excitedly, told of what he had seen. It was just as it had happened to Mark.

"You were dreaming," said the professor to Washington. "There are no such things as ghosts."

Every one, from old Andy to Tom and Bill, had been roused by Washington's cries, and listened to his story. At the close of the recital of how the white thing had suddenly disappeared, Washington refused to continue his watch, unless some one stayed with him.

Mark volunteered to do this. He was anxious to see if the ghost would reappear to him. But nothing happened; and the rest of the night passed off quietly.

The next day the *Porpoise* was taken below the surface, in order to allow of better speed being made. She was running along, submerged to a depth of two hundred feet, when there came a sudden jar, and the ship stopped.

"More trouble!" exclaimed the professor.

He opened the slide covering the bull's-eye windows and looked out. All about was swirling muddy water.

"Can you see anything?" the inventor called to Jack, who was in the conning tower.

"We've run into a mud-bank, and are stuck fast," called back the boy.





## DIGGING OUT THE SHIP

"Reverse the engine!" called the professor. "Maybe we can back the ship out."

Washington set the big screw to revolving in the opposite direction. The *Porpoise* shook and shivered but the mud held her fast.

"We must have gone in pretty deep," commented Amos Henderson. "Luckily it was soft mud instead of a rocky reef or we'd have damaged the ship beyond repair."

For several minutes the engines were kept on the reverse, but all to no purpose. The sticky mud was like glue in its holding power and the ship had buried her prow deep into it.

"I guess we'll have to dig our way out," said the professor, after taking a careful view of the big mud bank from the conning tower. "Washington, get out the diving suits and the spades."

"Are we really going out in the water to dig?" asked Tom.

"Of course," said Mr. Henderson. "You'll be as safe as in the ship, wearing one of my diving suits. We'll all have to help, for it will be quite a task."

The queer suits were brought out, and the reservoirs in the helmets were filled with compressed air. It was decided to have Washington remain within the *Porpoise*, to watch the machinery and start the engine when the digging was partly done, in order to see if the ship would not pull herself free when some of the mud had been removed from the prow.

"And we may need Washington for another purpose," said the

professor.

"What for?" asked Mark.

"Well, he'll have to stay by the diving tank, to let us in quickly in case of emergency."

"Do you think there'll be an emergency?" asked Jack.

"You never can tell," was the answer. "We are in deep water, and I don't want any accidents to happen."

In a few minutes all save Washington were in their diving suits and ready to go out and walk on the bottom of the sea. They entered the tank, the door was closed, and then water was slowly admitted from the ocean. When the tank was full, led by the professor, they stepped out on the muddy floor of the ocean.

At first the pressure of the water at so great a depth bothered them. But, as we know, the diving suits were reinforced with plates of steel, and so strong that little more than an extra weight of water was noticed. They soon became used to it. Each one carried a spade, while the professor, Andy and the boys each had, slung about their necks by straps, one of the electric guns.

Cautiously they walked toward the big mud bank. They had to go slowly because of the weight of the water above them, and because they might at any minute step into some muck hole and sink down. Fortunately, however, they found there was a firm bottom right up to where the bank of mud reared upward.

Turning on the electric lights in their helmets, the voyagers were able to see quite distinctly. The *Porpoise* had rammed her nose into the under-water hill for a distance of about ten feet. It was going to be no easy matter to get her free, but the divers lost no time.

Vigorously they attacked the big hill of mud. They dug their spades in and tossed the earth to one side. It was a strange place to work. At first the weight of water hampered every one, but they soon became used to it and were able to proceed more rapidly.

From the conning tower Washington kept watch of their progress. When they had gone in about five feet he started the engines, hoping

the *Porpoise* might now pull herself free. But the mud still held.

By signs, for it was of course impossible for any one to hear or speak, attired as they were in helmets and suits, the professor motioned that they must dig deeper.

Once more they attacked the big mud bank with their shovels. Farther and farther they went into the muck until it seemed that the nose of the submarine must be free. But when Washington started the engines it was obvious that the ship was still held.

Again the digging was resumed. All at once, while every one was wielding his spade to best advantage, a shadow seemed to cover the water. It loomed up large and black, and the professor stopped and gazed upward. What he saw made him drop his spade and grab the gun that was about his neck.

Floating in the water above the diggers, were three immense sharks. Their cruel mouths were partly open, showing three rows of big teeth, and they were slowly turning over on their backs to make a sudden rush and devour the men and boys. Owing to the peculiar shape of its maw a shark can not bite until it turns over.

The professor motioned for Bill and Tom to move behind him, and signalled for Jack, Mark and Andy to stand close with their weapons ready.

The sharks floated lazily downward as if they knew they had the diggers at their mercy. To run and escape was impossible, for no one could run hampered by the weight of water and his diving suit.

One of the terrible fish opened its mouth wider and, with a flirt of its tail aimed straight for the professor. Mr. Henderson raised his gun, and took careful aim at the middle of the fish, half turned over. Unerringly the electric bullet sped on its way. It entered the soft under part of the shark, and immediately the thing struggled in its death agony.

The water was dyed with blood. At the same instant the other sharks rushed forward in a swirl of foam. The boys and Andy fired as best they could, and must have hit one of the creatures for there was

a greater commotion.

But the fight was not over. Instantly the ocean seemed alive with the giant fish. Attracted by the blood of the killed ones, scores of the tigers of the seas rushed toward the scene of combat making matters livelier than ever.

The professor, the boys and Andy fired their guns at random. Redder and more red became the water until their helmet lamps barely glowed in the crimson sea. It seemed that a whole army of the voracious sharks had attacked them.

The professor realized that to stay and attempt to fight all the sharks in that part of the ocean was impossible. He motioned for the boys and Andy to follow him. Then he slowly led the way back to the ship.

But the sharks were not to be gotten rid of so easily. Several of the largest followed the diggers, their horrible eyes, and big mouths with rows of cruel teeth, striking terror to the hearts of all.

One of the creatures made a rush for Bill and Tom who were close together. Either or both of the men would have been bitten in twain, in spite of the protection of their diving suits, had not Mark, with a snap shot, killed the fierce fish.

It was now a running fight, and yet not so much that, because to run was impossible. However, they hurried all they could, and, by dint of quick firing kept the ugly creatures at bay until the side of the ship, where the diving tank was placed, was reached.

The professor stepped to one side, and motioned for the others to proceed him in entering. Little time was lost. As Bill, the last one in, stepped past the steel door the inventor attempted to enter. To do so he had to let go of his gun.

Instantly one of the sharks made a rush for the old man. But Andy was on the watch. He leaned forward, and, from his weapon sent a bullet straight down the throat of the monster. The electric missile did its work well, and the lifeless body of the shark was devoured by the others of its tribe.

The professor pulled the door shut behind him. Then he set the pump to work to empty the tank. As he did so there was a tremor to the ship. What could it mean?

In a few minutes the tank was empty and the divers stepped out into the ship, freed from the oppressive weight of water. The ship continued to vibrate and seemed to be in motion.

"What is it?" asked Mark as soon as he had his helmet off.

"De ship am free! We've got off de mud bank!" exclaimed Washington, running in from the engine room.

It was true. Enough had been dug so that, with the power of the screw working backward, there was sufficient force to pull the *Porpoise* from her perilous position.

"Empty the tanks and rise to the surface," said the professor.

In a few minutes the ship was on top of the waves, the adventurers freed from the double danger of the mud and sharks. They congratulated each other on the good outcome of the fight with the monster fishes.

Wearied with their labors and the battle under the waves, the travelers sat up on the deck breathing in the fresh breeze. Then, after a while, supper was made ready and eaten with good appetites.

It was decided hereafter to sail along near the surface at night, and not to submerge the ship deeply save during daylight, when it was easier to distinguish objects under the water.

Following this plan the *Porpoise* steamed along just awash that night, and the next day was sent down about fifty feet below the surface.

One afternoon, when the travelers were resting, having partaken of a fine meal, the professor went on deck to make some observations, the ship having been raised for that purpose. He came down, somewhat excited.

"Well, we're half way to the pole," he announced.

"How can you tell?" asked Mark.

"Because we have just crossed the equator. We went over the

imaginary line three minutes ago."

"I was wondering what made it so warm," said Jack.

"I guess you dreamed it was hotter," spoke the professor. "It has been just as hot as this for the last few days. Crossing the line makes no difference."

"Then we are really in the southern hemisphere now," said Mark.

"That's where we are," replied Mr. Henderson.

He put his instruments away.

"Well, we may as well go below the surface again," he remarked.

"Come quick! Hurry up!" yelled Washington from the deck. "Dar's a shipwreck up heah! Somebody's on it!"



# THE STRANGE SHIPWRECK

The professor, followed by the boys and Tom, Bill and Andy hastened on deck. They saw Washington pointing excitedly off to the west. There, rising and falling on the easy swell, was the wreck of a large vessel.

She had been a three masted schooner, but now only the stumps of the masts remained and the craft was rolling to and fro. It had settled low in the water, and was quite deep by the head, so that, at times, the waves broke over the bow in a shower of spray.

But what attracted the attention of the adventurers more than anything else was the sight of two figures near what had been the after cabin of the ship.

There they stood, frantically waving their hands toward those on the submarine. Across the water that separated the two craft, there came a faint hail.

"I suppose they are nearly dead," exclaimed the inventor. "We must save them."

He ordered the *Porpoise* sent ahead slowly toward the wreck. The distance was about half a mile, and was soon covered. As the submarine approached closer those on the schooner could be observed more plainly.

"One of 'em is a woman!" exclaimed Jack, who was using the glasses.

"Let me see," spoke the professor.

"You're right," he added. "The other is a little girl."



A few minutes later the *Porpoise* was alongside. The woman and child came to the rail of the schooner, which was barely five feet above the waves.

"Can you jump down, or shall I come aboard and get you?" asked Mr. Henderson seeing the woman hesitate.

"I can jump down, if you will catch the child," said the woman. "Oh I am so glad you came," she added. "We are almost dead from hunger and thirst, and the wreck is ready to sink and cannot last many hours longer."

"Pass the little girl down to me," spoke Andy. "Then you jump. We'll save you all right."

The little girl reached the deck in safety, and the woman, who proved to be her mother, followed.

"Now take us to your ship," said the woman.

"You must be a long way from her, as she is not in sight."

"Our ship is right here," spoke Mr. Henderson with a smile.

"Where, I don't see her," and the woman looked in all directions.

"Allow me to introduce you to Profess Amos Henderson's famous submarine, the *Porpoise*," spoke the inventor with a bow. "But come, let us go below. You must be suffering, and here I am making speeches."

"Indeed I am hungry, and thirsty too," said the woman. "So is Nellie. But I thought this was merely a small boat, sent from some large ship to get us."

The woman and girl descended to the cabin of the submarine, where Washington set before them a fine meal. Under the advice of the professor they partook sparingly of food and drink at first, as, having eaten nothing in many hours, the inventor said they must begin by taking a little at a time.

As soon as they had finished and become somewhat rested, the woman told her story. She was Mrs. Johnson, a widow, her husband having once owned and been captain of the schooner that was wrecked. After his death she and her daughter, having become part

owners of the craft, disposing of a third interest to the former mate of the ship, had set out on one of the voyages to South American ports.

They had had good weather going, and took on a valuable cargo of lumber and rare woods. But the return trip was more perilous. Heavy storms had buffeted the craft almost from the time of leaving port, and in one heavy blow, ten days before, the ship had been wrecked.

"What became of the crew?" asked Mr. Henderson.

"They took to the boats," replied Mrs. Johnson. "My little girl and myself were to go with the mate and his men. The waves were fearfully high, and, as they held the boat close to the schooner so we could get in, a big roller smashed the little craft. The men must have all been drowned for I never afterwards caught sight of one of them."

"But the other boats?" asked the inventor.

"They had gotten too far away to hail, supposing that I would be taken care of by the mate. There was nothing for Nellie and I to do but stay on board, expecting the ship to sink every minute."

"And you have been there ever since?" inquired Andy.

"Ever since. That was ten days ago. Every day I thought it would be our last. The storm passed away and the sea became calm but the ship kept settling lower and lower. Only the fact that part of the cargo was wood kept her afloat so long. I managed to get some provisions and water up on deck, but the sea had spoiled most of the stuff. We had to eat only a little at a time, as I knew it would be some days before we could be rescued, if we ever were. Two days ago we ate the last of the food and drank almost the last of the water."

"Then you had nothing since then," spoke Jack.

"Only a few drops of rain that I caught on a piece of sail," answered Mrs. Johnson.

"Never mind, you can have all you want now, mother," said Nellie, coming over to pat her parent's cheek. "Oh," the child went on, "I was so thirsty I could just cry when I thought of such things as ice cream sodas."

"I guess you could," agreed Mark. "Well, we can't give you any

soda water, but we have plenty of the other kind."

Mrs. Johnson was much interested in the *Porpoise* and Professor Henderson showed her all about the craft. Though the quarters were rather cramped, a small cabin was fitted up for the lady and her daughter.

"We will travel a bit under the water so you can get used to it," said the captain after a tour of the ship had been made. The tanks were filled, and the *Porpoise* sank beneath the waves. At first Mrs. Johnson was much frightened, and Nellie cried. But when they saw how skillfully the ship was managed, and how easy it was to rise again, they lost their fears.

For several days the voyage was continued. Mrs. Johnson and Nellie remained aboard as there was no place to land them, and they said they wished to stay until they met some ship sailing north.

One day, just at dusk, when the *Porpoise*, after a long run under the water had come to the surface, the professor, came up on deck to take a look around. Washington and Andy accompanied him.

"Looks like land, off there to the left," remarked the old hunter.

"Get the glasses, Washington," said Mr. Henderson. "It may be a ship."

He took a long and careful look through the binoculars.

"It's some sort of land," he announced. "We'll go over in the morning and see what it is. Probably it's an island, for there's no main land in these parts. We are in the middle of the southern Atlantic now."

The next morning, after breakfast, the *Porpoise* was headed toward the dark spot on the surface of the water that the professor had gazed at the evening before. As they came nearer it was seen that the place was a large island.

"But it's a mighty queer one," spoke Mr. Henderson. "It looks more like a big volcano than anything else."

As the ship came nearer it was seen that this was true. The island rose abruptly from the surface of the sea in a big ridge, slightly

rounded. There appeared to be no signs of life on the land, but in the air overhead hovered several big birds. These circled about and then fluttered down, seemingly about the middle of the island.

"We'll sail around and see if there's a place to land," spoke the inventor. "There doesn't seem to be a good harbor on this side."

Slowly the *Porpoise* made the circuit. The island appeared to be almost round. When they had gone about half way around Andy, who was staring ahead, cried out:

"Look out Professor! Don't go any nearer or we'll be sucked into the whirlpool!"

The inventor looked where the hunter pointed. Then he beheld the strangest sight he had ever seen. The island was low toward where Andy pointed and they beheld the waters of the ocean pouring over the edge of it, and falling down into an immense hole with a roar like that of Niagara Falls.

"Reverse the ship!" cried Professor Henderson. "Send her back quickly, Washington, or we'll be sucked down!"

The colored man lost no time, and the big screw was sent whirling in the opposite direction. And it was high time, for already the onward rush of the falling waters was slowly drawing the ship toward the big cavern.

"That was a lucky escape," commented Amos Henderson. "Well, as we can't land there we'll try the other way around."

The ship was headed in the opposite direction, and, after an hour's sailing, a good harbor was discovered. The *Porpoise* was anchored in shallow water close to the shore and in a small boat the professor, Andy and the two boys went to the strange island.

They found it merely an immense circle of land with the middle part taken up by the big hole. And such a hole as it was! It was so wide across that they could not see the farther side, and the depth they could only guess at. Looking down they could only see great rolling masses of clouds or vapor.

"Perhaps it's steam," suggested Jack.

"Maybe it is," agreed the professor. "If this is a volcano, with lava in it, the water of the ocean, pouring in on the other side, may be changed to steam."

"Do you suppose this hole leads to the centre of the earth?" asked Mark. "I've read somewhere, that the earth is hollow."

"Some scientists believe it," commented the professor. "This looks like a big enough hole to lead clear through to China. Hark, you can hear the roar of the water now."

They listened, and the wind brought to them the sound of the sea pouring down into the unfathomable depths.

"Let's throw a big rock down," suggested Jack. "Maybe we can hear it strike bottom."

With the aid of Mark he cast a big boulder down into the depths. They listened intently, but not the slightest sound echoed back.

"I guess the bottom is too far away for you to hear the stone land," said the professor.



## THE GHOST AGAIN

They spent some time looking down into the hole. The masses of vapor, or clouds, rolled and swirled hundreds of feet below them, but never broke sufficiently to allow of a clear sight.

"Well, we had better go back to the ship," remarked the professor. "We must continue our voyage."

They were soon on the *Porpoise* and steaming away from the strange island, the inventor deciding to get far off out of the influence of the terrible waterfall.

The night was, as usual, spent with the ship slowly steaming ahead on the surface of the water. It was getting on toward twelve o'clock and Washington had the watch. He was to be relieved by Jack.

The latter had been awakened by the alarm clock at the head of his bed, which time-piece he had set to arouse him so that he might take Washington's place. Jack was just getting the sleep from his eyes by a vigorous rubbing when he heard a loud yell.

"Land a' Massy!" cried Washington from the deck above. "I's goin' t' die suah! De ghostess am after me ag'in!"

Without waiting to dress, Jack sprang up the ladder and was soon out on the deck. He saw Washington kneeling down in front of the conning tower door while, at the after end of the deck, was a mysterious white object; the same strange shape that had been observed before.

"I'm going to solve this puzzle!" exclaimed Jack to himself as he made a dive toward the object in white. "This ghost business will

have to stop!"

But, unfortunately for his plans, his foot slipped on the smooth steel deck, and he went down in a heap. When he got up the ghost was nowhere to be seen.

Washington, however, was still kneeling down and praying to be spared from the attack of the midnight visitor. Jack limped over to the colored man.

"Keep still," said the boy. "It's gone now. What was it, anyhow?"

"Some ghost from de grabeyard," replied Washington.

"When did you see it first?" went on Jack.

"Bout ten minutes ago," replied Washington.

"Well it's gone now," said Jack, though he had to admit to himself that the affair was somewhat puzzling. Professor Henderson had been awakened by the yells of the colored man and came on deck to see what the trouble was. He appeared somewhat annoyed when Washington told him what had happened.

"There are no ghosts!" declared the inventor in positive tones.

"You wouldn't say so, Perfessor, if you'd seen him," spoke Washington. "He were all in white, tall an' slim, an' big red eyes, an' a green nose, an' fire comin' from his mouth an'—"

"Nonsense," interrupted Jack. "It was nothing but a white object, Professor Henderson. I saw it."

"And what do you think it was?" asked the inventor.

"I—I can hardly say," replied Jack. "Of course I don't believe in ghosts, but this—"

"It was probably a mist from the ocean," interrupted the professor. "Don't let me hear any more of it. Washington, go below. Your watch is up and Jack will take charge. I don't believe there will be any more ghosts."

Nor were there that night. The *Porpoise* glided along, requiring little attention, and when morning broke was several miles nearer the southern pole.

The journey was continued beneath the waves and it was found



much cooler under them than upon the surface, for the ship was in the midst of the equatorial heat.

About four o'clock in the afternoon, when all was quiet aboard, there came a sudden yell from the engine room. Washington's voice could be heard calling for help. Then it died away in a groan.

"Something has happened!" called Jack. "Washington is in trouble."

He hurried toward where the machinery could be heard buzzing. The professor, with Andy and Mark followed. They expected to see the colored man caught in some shaft or belt, but he was nowhere in sight.

"Perhaps he has fallen into the ocean," suggested Mark.

"The engine room does not open into the sea," answered the professor.

A deep groan came from some corner of the engine room.

"There he is!" cried Jack.

But a careful search failed to reveal Washington. Still he could be heard to groan at intervals. Bill and Tom came and aided in the search, while Mrs. Johnson, who was worried at the unusual activity, asked what the trouble was.

Captain Henderson did not tell her, for, as he said afterward, he did not want any women fainting away on his ship. At his request Mrs. Johnson went back to her cabin, and the hunt for Washington continued.

"Here he is!" cried Jack at last.

The boy had climbed up on a small ladder that led to the big storage battery tanks. He had looked down, and there, in the large metal box had spied the colored man on the bottom. Washington was unconscious and breathing heavily.

"He has been overcome by the fumes of the sulphuric acid!" exclaimed the professor. "We must get him out quickly or he will die!"

"I'll get him!" cried Andy.

The old hunter grabbed a small step ladder that stood against the

wall of the engine room. With this on his shoulder he climbed up the steps which led to the top of the storage battery tank. Then, by means of his ladder, he descended inside.

He had to work quickly as the fumes were very strong, but he managed to hoist Washington up so that Bill and Tom, from outside, could take hold of him. Then the colored man was carried out on the deck, where the fresh air and some restoratives the professor used soon revived him.

"Is I dead," were Washington's first words, as he sat up and looked about him.

"Not this time," replied the professor. "You had a close call, though. How did it happen?"

Washington explained that he started to clean the battery tank, when he lost his balance and fell in. He cried as he felt himself falling, but as soon as he struck the bottom of the tank the fumes of the chemicals made him unconscious. His deep breathing, which had sounded like groans, alone served to attract attention to his location.

In a little while Washington was all right save for a slight weakness. Captain Henderson made him go to his bunk, and ordered him to remain there until morning.

During the excitement over Washington's mishap all thought of steering the ship had been forgotten, and when Mr. Henderson went to the conning tower about five o'clock he found that the *Porpoise* was several points off her course and was headed to the east instead of to the south. How many miles out of her way the craft had steamed could only be guessed, but as she had been going wrong for nearly an hour, it must be quite a few the inventor calculated.

However, he said, no great harm had been done. Even this slight accident would not have happened had not Bill, who was in the conning tower steering, forgotten to put the automatic device in operation when he left the wheel to join in the search for Washington.

"We'll soon make up the lost ground," said Mr. Henderson. "Another week or ten days ought to see us at the end of our journey."

"And what will we do when we get there?" asked Jack.

"We will make some important geographical and scientific observations," said the professor. "Not only that, but we will have done something that no living person has ever accomplished. We reached the north pole, though we could not land on the exact spot. Let us hope we will be more successful regarding the south pole."

The professor set the ship on her course again. Bill and Tom got supper in place of Washington, while Mrs. Johnson helped set the table.

The meal was eaten, and then the inventor started the ship toward the surface, following the plan of not sailing beneath the waves after dark, in order to avoid accidents.

The craft was making good speed ahead, with the big screw revolving in the tunnel and spurting the water from the rear, when there came a sudden jar, and everyone nearly toppled over from the quick stopping of the *Porpoise*. At the same time the forward end seemed to go up in the air.

"What has happened? Are we sinking?" cried Mrs. Johnson.

"I think we are going up," spoke the professor in cool tones.

"In the air?" asked the lady.

"On the land," answered the inventor. "I think we have struck shore and slid up on a beach."

He ordered the engine stopped and hurried to the conning tower to make an observation. He turned on the searchlight and looked carefully at what the beams showed. Then he came back to the cabin.

"Well, what is it?" asked Mrs. Johnson.

"We have gone ashore, just as I supposed," said Mr. Henderson.

"And whereabouts are we?"

"On the coast of South America."

"Near where?"

"Near Terra Del Fuego, the land of fire!"



# ATTACKED BY SAVAGES

"Are we in any danger?" asked Mrs. Johnson.

"I hope not," replied the captain. "If the ship is not strained the rising tide will probably float her safely, and we can continue our trip. We will have to wait until morning to see, however."

"And if the ship is damaged?"

"We will have to do what we can. We will hope for the best, madam."

The professor went on deck. His first opinion of the accident was confirmed. The *Porpoise*, in emerging from the waves, had slid well up on a sandy shore, where she was held fast because the tide was rapidly falling. It would be twelve hours before there would be a chance of her floating again.

The mishap had occurred because the ship had gotten off her course when Washington's accident occurred, and had not been set right in time.

However, as Mr. Henderson had said, there was no particular danger, unless it was found that some of the plates had been strained, which might cause a leak.

The night was passed with the nose of the *Porpoise* well up on shore, and before morning, as the tide continued to fall, more and more of the craft became exposed until the whole steel body rested on the sloping beach.

Jack was the first to awaken. He was up with the sun, and went out on the deck to take a view of the country he had often heard about. A

stretch of wild landscape met his eyes, and to the left and right of the ship the waves were breaking on jagged rocks.

"It's a good thing we didn't hit the rocks," thought the youth.

Mark came up on deck, and the two boys looked over the scene. It was a strange one. Beyond the beach was a low level country, green in places, with now and then a patch of what looked like trees.

"And what are those brown spots moving about?" asked Mark.

"I guess they are herds of cattle," replied Jack. "You know South America is a great place for them."

For half an hour the two lads gazed about. Except for the stern of the *Porpoise* all of the craft was now out of water, and one could have jumped from the low deck down to a mound of white sand of the beach.

"Let's go ashore and take a run," suggested Mark. "I've almost forgotten how to walk on dry land."

"Go ahead," answered Jack. "I'm with you."

"All right."

The boys lost no time in getting down to the beach. They found it hard and firm, and made their way to the strip of grass-covered land lying beyond. Up and down they wandered, finding many curious and beautifully marked shells where the waves had washed them.

Suddenly Jack gave a big jump and let out a yell.

"What's the matter?" asked Mark.

"I thought I saw one of those cocoanuts move," answered Jack, pointing to where several of the big shaggy fruits lay under a tree from which they had fallen.

"I guess you're right," spoke Mark. "I certainly saw one of them take a little side step. I wonder what does it."

As the boys watched they were surprised, to see one of the cocoanuts come toward them, apparently advancing without any visible means of locomotion.

"This is a queer country," remarked Jack, getting ready to run in case the strangely moving cocoanut might be a warning of danger.

"Look! There's a whole lot of them moving," cried Mark.

Sure enough a dozen or more of the nuts began to advance toward the lads. The boys were not so much afraid as they were surprised. But a few seconds later the reason for the strange sight was made plain.

As they looked they saw one of the nuts roll down a little mound of sand. Then they noticed that a big land crab was on the tiny hill and it was evident that the nut had fallen from his claws.

"It's the crabs!" exclaimed Mark. "I remember reading about them now. They come ashore from the water where they live part of the time and get the cocoanuts. Then they smash the shells by pounding the nuts on a stone and eat the white meat inside. They are called coconut crabs."

"I was beginning to think we were in some enchanted land," spoke Jack.

"Well, it certainly looked queer," agreed Mark.

For some time the boys watched the strange sight. Then they walked along the beach, seeing several large star fish, and some big horse-shoe crabs that had been stranded by the tide.

"Look at that immense turtle!" exclaimed Mark, as one of the creatures scuttled over the sand toward the sea. "I'll bet she's been laying eggs!"

"Perhaps so."

They made a rush for the tortoise but were not quick enough, for she slid into the water and made off.

"Here's her nest, anyhow," called Jack, as he pointed to some eggs, thinly covered with sand. "Let's go back and take them with us. I've heard they are good eating."

Jack and Mark started to gather up as many of the eggs as they could in their hats. While they were thus engaged they heard a call from the ship and looked up to see coming toward them, all of the ship's company except Washington.

"I wonder if anything could have happened," spoke Mark.

He and Jack dropped the eggs and started on a run toward the stranded ship. They were reassured, however, when they saw the professor waving his hand at them. When he got within hailing distance the inventor called:

"It's all right, boys. We're just taking a little walk, before breakfast, for an appetizer. It's been some time since we were on land. Washington says he'll have some fine fried ham for us in a little while."

"And here are the eggs to go with it," spoke Jack.

"Have you found a hen house?" asked Mr. Henderson in some wonder.

"No, but we discovered a turtle, which is just as good," replied Mark. The professor agreed with him, and called for Washington to come and get the eggs.

"Wall I 'clare to goodness!" exclaimed the colored man as he gathered the product of the turtle up in his cook's apron. "Dis suttinly am a queer contraption of a country to find eggs growin' in de sand."

He shuffled back to the ship, while the others walked up and down on the beach. In about half an hour the professor suggested that they return.

"Washington must have breakfast ready by now," he said, "and I, for one, am hungry enough to enjoy it."

They turned toward the stranded *Porpoise* but no sooner had their eyes taken in the sweep of the ocean that lay before them than they uttered cries of fear.

Spreading out from the beach in a big half circle that enclosed within its curve the submarine, were three score of canoes, each one filled with half naked savages.

"The natives are going to attack the ship!" cried the professor. "We must hurry back or we are lost!"

He started on the run, accompanied by the boys and men. Mrs. Johnson and her daughter brought up the rear. The adventurers had gone from one misfortune into another.



At the top of their speed they approached the stranded ship. The natives saw them coming and the next instant hundreds of paddles broke the waves into a mass of sparkling water as the wily savages urged their canoes swiftly toward the submarine.

"If we can only reach it first we can hold them off until the tide floats us, and then we can escape," said the professor.

He increased his pace though the run was beginning to tell on his aged frame. The adventurers were now within an eighth of a mile of the ship, but the savages were closer, and had the advantage of being able to make greater speed. The two forces approached nearer and nearer. Finally the first of the canoes reached the submerged end of the *Porpoise*.

With wild shouts a score of the brown men leaped from the boats and scrambled up the steel sides. An instant later they were joined by several canoe loads of their companions. They swarmed up on the deck, and some peered down the winding stairs that led to the interior of the ship.

"Too late!" cried the professor. "They have captured the *Porpoise*!"

"But Washington is aboard!" shouted Jack.

As he spoke the colored man was seen clambering up out of the companion way. He gave one look at the wild natives who swarmed over the ship, and then, with a yell to be heard a long way off, disappeared below.

The shouts and cries of the savages grew louder and they seemed to be doing a sort of war dance.

"We must make one effort to drive them away," said the professor in desperation.

"We haven't even a revolver," spoke Andy.

"Let's use stones," suggested Jack, grabbing up a handful from the beach.

"Look out!" yelled Mark. "They are going to shoot some arrows!"

A second later a flight of the weapons filled the air. Fortunately the

natives were too far away to permit the shots taking effect, but it showed that they intend to fight and take possession of the ship.

Even this did not frighten Mr. Henderson. His vessel was more than life to him and he kept on. Several arrows fell dangerously close and he might have been hurt had not old Andy run after him and induced him to go farther up the beach and out of harm's way.

"They will kill Washington!" cried Jack as he thought of the colored man at the mercy of the savages.

"There he comes!" yelled Mark.

He pointed toward the ship and as they all looked in that direction they saw the colored man climbing out on the deck. Under one arm he bore a long narrow box, and in the other hand he carried one of the electric guns.

"He's goin' to fight 'em!" exclaimed Andy. "He's got a gun and he will show 'em what's what!"

But Washington did not seem to have any such intentions. With a yell that equalled the savage cries of the natives, he sprang over the side of the ship, onto the sand and ran toward the group of adventurers. A flight of arrows followed him, but he was not hit.



## ON LAND

"Why don't he shoot his gun at 'em?" demanded Andy, capering about on the sand. "He could soon scare 'em off!"

"I'm afraid Washington is too frightened to do anything like that," answered Professor Henderson. "He is lucky to have escaped alive."

"Wait until he gets here with that gun, an' I'll do some huntin' that will make them savages skip!" exclaimed Andy.

In a little while Washington came up to where the others from the *Porpoise* stood on the beach. The colored man was panting from his run.

"De most monstrous disproportionately extradition ob circumstantial occurances dat ever transpositioned on my optical vasionariness!" he exclaimed as he laid his gun and the black box carefully down on the sand. "Ten thousand naked imps of darkness swarmin' ober de ship an' not a pusson to say what dey ought to do an' where dey ought t' go! It am suttinly terrible!"

"Why didn't you shoot some of 'em?" demanded Andy.

"Me?" exclaimed Washington. "What for I want t' shoot 'em? S'pose I want 'em t' git mad at me?"

"Well, you're a great one," went on Andy, picking up the gun. "I guess I'll have to take a few shots myself."

"Yes, sah."

From Washington the adventurers learned how the savages had silently come up in their canoes and surrounded the ship, gaining possession of it before he could make any effort at defense, even

had he so desired.

"What are we to do now?" asked Mrs. Johnson, when they had retreated out of sight of the savages. "The natives have possession of the boat, and how are we to regain her when there are so many of them?"

"It certainly is a hard nut to crack," admitted the professor. "We will have to camp out on the beach for a while and see what happens. Perhaps they may leave the vessel when they find it will do them no good. They can't run her."

"But they can tear her all apart and damage the machinery," said Jack. "Then we would be in a pickle."

"Well, we won't hope for any such bad luck as that," interrupted the professor. "We will look for the best."

"When are we going to have breakfast?" asked the little girl, after a long wait. "I'm hungry, mother."

"We will have it pretty soon," replied Mrs. Johnson in order to quiet her daughter's mind.

"But I want it now," continued Nellie. "I'm very hungry."

"Hush!" said Mrs. Johnson.

"An' I had de finest brekfust what was ever invented," said Washington, rolling his big eyes. "Mud turtle eggs, ham, preserves, coffee—"

"That will do, Washington," said the professor. "It only makes our mouths water to think about such things."

At the mention of the turtle eggs Jack nudged Mark, and signalled him to walk to one side. When they were out of earshot of the others Jack said:

"What's the matter with cooking some of the eggs that are left on the sand? There are plenty of them, and there is no sense in our going hungry."

"How you going to cook 'em?" asked Mark.

"I'll show you," replied Jack.

He scooped a hollow place out in the sand until he had quite a

hole. This he banked up with stones until he had a small oven. By arching the stones over toward the top there was left a sort of circular opening. Over this Jack fitted a monster clam shell, with the concave side uppermost.

This made an improvised stew pan. Underneath was piled small bits of dry drift-wood, which a match soon set on fire. In a little while the water in the big shell was boiling.

"Now get some other shells for dishes," said Jack to Mark.

Soon Mark had piled up a lot of smaller shells.

"Help me gather some eggs now," said Jack, "and we'll put them in to boil. Then we'll invite the rest of the folks to breakfast."

The two boys soon uncovered from the sand a pile of the eggs, and in a little while they were steaming in the hot water. Then Jack arranged the shell-dishes on the sand. He went over to where the others were gloomily considering their plight.

"Breakfast is ready," he announced.

"This isn't any time for joking," spoke Professor Henderson, rather sternly.

"But I mean it," went on Jack. "Just come over and see. I'm not fooling you."

Wondering what he had done they all followed him.

"Welcome to Hotel Terra del Fuego!" cried Mark. "We haven't much of a variety, but what there is we can recommend."

He began to dip the eggs out of the water with a bit of shell and placed them on the improvised dishes.

"Everyone sit down," commanded Jack. "The bill of fare is ready."

They all joined in the short laugh that followed, and soon were seated in a circle about the beach-oven. The eggs proved to be very good, even though there was no pepper. The salt of the sea water they were boiled in was more than sufficient.

"Now if there was only bread in that ammunition bag Washington brought with the gun," said Andy, "we wouldn't want a better meal."

"He'p yo'se'f!" exclaimed the colored man with a grin as he

extended a canvas bag that was tied to the stock of the electric gun.

The old hunter opened it and found it filled with ship biscuits.

"Well I am stumped!" he exclaimed.

"I grabbed up de wrong thing in my haste," Washington explained. "I thought I had de electrical lightning bullets, but I didn't. Howsomever de gun's got some in de chamber."

"It's a lucky mistake," commented the professor as he munched a biscuit and an egg. "Bullets are good but these are better, when one is hungry."

They managed to make a fairly good meal, so that even hungry Nellie was satisfied. The boys found a spring of fresh water up on shore, and this furnished something to drink, for which they were grateful.

They sat about on the beach, after the breakfast and discussed what they had better do. It was evident that an attempt to regain possession of the ship, with their small force and only one weapon, was out of the question.

"We've got to use strategy," said Andy. "If we could play some trick on the savages we might scare them away. Otherwise I don't see what we are to do."

"It's a bad state of affairs," replied professor Henderson. "Even if we got the ship we might find it so badly damaged that it would be impossible to run it. It is a terrible thing," and he heaved a deep sigh.

The hours passed with no change in the situation. The savages remained in possession of the submarine, and did not seem inclined to quit the vessel. Most of them were inside, but quite a number paddled about the stranded craft in their canoes.

There was nothing for the adventurers to do but to await developments. With no chance of attacking the force of natives, they might consider themselves lucky if the savages did not come ashore to give battle.

The sun was high in the heavens when, in the shade of a big tree where they had all taken refuge from the heat, Nellie again

announced that she was hungry.

"I guess the boys will have to provide another meal," said Mr. Henderson.

Jack and Mark said they guessed they could find some more turtle eggs, and Washington volunteered to accompany them. As they were looking for a nest in the sand they saw one of the tortoises scurrying down to the ocean.

"Git her, quick!" cried the colored man. "Turn her ober on her back!"

The boys did so, though they did not know what Washington's object was. The big animal lay bottom side up, vainly moving its flippers. In a few minutes Washington had killed the turtle and cut it out of the shell.

"Now we'll hab turtle soup!" he exclaimed.

Soon the fire was again blazing in the improvised stove, and a little later an appetizing smell filled the air. Washington had made the soup, and, in addition, had cooked a number of the turtle eggs.

Big clam shells again served for dishes and a better meal than the breakfast was served.

"Now if we only had some dessert," spoke Mr. Henderson in a joking tone, "we wouldn't want much more. But I suppose dessert is out of the question."

Jack and Mark looked at each other and, without a word went off toward the woods. In a little while they came back, their arms filled with cocoanuts.

"How will these do for dessert?" asked Jack.

"Fine!" cried Mr. Henderson.

The fruit was broken open with stones and the delicious milk and soft pulp eaten with much relish. Then the adventurers stretched out beneath the trees and rested. The thoughts of each one were busy with plans for recovering the submarine, though no one seemed to be able to suggest any thing.

It was getting dusk, when, somewhat discouraged over the result of



the visit of the savages, they were all seated on the beach. They were beginning to think again of something to eat when Andy Sudds, discovered the long black box which Washington had brought with him in his flight from the *Porpoise*, and dropped in a hollow.

"I suppose you've got something very fine in there, Washington?"

"I declare to goodness I don't know what dat air contraption am conglomerated with," said the colored man. "I jest grabbed it up and run."

The old hunter had, in the meanwhile, taken the cover off.

"What in the world have we struck," he exclaimed.

"Sky rockets!" cried Jack, with a glance at the contents of the box.

"Yes," said Professor Henderson. "I took some aboard in case we might have to signal for help on the water."

"Hurrah!" yelled Andy.

"What's the matter?" asked Jack.

"We'll use the sky rockets as weapons against the natives!" shouted the old hunter, capering about on the sand.



## REGAINING THE SHIP

At first the others did not know what he meant. Andy seemed much excited, and for a time the professor thought the heat and worry might have affected the hunter's mind.

"We'll show 'em a thing or two!" cried Andy. "I once scared a lot of Indians this way so they didn't know whether they were on their head or their feet. Hurrah!"

"What are you talking about?" asked Mr. Henderson. "Hadn't you better sit down and rest a bit?"

"I'm all right," replied Andy. "I'm talking about those sky rockets. They'll be better than bullets. You see," he went on, "after it gets dark we'll shoot the rockets over the ship. The savages will think they are in the midst of a lot of falling stars, and if they don't take to their boats and leave us the ship I'll miss my guess, that's all."

"Good!" exclaimed the inventor. "We'll try it."

The rockets were taken out and examined. They were big affairs of several pound weight and were intended for far-off signalling at sea.

Andy, with the aid of the boys, Tom and Bill, soon constructed a rough sort of support from which to set off the fire-works. As soon as it grew dark, which it did about seven o'clock, preparations were made to try the experiment.

With a whizz and roar the first rocket went sailing skyward. Up through the black night it went, trailing behind it a shower of fire and sparks. Then, with a loud report like that of a gun it burst directly over the ship and a rain of brilliantly colored globes of flame descended.

"Shot number one!" cried Andy, who was setting off the rockets.

For a few seconds after the first flight there came no sound from the natives at the ship. Then, just as the second rocket was set off there issued a long-drawn howl, which was succeeded by cries of fear.

"We've waked 'em up!" shouted Jack.

In rapid succession several more rockets were sent over the *Porpoise*. By the light of them could be seen a mass of natives crowded out on the small deck, while others were in their canoes.

"I think I'll try it a little lower this time," remarked Andy. "Maybe I can hit some of 'em!"

He slanted the support closer to the ground and set off two rockets at once. Straight across the sandy beach they flew, directly toward the crowd of natives on the ship. Right into the midst of the savages the trailing comet of fire shot, with a hiss, roar and sputter that was enough to strike terror into the bravest heart.

There was a long piercing howl of fear. Then, as the natives felt the hot sparks scatter over their half-naked bodies, they broke into a wild stampede. Over the side of the ship they plunged, into the sea, and swam off. Those in boats paddled quickly away.

For good measure Andy sent another rocket into the midst of the fleeing ones, and this served to quicken their departure. By the light of the last one it could be seen that the ship was deserted, though the water all about her was black with the swimming savages, and the canoes.

"I guess they won't come back in a hurry!" cried Andy. "Come on! We'll board the ship now, and get the electric guns to ward off any further attacks!"

"That's the talk!" cried Mark.

Toward the *Porpoise* all started on a run. As they neared her they found that the rising tide had floated her.

"We must see if the natives damaged her," spoke Mr. Henderson as soon as he set foot on deck. "If they have it will be a hard matter to

make repairs so far from civilization."

A hasty examination, however, showed that the savages had disturbed little. The engine was soon set in motion, and, in ten minutes the ship was steaming away from the coast, headed toward the south, the goal they were so eagerly seeking.

As soon as they were well out to sea, and all sight of the canoes of the savages had been lost, supper was served, and all brought good appetites to the table. For, though the improvised meals on shore had tasted good, there had not been much to them.

For several days the *Porpoise* was kept on her course, sailing along under the water by day, and upon the surface at night. It was one pleasant afternoon, while Nellie, Jack and Mark were sitting out on the deck, during one of the times when the boat had risen to the surface to renew the air supply, that a strange commotion was observed off their lee. The ocean seemed to be boiling.

"What is that?" asked the little girl.

The two boys looked to where she pointed. Indeed the ocean seemed to be bubbling up and down in a strange manner.

"It's a school of porpoises," said Jack.

Just then the water became alive with big fish. They leaped over each other, springing high into the air and falling back into the sea with resounding splashes.

"They're not porpoises! They're whales! Baby whales!" yelled Mark. "Look out or some of the big ones may ram the boat!"

As he spoke the water all about the submarine was seen to be fairly swarming with the small whales. There were scores of them, and, at times, they were so thick that it appeared possible to walk out upon them without getting very deep into the water.

Suddenly the ship careened to one side and the sea rushed over the deck. It was evident that one of the big whales, which were deeper down in the water, had struck the vessel.

Nellie screamed and tried to grab the hand rail that was about the platform. She missed her grip. The next instant she was floundering

in the ocean, in the midst of the school of whales.

"Man overboard!" yelled Jack, remembering vaguely that he had read this was the proper call to make in case of accident.

His cry brought Washington and the professor up the companionway on the jump.

"Launch the boat!" cried the inventor as he saw what had happened.

Mark was already in action. At the first sight of Nellie slipping over the side he had thrown off his coat, broken the laces of his shoes in order the more quickly to remove the foot coverings, and had dived into the swirling water which surrounded the submarine.

He struck out in the direction where the little girl had disappeared, and as her golden head appeared above the mass of foam he yelled in encouragement.

By this time the small boat was launched and the colored man and Jack were pulling toward him. Mark succeeded in reaching Nellie as she was going down the second time. He grabbed her long locks and managed to keep her up until the little craft was alongside of him.

"Git in quick, 'fore dem whales eat yo' up!" cried Washington.

He hauled the unconscious child in first, and then Jack gave Mark a hand. As if by magic all the whales had disappeared and the sea was quiet again. In a few minutes the rescuers and the rescued one went back again on the *Porpoise*, where Professor Henderson soon brought Nellie around again. Beyond the shock and wetting neither she nor Mark was harmed.

It was Jack's watch on deck that night. He had the tour from eight until twelve o'clock and when, about ten, every one but himself had retired, he took his position in the door of the conning tower and prepared to pass the time as best he could.

The ship was moving along at half speed, and, as the automatic steering attachment was working Jack had little to do. He sat looking at the stars that twinkled in the sky, the blazing Southern Cross showing among the constellations, when he heard a slight noise near

the companionway.

He looked in that direction and, to his horror, he saw the ghostly white shape that had, on previous occasions, caused him and the others fright.

At first the boy resolved to shut himself up in the tower and wait until the uncanny thing had disappeared. Then his courage came back and he thought he would try to solve the mystery.

He argued that if the weird white object was human and could witness his movements the best thing to do would be to try and creep upon it unobserved. On the contrary, if the ghost was some natural phenomenon, or a supernatural agent, all he could do would be of no avail.

So he decided the best thing to do would be to crawl upon the thing, keeping as near to the deck as possible and trying to hide himself. With this in view he put on a long rain coat that hung in the conning tower, and then, like a snake, commenced to wiggle his way toward the middle of the platform where the white object still stood.

Nearer and nearer to it Jack came. His heart was beating fast and he was much frightened, but he nerved himself to continue. As he came closer he could see that the object looked more and more like a man, completely robed in white garments.

Jack was now within ten feet of the strange object. It was a man, he was sure of it, but whether a present or former inhabitant of the earth he could not decide. Jack's hair was beginning to raise. A cold shiver ran down his spine as the white thing lifted an arm and seemed to point directly at him. At the same time it groaned in a deep tone.

Jack let out a yell that could be heard all over the ship. He made a spring for the object, determined to discover what it was or die.

At that instant the whole ship seemed to rise in the air. It left the water and began moving skyward. Right out of the waves the *Porpoise* was lifted until the big screw was clear of the water and it was churning around in the tunnel without any resistance, racing at top speed now that it had no water to thrust against.

Then the ghost seemed to vanish into thin air, and Jack felt himself falling down the hatchway.





## ON A VOLCANIC ISLAND

In an instant the ship was in confusion. The professor, followed by old Andy, Washington, Mark, Bill and Tom, came rushing from their berths, all in their night clothing, to see what the trouble was. They met in a tangled mass, stumbling over Jack at the foot of the steps.

"Is the ship on fire?" called Mrs. Johnson from her cabin.

"I hope not!" called the professor. "But something has happened. Don't be frightened!"

By this time Jack, who had been somewhat stunned, recovered his senses and worked his way out of the mass of bodies.

"The ghost! The ghost!" he cried. "I saw him again!"

"Land a' massy!" yelled Washington.

"What has happened to the ship?" cried the professor. "Is it a tidal wave?"

"I was on deck," panted Jack. "I saw the white thing! I crept up on it! All at once the ship rose in the air!"

"And it's still rising!" shouted the inventor. "I must see what this means!"

He made his way to the deck, and his loud shout soon brought the others up to him.

"Shut off the engine!" Mr. Henderson called down to Washington, who hurried to obey.

"What has happened?" asked Andy, rushing towards him.

"We have run upon an island," answered the professor. "This is the worst thing that has yet happened to us."

"What sort of an island is it that shoots you up in the air?" asked the old hunter.

"It's hard to say," replied Mr. Henderson. "We will have to wait until morning to find out."

The boys and men went up on deck and there beheld a curious sight. The *Porpoise* had been lifted bodily from the surface of the ocean where she had been sailing and was now raised about ten feet above the crest of the billows. It was too dark to see the extent of the island she rested on, but, from the circle of foam around the outer edge it did not appear to be very big.

The excitement occasioned by the appearance of the ghost, Jack's yells and fall, and the rising of the ship, had subsided somewhat. Mrs. Johnson and her daughter, who were much frightened, were assured there was no immediate danger, and the men and boys put on more substantial clothing than that of their night robes.

It seemed as if morning would never come, but at length there was a pale light in the east and soon it changed to a rosy glow, showing that the sun was coming.

The professor was early on deck, and Mark and Jack were not far behind. As soon as it was light enough they could see that the ship was held fast on top of a small rocky isle, about one hundred feet in diameter, which rose abruptly from the water.

"It's a volcanic island," decided the professor. "We are in the midst of subterranean disturbances and this is probably one of the effects of some under-sea eruption. The pinnacle of rock rose from the ocean, forced up by some power underneath, just as our ship came over it. That accounts for the sudden rising into the air of the *Porpoise*. No wonder we were all scared."

"The next question," began old Andy, "is how are we to get off?"

"That's the point," agreed Mr. Henderson. "Here we are, high and dry, and we might as well be a broken flying machine as a submarine for all the power we have."

"Will we have to stay here forever?" asked Nellie, who had come

up on deck.

"I hope not," answered the professor, smiling for the first time since the accident. "We will find a way to get down, never fear, little girl."

"I suppose we might dig some sort of a canal down to the water," remarked Jack. "If we could we might float the ship."

"I'm afraid you'd find it slow digging through this volcanic rock," answered Andy. "It's like flint."

"Well, there's no use worrying over it," went on the professor in as calm a tone as he could muster. "It's time for breakfast, and we have to eat whether we're on the top of an island that shoots out of the water when you least expect it, or sailing along as we ought to."

Accordingly Washington prepared the morning meal, and they all found they had appetites for it, in spite of their fright. Afterward they all came on deck again and looked about them.

They were in the midst of a wild waste of water. Not a sign of land could be seen in any direction, and there was no evidence of a sail or steamship as far as the horizon showed.

The little island which held the *Porpoise* so close a prisoner was a mere speck in the vast ocean, but it was large enough to put an end, temporarily at least, to the progress of the powerful submarine.

The professor and the boys went over the side and climbed down to the rock. Then the inventor verified his surmise that the rocky point was of volcanic origin. It was also seen that there was little chance to get the craft back into the ocean.

"I guess we're doomed to stick here for some time," remarked Mr. Henderson, with a grim smile. "The rock has caught us squarely and nothing short of dynamite will free us. To use the explosive might mean the destruction of the ship, and I dare not risk it."

Gloom settled over the party in spite of the efforts the professor made to be cheerful. Washington, after the first few minutes of fright, regained his usual good spirits, but, no matter how he laughed and joked, there was a feeling of terror in every heart.

They realized their helplessness, and knew that unless another

upheaval of nature occurred there was small likelihood of their release.

On the third day of their strange adventure Professor Henderson resolved on a bold step.

"We must use dynamite," he declared. "If we stay here on this desolate rock we are bound to perish sooner or later, for our food cannot last many months, though we have a large supply. We are out of the path of steamers and only by chance would one pass here. With care we may be able to blast the rock so that the ship will not be permanently damaged. What do you all say? I would like your advice, for this concerns all of us."

One after the other all said they were willing to abide by whatever the inventor did. Accordingly he made his preparations. Washington, with a hammer and chisel, was set to cutting a fair sized hole in the big rock, as far away from the ship as possible.

He was two days at the job, and, during this time those on the stranded *Porpoise* watched in vain for the sight of a vessel.

"I am going to put the dynamite in," announced Mr. Henderson one morning. "We must all get into the small boat and row some distance away, as there is no telling what the result of the explosion may be."

"Suppose the submarine is destroyed?" asked Mrs. Johnson.

"Then we will have to sail for the nearest land in the small boat," replied the captain. "I will provision it and we will take all the precautions we can."

It was with anxious hearts that the little party embarked in the little craft that was carried on the *Porpoise*. It was barely large enough to hold them. The professor was the last in, and he lighted a long fuse that led to the dynamite before taking his seat. Then with Tom and Bill at the oars the little craft moved away.

"How long before the explosion will take place?" asked Jack.

"I timed the fuse for ten minutes," answered Mr. Henderson. "That will enable us to get far enough away so we will not be swamped by a wave."

Five minutes later Mark, who was intently watching the volcanic rock, gave a loud cry.

"There she goes!" he shouted.

They all looked to behold a wonderful thing. As easily as though it was some conjuring trick the rock began to settle down in the water. Lower and lower it went until only the tallest jagged points showed above the waves, whose crested tops the keel of the ship now almost touched.

"That isn't the explosion!" exclaimed the professor. "The fuse has not had time to get to the powder yet."

"But the rock is disappearing!" yelled Andy.

As he spoke the big pile of volcanic stone vanished completely and the *Porpoise* floated easily on the surface of the sea.

"Hurrah!" cried Mark.

"It am de most kloslostrous occurranceness dat eber transpositioned itself!" exploded Washington.

"Let's row back to the ship now!" cried Mark.

"Not yet!" said the professor quickly. "The dynamite has not gone off yet."

"There it goes now," remarked Jack.

At that instant a big column of water shot upward and a dull rumbling could be heard. A few seconds later the little boat rocked violently from the effects of the waves. Then the sea became calm, and the *Porpoise* could be seen dancing up and down on the heaving billows.

"Now we can go back in safety," spoke Mr. Henderson, and Tom and Bill bent to the oars.

"What happened?" asked Mrs. Johnson. "The rock seemed to disappear before the explosion occurred."

"That's exactly what it was," explained the inventor. "By some strange freak of nature the volcanic mass dropped back into the ocean a little before I was ready to blow it to pieces. In settling down it lowered the ship. Then the explosion occurred beneath the waves. If

I had waited a little while I need not have risked the dynamite."

"Well, there was no guarantee that the rock would go back where it came from," remarked Jack.

"No, we had to act," agreed the professor. "But now let us go aboard."

They rowed back to the *Porpoise*, which they found had sustained no damage from the queer experience it had been through.

The motors were set in motion and in a little while the craft was again moving through the water out of the dangerous vicinity of the volcanic area.

"Who has the two watches to-night?" asked Mr. Henderson after supper had been served.

"Washington and Andy," answered Jack, who kept track of the matter.

"I guess we'll change it, and have you and Mark take them," went on the captain. He gave Jack a peculiar look, and made a sign to him not to say anything. Wondering what was to come Jack went up on deck to watch the sunset.





## CAUGHT IN A WHIRLPOOL

The boy was joined a little later by the captain, who, coming close to him whispered:

"I am going to try to discover the ghost to-night. That is why I wanted you boys on hand to help me. This thing must be stopped if it is a joke, and, if it isn't—"

"Do you think it is some one playing tricks?" asked Jack.

"I don't know what to think," answered Mr. Henderson. "We will see what happens to-night."

Mark came on deck a little while, and the three talked of the strange appearances of the mysterious white object. The boys told of their experiences, and Jack related more fully his on the night the ship went up on the big rock upheaval.

"I don't believe in ghosts," said Mr. Henderson, "I'm going to lay this one," and he smiled grimly.

Night settled down. Jack, who had the first tour under the new arrangement, had made himself comfortable in the conning tower, and Mr. Henderson had hidden himself in the companionway. His idea was to thus guard both openings into the ship and ascertain whether the ghost came from within or without the craft.

Up to a short time before twelve o'clock nothing out of the ordinary happened. The only sound was the lapping of the waves on the steel sides of the *Porpoise*, and now and then a splash as a big fish leaped out of the water. There was only the slightest breeze.

Jack who, somehow or other, felt much sleepier than usual, caught

himself nodding several times. Once he awoke with a start and realized that he had been dozing.

"Come, come," he remarked to himself, "this will not do at all. This is a fine way to watch for a ghost."

He remained wide awake for perhaps five minutes. Then he was off to the land of nod again. He was just dreaming that he was skating on a pond and was playing snap the whip with a lot of boys, when he awoke with a start.

He felt something pressing on his chest and to his horror, as he looked up, he saw a big towering white object standing over him. A second glance showed him it was a man, or the semblance of one, and the thing's foot was on his chest.

With a terrified scream Jack sprang up, upsetting the ghost, which, the boy thought at the time, seemed rather heavy for an unearthly spirit.

"Did you catch it?" cried the professor.

"No! Yes! I don't know!" yelled Jack, struggling to his feet in time to see the white object glide down the stairs that led from the conning tower into the forward cabin.

"Run after it! We must solve the mystery!" cried Mr. Henderson springing from the companionway up on deck.

But at that moment the ship began to whirl about in a circle slowly at first, but with increasing speed until Jack and the professor felt sick and dizzy. All about the water seemed to be bubbling and boiling, while, at the same time, there arose on the air a mournful howl.

The professor jumped to the rail and looked over the side. What he saw made him recoil with horror.

"Quick! Close the man-hole hatch!" he cried. "Shut the door of the conning tower!"

"What is it?" Jack managed to ask.

"We are caught in a whirlpool!" Mr. Henderson yelled as he leaped down the companionway and pulled the heavy steel cover after him.

Stricken with a nameless dread, Jack closed the water-tight door

of the conning tower and made his way to the cabin. He could hardly get down the stairs, so swiftly was the ship whirling about.

He found the captain busy in the engine room and, in response to calls, Washington and Mark came hurrying in. They had been awakened by the commotion and the strange movements of the *Porpoise*.

"Turn on all the lights," ordered the inventor. "We must prepare for the worst."

The incandescents were soon glowing and in the glare the frightened adventurers gathered about Mr. Henderson, wondering what new terror had befallen them.

"See!" exclaimed the inventor. "We are going comparatively slow now, but we are on the outer edge. Wait until we reach the centre."

He pointed to a compass and, as the needle pointed steadily to the north the card seemed to be going around like the hands of a clock that has lost the balance and escapement wheels. The ship made three complete circles a minute.

Pale and frightened, Mrs. Johnson came from her cabin, whence the terrified cries of Nellie could be heard.

"Are we sinking?" she asked.

"Sinking will never harm the *Porpoise*," replied Mr. Henderson. "This is something decidedly worse."

"I know! It is a whirlpool!" exclaimed the lady.

"I'm dizzy; I'm so dizzy!" wailed Nellie. "Please stop the ship from going round, Mr. Henderson."

She came from her bed crying, and all her mother could do did not quiet her.

Meanwhile the submarine continued to whirl about faster and faster in the swirling waters. Five times each minute now it made the circuit, and, like the coils of a boa constrictor that is enfolding its victim, the circles continually grew smaller.

"We are being sucked down," said Jack in a low tone as he glanced at the depth gage, and noted that it showed them to be thirty

feet under water.

"That is so," remarked Mr. Henderson quietly.

"What will be the result?" asked Mrs. Johnson.

"I do not know," was the answer, and the captain turned aside. He seemed to have lost all courage in the face of the new disaster.

"Can't we empty the tanks and rise to the surface?" asked Andy.

"The tanks are not filled," replied Mr. Henderson. "What is taking us down is the force of the whirlpool and not the weight of water."

"Then you fear for the worst?" asked Andy.

"I do," said the captain simply.

"Don't give up the ship!" exclaimed the old hunter suddenly. "Never say die! It's a long lane that has no turns! Hip! Hip! Hurrah!"

They all turned to stare at the old man.

"Never mind," said Mr. Henderson in a soothing tone, that one would use toward a baby, or a person not right in their head. "Never mind. We may be saved."

"Oh I'm not crazy!" exclaimed Andy. He tried to caper about but the motion of the ship made him dizzy and he had to sit down. "I'm all right! I just happened to think of something!"

"What is it?" asked the captain eagerly.

"Send the ship ahead!" exclaimed Andy. "Speed her as fast as she will go. Try her strength against the force of the whirlpool! We may win!"

"Good!" exclaimed Mr. Henderson. "I was too much depressed to think of that! The ship has powerful engines. Queer you should remember that instead of me. Come, Washington, start the screw going! We will try to beat the whirlpool!"

The submarine was now whirling around so rapidly that it was difficult for any one to stand without leaning against the sides or holding on to something. It was going lower and lower down, as the gage showed.

Soon a throb that was felt through the length of the craft told that the engine had started. The vibration increased until it seemed that the

ship would be torn apart. Never had the big screw revolved at greater speed.

For a while the struggle between the force of man represented by the engine, and the power of nature, embodied in the whirlpool, seemed equal. Neither could gain the mastery. The ship continued to slide around in ever narrowing circles while the big cable of water forced through the tunnel by the screw, was like a cataract.

"Which will win?" asked the professor softly to himself.

He crawled to the gages and watched them. Only by their needles could it be told when the battle had turned in favor of the adventurers.

The circular motion, that was now terrible in its speed and power, seemed to culminate in a rush that almost overturned the ship. In the engine room Washington was laboring to keep the machine at top speed. He put on the last ounce of power.

"Hurrah!" yelled the professor suddenly. "I think we shall win!"

He pointed to the depth gage. The needle, which had showed a constantly increasing record, until it was now at two hundred feet, had stopped. It showed they were going no lower.

Then Mr. Henderson looked at the indicator which showed the progress straight ahead. The needle was beginning to tremble. As he watched he saw it move, slowly at first, until, as the powerful screw won a victory over the terrible whirlpool. The gage marked one, two and then three miles an hour.

"We are leaving the swirling waters!" cried Mr. Henderson.

Then, all at once, as though it was an arrow shot from a gigantic bow, the *Porpoise* cleft the under-billows and shot ahead, free at last from the grip of the whirlpool.

Man had triumphed over nature!

On rushed the ship like a race horse, for the engine was working as it never had before, and it did not have the pool to contend against.

"Slow down," said Mr. Henderson, "and we will go to the surface."

Two minutes later, under the buoyancy of her empty tanks, the

*Porpoise* lay floating on the top of the waves, under the shining stars.



## UNDER FIRE

"I shouldn't want to go through that experience again," remarked Mr. Henderson, as he, with all of the ship's company except Mrs. Johnson and Nellie went on deck. "I thought we were lost, sure."

"Lucky our engine didn't go disproportionatin' herself at de mostess criticless moment," put in Washington. "Golly, but she suttinly did hum!"

"And you deserve credit for making her do the humming," went on the professor with a smile.

"Well, we didn't catch the ghost," remarked Jack, "though I certainly saw him, it or her, whatever the thing is. I felt it too."

"It's rather strange," spoke the professor. "Every time, or nearly every time the ghost, as I suppose we must call it for the present, makes its appearance, something terrible happens to the ship. I hope it doesn't show up too often."

It was three o'clock in the morning, and they had battled with the whirlpool over two hours. They talked of little else, and each one told how he or she felt.

"It was just like twisting yourself up tight in the swing, and then letting the rope unwind," said Nellie, and they all agreed that she had described the sensation perfectly. They laughed, also, a thing they had felt little like doing a short time previous.

The engine had run so hard, and some of the bearings had become so warm, that for the rest of the night the professor decided to let the machinery remain stationary. This would give it time to cool



down he said, and they could make up the time lost the next day.

Tired out with the night's worry and labors they all slept late the next morning, and it was nearly ten o'clock before breakfast was over. The ship was started on her course once more, and Jack, who was steering, made the engine hum as the submarine scudded along, submerged about fifty feet.

"When you have time I would like to talk to you," said Mrs. Johnson to Captain Henderson.

"I'm at your service now," replied the inventor.

"What are you going to do with Nellie and me?" the lady went on.

"Take you to the south pole with us," was the answer, with a smile.

"It's very kind of you, and I don't want to put you to any trouble," went on Mrs. Johnson. "But I would like to go back north."

"I'd like to oblige you," returned the inventor, "but I hate to turn back now. We are well on our voyage, and I may never get another chance to locate the pole. Don't you want to accompany us? Think of the glorious achievement!"

"I'd rather go back north," persisted the lady. "But I wouldn't ask you to turn the ship around. What I was going to suggest was to sail along on the surface for a few days and see if you cannot sight a homeward bound steamer or sailing vessel. Then you could put me and Nellie aboard her."

"Of course!" exclaimed Mr. Henderson. "I never thought of that. Though we will be sorry to lose your company, and that of your little girl, I will do anything to oblige you. We will at once go to the surface."

He called the necessary order to Jack through a speaking tube which led to the conning tower. In a few minutes the ship shot upward, and emerged from the ocean in a little shower of foam and spray.

She lay undulating on the surface, and was just beginning to move forward again, under the influence of the screw, when a dull boom echoed off to the left.

Jack looked from the observation windows in the conning tower and saw, about a mile away a big steamer. From her side a white

cloud of smoke floated, and then the water splashed about fifty feet from the blunt nose of the submarine.

Once more came the boom, the white cloud of smoke and this time the water splashed only twenty-five feet away from the bow of the *Porpoise*. A third time came the sound, and the splash was even nearer.

"They're firing on us!" yelled Jack.

At his cry the professor ran on deck. He was just in time to see the fourth shot made, and this time the shell dropped into the water just astern of the *Porpoise* and so close that when it exploded it sent a shower of spray all over the deck.

"Here! Stop that!" yelled Mr. Henderson, shaking his fist in the direction of the steamer. "You nearly hit us that time. Do your practicing in some other direction!"

"I don't think they can hear you," said Jack. "And besides, I don't believe they are practicing."

"Then what in the world are they doing?"

"Shooting at us I guess."

"Why do they want to shoot at us? We haven't done them any damage."

"Perhaps they think we are a torpedo boat," suggested Jack. "Maybe that vessel's nation is at war with some other one and wants to sink us if it can."

"I believe you're right!" exclaimed Mr. Henderson. "But this will never do. They must stop!"

Once more the big gun on the ship was fired and the shell came dangerously close. At the same time several other reports, less in volume were heard, and the water all about the submarine began to bubble as the missiles from the machine guns cut the waves.

"Maybe it's an English vessel sent to capture Mark and me because of that anarchist trouble at the hotel," Jack went on.

"Nonsense!" exclaimed the captain. "But whatever it is, we must stop it, or they will sink my ship. Wave your handkerchief, Jack."

The boy sprang to the top of the conning tower, in order to permit those on the vessel to see him more plainly, and vigorously shook the white rag. That it was observed was evident when some one on the steamer wig-wagged back a reply. In a few minutes a boat was seen to put off from the ship, and soon a little launch, in command of a lieutenant in uniform, drew up alongside the *Porpoise*.

"Who is captain of this craft?" asked the lieutenant as he came aboard.

"I am," replied Mr. Henderson. "What do you mean by firing on me?"

"I am Lieutenant Muchmore," said the other, saluting. "Captain Wackford, of the *Sylph*, in His Britannic Majesty's service, presents his compliments, and asks you to pardon the occurrence. You see we took you for a derelict and were trying to sink you."

"I thought perhaps war had broken out between some country and the United States since we left port," went on Mr. Henderson, "and that you were trying to make a capture."

"No, it was only that we thought you a waterlogged craft, and a danger to navigation," repeated the lieutenant. "But what sort of a ship have you?"

"Come below and I'll show you the finest submarine that ever was built," answered the inventor with pardonable pride. "If you don't mind, give your launch orders to go back to the ship, and I'll show something that will make you open your eyes."

Anxious to see what the strange little craft could do Lieutenant Muchmore sent his launch back, and went below with Captain Henderson. He was astonished at what he saw, and unlike most Englishmen was willing to say so.

Mr. Henderson then went to the conning tower. He directed the man-hole cover to be clamped on, and then filled the tanks. The ship sank fifty feet below the surface and then shot forward.

Seated in the cabin the lieutenant was observing with wonder showing on his face at the accomplishment of sailing along under

water. Suddenly the lights were shut off, and the shutters moved back from the bull's-eye windows. The sea, glowing in the beams of the search light, was alive with fish, large and small, beautiful and hideous.

"Wonderful!" exclaimed the Englishman.

The bull's-eyes were closed, the lights switched on, and then speeding the engine almost to the top notch the captain steered the submarine straight for the war-ship.

He had carefully noted her direction before starting his own craft, and he resolved to do a little manoeuvring that would still further astonish the visitor. By careful reading of the different gages Mr. Henderson was able to come to the surface right in front of the *Sylph*, to the no small astonishment of the men on the deck of the vessel.

Then, just to show what the *Porpoise* could do, the inventor darted around the war-ship in a circle. He sunk below the surface, went under the keel of the *Sylph* and came up on the other side. Then he went the whole length of her, under water, starting at the stern and ending at the bow, where he brought the submarine to a rest in a smother of foam.

"Great! Wonderful! Surprising!" were some of the adjectives Lieutenant Muchmore used as he stepped from the conning tower, with Captain Henderson, onto the deck.

At the appearance of the officer and the inventor a group of those on the *Sylph* gave three cheers for the little vessel.

"Is she for sale?" asked Captain Wackford.

"No, thank you," replied Mr. Henderson with a laugh.

"Because if she is I'll give you free passage to England with her, on my ship," went on the commander. "My government would give a fortune for a boat that can do what yours does."

"It is not for sale," repeated Mr. Henderson, "but I have some one on board who would appreciate a free passage to England, or any northern port."

"Who is it?" asked Captain Wackford.

"A Mrs. Johnson and her daughter."



## CAUGHT IN AN ICE FLOE

Mr. Henderson soon explained the finding of the lady and the little girl, and Captain Wackford readily agreed to give them passage to New York, as the *Sylph* was to call at that port.

So Nellie and her mother were put aboard the warship, after bidding farewell to the captain and crew of the submarine. Mr. Henderson and the boys promised to write to them as soon as they got back from their voyage to the south pole, and, amid a chorus of good-byes the *Porpoise* resumed her journey.

For several days the submarine forged to the south, and the weather became noticeably cooler. Some of the nights were chilly, and those on watch were glad of the heavy coats they had brought along.

One morning, after a week of travel, when no interruptions had occurred by reason of accidents, old Andy came up on deck, and sniffing the air, said:

"We'll sight ice before night, or I'm a Dutchman."

"What makes you think so?" asked Jack.

"I can smell it," replied the hunter, whereat Jack, and Mark who had joined him, laughed.

"That is no joke," put in Professor Henderson, who, coming up the companionway heard what was said. "Old sea captains will tell you they can smell an iceberg long before they can see it."

"I don't claim to be a sea captain," said Andy, "but I once was on a whaling voyage and I learned to sniff ice in the air. I saved the ship

from collision with a berg once."

"Let me see," began the inventor as the adventurers sat about the supper table after the meal was finished, "who have the watches on deck to-night?"

"Washington first and Bill second," replied Jack looking at the chart.

"Keep a sharp watch for the icebergs," advised the captain. "If you feel a sudden chill in the air, and see something white, stop the engine at once and call for me."

When the *Porpoise* had been put in shape for the night, and the company, tired out from their labors over a general "house cleaning" which Captain Henderson had insisted on, went to bed, Washington took his place in the conning tower.

It was quite cold, but as the temperature for several days past had been steadily falling, nothing was thought of it.

"I guess I'll git out my fur-lined sealskin coat," said the colored man to himself as he felt the chill night air, that seemed to increase in frigidity along about eleven o'clock. He went to the cabin to get his overcoat, and, returning on deck prepared to spend the rest of his hour of watch in ease and comfort. He stretched out on the bench in the conning tower, noted that the machinery was working right and that the proper course was being steered, and then he let his thoughts drift to the many adventures he and his employer had gone through of late, and also while on the trip "Through the Air to the North Pole."

Washington gave one frightened, startled look, in a few minutes, so comfortable had he fixed himself, but happening to look forward through the glass-covered porthole of the tower, he saw something that made the cold chills run down his back.

There, right in front of the *Porpoise*, and not a cable-length away was a tall, mysterious, white thing which was shimmering in the pale light of the moon that had lately risen.

Washington gave one frightened, startled look, and then, with a



tongue that could hardly move, he yelled out:

"De ghost! De ghost! He'll git me suah!"

Then the colored man made a dive for the stairway leading to the cabin, but missed it and brought up with a crash on the steel floor of the conning tower.

"What is it?" called Professor Henderson, springing out of his bunk.

"De ghost!" wailed Washington from the huddled up heap he was in.

"Catch him!" yelled the captain.

"I dasn't," moaned Washington.

The next instant the ship quivered from stem to stern. There was a terrible shock, followed by a grinding, crashing sound. Then the craft seemed to be pressed down by some great weight. It heeled over to one side, and the water began to pour down the open man-hole.

"Quick! Clamp on the covers!" shouted Mr. Henderson as he felt the sea dashing into the interior of the boat.

Jack and Mark sprang to obey. It took all their strength, for the water was running in like a mill-race.

"What has happened?" asked Andy, as he tried to climb up the companionway ladder, that was tilted backward.

"I guess we've hit your iceberg!" cried Mr. Henderson.

"I knew I smelled the frozen stuff," replied the old hunter.

They got the covers on the manhole only just in time and they all crowded into the cabin, while Jack switched on the electric lights.

"Is the ship damaged?" asked Mark.

"I think not," replied Mr. Henderson. "But we are sinking. Look at the depth gage."

The hand on the clock-face was moving slowly around. From ten it went to twenty feet, then to thirty and kept going until it stood at seventy.

"Look to the air tanks," ordered Mr. Henderson to Washington, who, by this time had recovered from his fright. "See if they are all

right."

The colored man came back in a few minutes and reported that the supply of compressed atmosphere was safe and that there was plenty of it.

"That's good," remarked Mr. Henderson. "Whatever else happens we can breathe for a while."

"But what has happened?" asked Andy.

"I think the top part of an iceberg toppled down on us," was the reply. "You know about nine-tenths of a berg is under water. Sometimes there is a warm current of the ocean underneath the ice, and it melts. Then it becomes top-heavy and tilts over. One of that sort must have caught us, and has shoved us down into the sea."

"But why don't we rise again when the ice floe slips off us?" asked Mark.

"Because, in all probability the ice will not slip off us," answered the professor grimly. "It may be so large that it has caught us like a bug under a barn door."

"Then we are fast in the ice under water," spoke Andy after a pause.

"It looks like it," came from the inventor. "However we will not give up yet. We may be able to make our way out. Start the engine at full speed, Washington."

The machinery which the professor had shut down at the first cry of alarm was set going. Soon the throb and hum told that the big screw was revolving.

Meanwhile the *Porpoise* had regained an even keel, and had stopped sinking, remaining at the depth of seventy feet below the surface.

"We will first try to go straight ahead," said the captain.

He turned on more power and they all waited in anxiety. The test would tell whether they could escape in that direction or not.

But, though the powerful screw churned the water to foam in the tunnel, the *Porpoise* never budged. It was as if she was held in a vice.

"It's of no use," remarked Mr. Henderson with a shake of his head as he watched the speed gage and noted that it remained stationary. "We must now try the other way."

Once more the big screw was set going, this time in the opposite direction, so as to pull the ship out of the ice if it was possible. But this, too, was of no avail.

"It looks as if the ice had us," said Andy, trying to speak in a cheerful tone. "But there's one way more to try."

"What is that?" asked Mr. Henderson.

"If we were in the air ship we could go up," replied the old hunter. "But, as it is, we had better go down. Why don't you fill all the water tanks, and try to sink beneath the iceberg? It can't go down so very far into the water, and I reckon we could slip under it."

"The very thing!" exclaimed the professor, whose mind was too sorely troubled over the happening to enable him to think of plans of escape. "That's the best thing to do."

Under the inventor's direction Washington filled the tanks and then, ere the pumps had ceased working, the screw was started and the deflecting rudder inclined to cause the ship to dive.

One, two, three minutes passed, and still the *Porpoise* did not move toward the bottom of the sea. She remained submerged and stationary. Anxious eyes gazed at the dials. The indicating hands trembled under the throbbing of the engines, but did not move.

"It will not work!" exclaimed Mr. Henderson in sorrowful tones.

"What does it mean?" asked Bill, who had come up to where the others stood.

"It means that we are prisoners in the ice; caught between the upper and lower parts of a gigantic berg, and held here under the water."

"Can't we ever get out?" asked Jack, a tremor coming into his voice. "Can't we escape when the ice melts?"

"The ice of the southern polar sea seldom melts in this latitude," replied the professor.

An ominous silence followed his words.



# THE SHIP GRAVEYARD

Truly the adventurers were in a position that might well cause the stoutest heart to quail. With hundreds of tons of ice above, below, and on every side of them, their chances of escaping alive from this frozen tomb were very small.

"Can't we make an attempt to get out of this prison?" asked Jack.

"Indeed we will," said the professor. "We will try all the means at our command. If they all fail—"

He dared not finish the sentence, but they all knew what he meant. It was now about one o'clock in the morning. The ship had become stationary after the uneasy motion caused by the oscillation of the big berg.

"We may as well turn in and get a little sleep," remarked Mr. Henderson. "We can all work better if we get some rest."

It is doubtful whether any of them slept, for the horror of their position was too fresh in their minds. Still, lying down in the bunks rested them.

It was six o'clock when Washington awoke. In spite of the dangers of the icy grave, he had managed to get a little sleep. He prepared breakfast and called the others.

"Make a good meal," advised Mr. Henderson. "We have plenty of work ahead of us."

"Are you going to free the ship?" asked Mark.

"I am going to try," was the answer.

A little later the inventor was busy in one of the small store rooms

aft when Jack came up. The professor was carefully taking out a box labelled:

DYNAMITE! DANGEROUS!

"What are you going to do?" asked the boy.

"I am going to try the same experiment we attempted on the volcanic island," was the reply. "Only, this time, I am afraid we shall have to complete it to the end. There is little likelihood of the ice falling apart."

"Then you are going to blow it up?" went on Jack.

"That's what I hope to do," the inventor went on. "I see no other way, and, though there is a risk, it is not so great a one as to wait to be crushed in the ice as it freezes more solidly."

Under the directions of Mr. Henderson they got out the diving suits. The professor, the two boys and Andy put them on. The dynamite, in specially prepared water-proof packages, with long fuses was laid in readiness close to the door of the diving chamber.

Into the cell, the four who were to make the perilous journey under the ice, took their places. The water was slowly admitted, and then, with the electric lights in their helmets throwing out powerful gleams, they started forward as the outer door swung open.

It was well they had all taken the precautions to don thick undergarments and clothing, for, even through the heavy rubber diving suits, the terrible cold of the southern polar sea struck a chill to their very bones.

As the professor had said, the ship was caught between the upper and lower parts of the iceberg. On either side, ahead and to the rear there was open water. Beneath their feet there was a floor of ice. It was as if they and the ship had been placed between two great sheets of the frozen matter.

Their progress was slow, for the water hampered their movements and each one had some of the dynamite to carry. The footing, too, was insecure, for the icy bed of the ocean was slippery.

As they were huddled together, the professor in the lead, and their

lamps making a faint illumination in the darkness, they suddenly became aware of a great shadow over them. They looked up, and their hearts nearly ceased beating as they saw a gigantic sperm whale right over them, and between the ice. The terrible animal had observed them also, and, food being scarce in those frigid regions, had evidently made up its mind to dine on some choice morsels.

The whale was nearly as large again as the submarine, and to the frightened voyagers seemed more immense than a house. With slow motions of the flukes the animal placed itself right over the boys and men, ready to rush at and take them into its terrible maw.

Old Andy, who alone seemed to retain his presence of mind, stepped to the front. The professor and the boys wondered what he was going to do. Then Andy held up one of the electric guns.

Always thinking of his chosen calling, the old hunter had picked up the weapon as he was leaving the *Porpoise*. He waited until the whale was within a short distance, so close in fact that the small eyes, out of all seeming proportion to the rest of the big body, could be seen. Then Andy fired one of the explosive bullets straight into the open mouth that was fringed with rows of the springy bone that is a part of a whale's eating apparatus.

The shot took effect, and made a vital wound. In its death struggles the beast lashed the ocean to foam, and, but for the fact that Andy as soon as he fired the shot crouched down, pulling the others toward the floor of ice, they might all have been killed.

The whale turned and made a rush in the opposite direction to that of the divers. This was a welcome sign to the professor, for he knew the animal was seeking open water and this told him it must be somewhere in the vicinity.

Their hearts still beating loudly from the closeness of death, the adventurers continued their way. On every side were fish, big and little, and, though some of the larger ones thrust themselves to the men and boys, as if wondering what strange creatures they were, none of them offered to attack.



Led by the professor they made a complete circuit of the ship that was held fast in the ice. As the inventor had surmised, the *Porpoise* was nipped only above and below. If she could be freed at either of those points she could rise to the surface, or sink down under the ice.

After making a careful examination of the position of the craft, Mr. Henderson motioned to have the dynamite placed on the ice, in front of, and about two hundred feet away from the nose of the ship.

He connected the cartridges with the fuse and wires that were to explode them, and then, taking the free end, he started back toward the ship. Washington was on the watch for them, and operated the diving chamber. Soon the four were back in the *Porpoise*.

"Now to see if our plan will work," said Mr. Henderson. "I am relying on the well known downward force of dynamite to blow a hole in the bottom part of the ice, so that we can drop below."

"Why not make a hole above so we can rise and escape?" asked Bill.

"Because," replied the professor, "we are now in the region of perpetual ice. The ocean above us is one fast floe, or a number of smaller ones, so that, in any event our progress would be impossible. But we can sail far enough down under water to escape all the ice. That is the purpose of the *Porpoise*. That is why I built her. We will now begin on the last part of our voyage; that is if we can get free of the fearful grip of this sea of ice."

There was little they could do to protect themselves. They would either escape or be blown to pieces in case the explosive exerted too great a force. They all put on life preservers to guard against the contingency of the *Porpoise* being ripped apart and themselves cast into the water, yet they realized that without their ship, they could live but a little while in the ice-filled water near the south pole.

The professor saw that everything was in readiness. He hesitated a moment and looked at the electric button in his hand, for this time the dynamite was to be detonated by a battery. How much might depend on one push of the finger!

There was a slight movement to the muscles of the professor's hand. Then it seemed as if a thunderbolt had fallen into the midst of the ocean about them.

There was a dull rumble, but the confined space and the thick walls of the ship shut most of it out. It was followed by a sickening dizzy motion to the submarine. She seemed about to roll over and those in her grabbed frantically at the sides. The next instant the craft plunged down, down, down, into the water which was filled with broken cakes of ice, that rattled against the steel sides, like peas in a pan.

Down and down the *Porpoise* went, for her tanks were full. More and more rapidly she continued to sink, until it seemed she would fetch up in the deepest cavern of the ocean.

"We's gwine t' Mars Davy Jones's locker, suah!" Washington exclaimed as he looked at the depth gauges.

[Illustration: THEY WERE IN THE MIDST OF A GRAVEYARD OF WRECKED SHIPS.—Page 200.]

"Has the experiment succeeded?" asked Andy of Mr. Henderson.

"I think so," was the answer. "At any rate we are free from the ice, temporarily at least. We are sinking down through the hole the dynamite made, just as I hoped we would."

"Where will we end up?" asked Jack.

"No one knows," replied the captain. "But I would say—"

At that instant the ship stopped sinking and brought up with a bump.

"I should say we were at the end of this part of our journey," finished the inventor.

He turned off the cabin lights and lighted the search lamps that threw a gleam so the water could be looked at from the bull's-eyes windows. The sight that met their gaze was an astonishing one.

They were in the midst of a graveyard of wrecked ships, and, on every side, scattered over the ocean bed, were the broken hulks that had once been stately vessels.



## CAUGHT BY SEA SUCKERS

"What sort of a place is this?" asked Andy, as he gazed at the last resting spot of the big ships.

"They have probably drifted here with the ocean currents, become caught in the ice and have remained here hundreds of years," said Mr. Henderson. "Some of the ships are very old, and, by their build must have sailed the waters centuries ago."

"Maybe some of them are treasure ships," suggested Jack.

"They might be," admitted the professor.

"Then we'll go aboard and get the gold," spoke Mark.

"I'm afraid you'll be disappointed," went on the inventor. "In the first place most treasure ships are looted before they sink. And it would be very dangerous for any of us to venture to explore those hulks."

"Why?" asked Jack.

"Because they are rotten, and liable to fall to pieces any minute. If you happened to be in one at the time you would be caught in the wreckage and eventually drowned even though you had on a diving suit. Then, again, the ice here is constantly shifting about, and a sudden motion of the under-water floe might carry you hundreds of miles away. So we will not try to hunt for any fortunes on the sunken ships."

With this the boys were forced to be content. They stood at the small windows looking at the skeletons of ships that lay on every side of the *Porpoise*. Some of the craft were big steamers, and others were small sailing vessels. A few had jagged holes in the hulls,

showing how they had been damaged. A few stood upright, with sails all set, as if disaster had suddenly come upon them.

"Well, what is the next move?" asked Andy after a pause. "Are we going to stay here?"

"We are going to find the South Pole," spoke Mr. Henderson suddenly. "That is what I set out to do, and I am going to accomplish it if possible. We have had many accidents and a harder time in some respects than when we made our trip to the north in the air ship. But I am sure we shall succeed. Start the ship to the south, Washington."

"But we may run into an iceberg," objected the old hunter, who was inclined to be cautious.

"I think not," answered Mr. Henderson. "I believe we are on a sort of level plane between two vast upper and lower fields of ice. We can go freely in any direction excepting up or down."

"How is that?" asked Mark. "I don't quite understand."

"Because there is, I believe, a big sheet of ice above us, one, say several hundred feet thick. The same thing is below us, between us and the real bed of the ocean."

"But suppose we have to go up to renew our air supply?" asked Jack.

"We can't go," replied the inventor.

"Then we will die."

"Not necessarily. We will steam along until we come to a place where there is no ice above us."

"But I thought you said there was nothing but ice above us now."

"So there is, but I intend to head due south and there, I believe, we will find an open polar sea. If we do my theory will be proved and we will have made a great discovery."

"Forward then!" exclaimed Jack. "Let us strike for the open sea."

The *Porpoise* began to move ahead. She steamed slowly, for Mr. Henderson realized that he was in dangerous waters. He took his position in the conning tower, and had Jack with him to assist in looking for any obstructions that they might unexpectedly meet.

The big searchlight gave a fine illumination, for the ice above and below reflected back the beams, and what would otherwise have been a sea of darkness was made one of daylight.

The water swarmed with fish, but they were like none that the adventurers had ever seen or dreamed of before. There were monsters with hideous heads, and eyes so large that they occupied nearly half of the ugly bodies.

Then there were serpent-like forms, fish with long slender bodies and whip-fashioned tails, with jaws that extended before them for ten feet or more. Others there were, great lumbering monsters that crawled along on the ice, somewhat as seals do.

After several hours' travel the submarine ran into a school of fish that had shapes like those of polar bears, while their heads were like those of sharks. The creatures swarmed up to the side of the vessel, and some scratched with their claw-like fins on the glass windows of the conning tower and the side bull's-eyes.

A meal was prepared by Washington, and all the adventurers brought good appetites to the table. On and on rushed the ship, every hour coming nearer and nearer to the pole.

Professor Henderson had turned the steering of the craft over to Mark, who, with Jack as an assistant was sending her along at a good speed, when suddenly the submarine seemed to slacken in her progress.

"What's the matter now I wonder?" asked Mark.

"Maybe the engine bearings got hot, and Washington had to slow up to cool them," suggested Jack.

He looked through one of the side windows in the conning tower, a moment later, and uttered a cry of fear.

"What is it?" asked Mark.

Jack pointed with a hand that trembled from fright. Staring at them through the thick glass of the bull's-eye the boys beheld the most hideous sea monster they had yet encountered.

It seemed to be a vast circular mass of flesh, twenty feet in

diameter, and, in the middle were two openings each three feet across. They were like big holes, and, at the farther end of them could be seen two unblinking eyes. In the centre was a horrible mouth, armed with a triple row of teeth.

Down below there was a short body, at the end of which was a smaller disk, armed with a sharp horny point.

"What is it?" asked Jack in a whisper.

"I don't know," replied Mark.

A moment later Mr. Henderson came up the companionway into the tower. He caught one glimpse of the monster.

"It is the great sucker of the polar seas!" he exclaimed. "Quick! Speed up the engine! If that one, and the mates of it, fasten on to us we will have trouble!"

He pressed the signal that connected with the engine room, and told Washington to start the engine at its greatest power. The next instant the ship throbbed and trembled under the vibrations of the big screw.

"We may escape!" cried the professor.

As he spoke the ship seemed to come to a sudden stop. The engine could still be felt moving, and the big screw still churned the water to foam in the tunnel, but the craft was stationary.

"We are caught!" exclaimed the professor.

"So we are!"

The windows in the conning tower were darkened. The big sucker had thrown itself forward and spread itself over the glass, claspings its horrible form half way about the submarine.

"Let's look at the other windows! There may be only one of the creatures!" Mr. Henderson exclaimed, as he hurried down the companion way and into the main cabin. He threw back the slides covering the glass.

The sight that met his eyes caused him to recoil in horror. There, pressing their shapes against the steel sides, and over the bull's-eyes of the ship were two more of the gigantic suckers!

The ship had now ceased to move, and Washington, in the engine room, feeling that something was wrong, had shut off the power. The adventurers were caught in a trap more terrible than that of the ice, the volcanic mountain, or the Sargasso Sea. It was a trap from which they might never escape.

The suckers, thinking the submarine was perhaps a species of fish, like themselves, and one of their enemies, had fastened on it their fatal vice-like grip. To move through the water, with the weight of all that clinging flesh was impossible.

"What sort of creatures are they?" asked Jack, speaking in a whisper, so great was the terror inspired by the presence of the gigantic sea suckers.

"I never saw any of them before," replied the professor, "but I have read about them. They live only in the polar regions and are a species of octopus, only more terrible. Their powers of suction are enormous, and once they fasten on a fish or animal they never let go until they have absorbed it completely. They act in the same way that a star fish does on an oyster."

"But they can't eat the ship," said Jack.

"No, I fancy the steel and iron sides will prevent them from making a meal of us."

"Then where is the danger?"

"They will not let go until they discover that they cannot devour us, and it may take days. We can only remain under water a comparatively short time at the most. So you see where the danger is."

"But can't we go out and kill them? Then they would let go."

"It would be most risky to venture out, protected even with a diving suit, and carrying the electric guns," the professor went on. "No, I must think of some other plan to free ourselves from the creatures."

"Blow 'em up wif dynamite an' send 'em inter disproportionately contrastedable circumferences!" exclaimed Washington, who had been listening to the conversation.



"This isn't any time to joke," Mr. Henderson said sternly.

"I wasn't joking," replied the colored man. "Can't we squirt acid on 'em or chop 'em up, or—or—"

"We can do nothing for the time being," said the professor. "Come, we will have a consultation on the subject. Perhaps some one may be able to think of a plan of rescue."

"Let us hope so."

They all gathered in the cabin. The professor explained the nature of the creatures, as far as he knew them from what he had read or heard. He pointed out, through the glass windows, over which the suckers were still clinging, how they maintained their grip, by exhausting, through their big mouths, the air between their saucer-like surfaces and the ship to which they were clinging.

"Can't we go out and fight 'em?" asked Andy, who was always ready to use a gun.

"I doubt if we could get out," replied the professor. "Though we can not see them, I believe the creatures cover every part of the ship from stem to stern. We could never open the door of the diving chamber with that terrible sucker covering the iron portal."

"Maybe if we wait long enough a lot of sharks will come along and eat 'em up," put in Jack.

"I am afraid sharks will not come to these frozen waters," said the professor. "They like a warm climate."

"And you don't think it would be feasible to use dynamite," asked Mark.

"We can't get out to place it where it would blow up the fish and not us," answered Mr. Henderson. "If we could it might serve."

A silence fell on the group. They were in sore straits and there seemed no hope of rescue. The big disk-like bodies that covered the windows did not move, but remained there, staring with horrible persistency into the interior of the ship.



## LAND UNDER ICE

Suddenly the craft began to move. Slowly at first, then, with more speed it forged ahead through the water.

"Are we free?" asked Andy, starting up.

"Who started the machinery?" demanded the professor.

"No one," replied Jack. "We are all here. There is no one in the engine room."

"But we are moving," said Mark.

"It's dem sucker-fish!" exclaimed Washington. "Dey is takin' us off to der dens an' dere we'll all be eat up!"

"I'm afraid part of it is true," said Mr. Henderson. "The creatures are certainly making off with us. How powerful they must be!"

"Will dey take us to a cave?" faltered Washington. "Will dey eat us up?"

"I don't think they'll eat us up," spoke the inventor. "It would defy even their powerful sucking apparatus to bore through the steel sides of the *Porpoise*. What I am afraid of is that they may move us to some hidden depth where we will be caught under the rocks or in the ice, and so lose what little chance there is of getting free."

"And the worst of it is we can't do a thing to help ourselves!" exclaimed Andy. "This is the worst game I was ever up against!"

The adventurers were indeed helpless. They could not get out of their ship to attack the monsters, even had they dared to. Their engine, powerful as it was, had proved no match for the creatures, and now they were being carried away, ship and all, to some

unknown place.

The ship did not go through the water fast. Though the suckers seemed to be working in union their bodies were too unwieldy, and the ship so large, that their pace was slow. Nevertheless they kept steadily on.

Several times, in their desperation, the adventurers tried the force of the big screw against that of the suckers. It was of no avail. Neither was the device of emptying the tanks, and trying to force the craft up as far as the roof of ice would permit it to go.

"It's of no use," announced Mr. Henderson with something that sounded like a groan. "We must prepare for the worst."

"How long can we live here without going to the surface after a fresh supply of air?" asked Bill.

"About three days," was the answer. "I took the precaution to put a double supply into the tanks, in readiness for an emergency, but I never thought of such a terrible situation as this."

The submarine seemed to be moving more rapidly now. It was useless to try to see through either the windows in the side or in the conning tower, for all the glass was covered by the horrible bodies.

"What will they do with us when they get us where they want us?" asked Andy.

"What can they do except hold us prisoners until—until—" The professor broke off the sentence he dared not finish.

For an hour or more the craft was moved through the water at moderate speed. Then it came to a stop. Those on board were alert for what might happen next.

"I guess dey done got us in der cave," said Washington with chattering teeth. "Now dey'll begin to devour us wid dem terrible big mouths! Golly, I wish I was home!"

"Stop that nonsense!" exclaimed Mr. Henderson. "Be a man! There is no danger yet. The sides of the *Porpoise* will defy worse enemies than those attacking us!"

At that instant the ship began to move again. It was hauled slowly

through the water.

"They are pulling us backward!" said Andy, as he watched the needle of the compass.

Once more the submarine was stopped. Then it moved forward at a more rapid pace than at any time since the suckers had seized it. An instant later it brought up against some solid object with such a jar that those inside were thrown off their feet.

"Something has hit us!" cried Jack.

"More likely we've struck something," said the professor.

Again the ship forged to the rear, and once again it was sent swiftly ahead. Then came the second shock, harder than the first, which sent some of the party headlong.

"They are banging us against a rock!" cried Mr. Henderson.

"Do you mean those sea suckers?"

"Yes. They have probably found that the shell of the *Porpoise* is too hard even for their powerful jaws. So they have taken us to some place where the rocks show and are banging us against them in order to break the ship, so they can get at what is inside."

Once more the ship was drawn backward and again dashed against the stone. The shock was a hard one and toppled over all who were not clinging to something.

"They are ramming us bow on against the rocks," cried Andy. "It will break us apart if they hit us many more times!"

Washington hurried forward. He came back with his eyes showing terror.

"There's a lot of rocks right ahead ob us!" he exclaimed. "I see 'em through th' little window jest above th' screw. There's land under this here water!"

"Land under this ice do you mean?" asked the professor.

"That's what I mean, an' we's bein' rammed agin th' rocks!"

"There it goes again!" cried Jack, as the ship shivered from stem to stern against the impact of the blow.

"This can not last long," said Mr. Henderson. "If they strike us many

more times some of the places will start, the water will come in, and we will drown!"

"But what can we do?" asked Jack.

"Let's go out now and see if we can't kill some of the beasts with the guns," suggested Andy.

"I cannot permit it," answered the inventor. "Our position is bad enough as it is, but to go out would be to lose our lives for a certainty. The suckers would swallow us up in a moment. I must find some other way."

There was a period of silence, while all waited anxiously for what was to happen next. It was not long in coming. The next impact of the ship against the rocks was the hardest yet, and it seemed that more of the suckers must have gripped the craft.

"She's leakin' a little!" exclaimed Washington coming back from an inspection forward. "De water am tricklin' in!"

"We must fight them!" exclaimed Andy. He ran to get a gun and his diving suit.

"Don't try to go out!" warned the professor. "You will surely be killed."

"I'd rather be killed out there than die shut up in the ship!" cried the old hunter. "I'm going out!"

"Wait!" exclaimed Jack suddenly. "I have a plan that may save us!"

"What is it? Speak quickly!" said Mr. Henderson. "We are in desperate straits!"

As he spoke there came another crash against the rocks.

"We must electrocute the suckers!" cried the boy.

"Electrocute them? What do you mean?"

"Take the wires from the electric light circuit, attach one to each end of the ship, and start the dynamo at full speed!" answered Jack.

"What good will that do?"

"The ship is steel," went on the boy. "It will become charged with a powerful current. We can insulate ourselves by putting on rubber boots, but the shock of the electricity will kill the creatures!"

"Good for you!" exclaimed Mr. Henderson. "Quick boys, everybody lend a hand! Washington, detach the wires and run one to the bow and the other to the stern of the ship. Then get out the boots."

In a few minutes the dynamo was ready to send a death-dealing current through the entire ship. The professor and all the others put on the boots, that were a part of the diving equipment. The dynamo was started at full speed and the purring hum told that electricity of great power was being developed.

The professor stood with his hand on a switch, ready to close the circuit as soon as sufficient power had accumulated. Once more the suckers backed the ship in order to give it impetus for another impact on the stones.

Click! The professor snapped the switch shut. There was a burst of bluish-green flame, and the movement of the boat suddenly ceased.

"I guess that does for 'em!" shouted Andy.

"Wait a few minutes," advised the professor. "The suckers may not all be dead yet!"

He kept the current flowing throughout the length of the ship for several minutes, and then turned it off.

"Now to see if the plan worked," he said. The windows in the cabin were eagerly scanned.

"Hurrah!" cried Mark. "The suckers have gone!"

"I guess the electricity killed them," spoke Mr. Henderson. "We will venture out now in our diving suits and see what sort of a place we are in."

Soon the adventurers were arrayed in the heavy suits. Under them they wore thick clothing, and in each suit was placed a small flat heater, operated by a storage battery. The heaters were made of coils of fine wires, and the electric current, meeting with much resistance in passing through them, heated the coils, so there was considerable warmth.

It was all needed as they found when they felt the water entering the diving chamber, for the fluid was as cold as an ocean full of icebergs

could make it. Protected however by the heavy suits, warm clothing and the heaters the divers were fairly comfortable.

The outer door was opened and they all started back in amazement at the sight which met their eyes. Before them lay a forest of real trees, with bushes growing among them, while the ground, instead of being like the usual ocean bed was covered with grass.

As Washington had said, on getting a small view of the place from the little window, it was real land under water.

Their first surprise at the strange spectacle over, the adventurers glanced about for a sight of the terrible sea suckers. But they need not have feared. Lying in a huddled up mass toward the rear of the *Porpoise* were the dead bodies of the ugly creatures. The electricity had finished them.





## ATTACKED BY AN OCTUPUS

They walked some distance away from the ship, for the land under the water was easy to travel on. It looked exactly as if some beautiful valley had suddenly been submerged in the middle of summer, when everything was fresh and green.

They had gone perhaps a quarter of a mile from the *Porpoise* when Professor Henderson motioned to them that they had better return. On their way back they passed what looked to be a large cave in the side of a hill. Wondering what could be in it, Mark and Jack paused to peer into the black opening.

The next instant two long white things, like slender serpents shot out. With the rapidity of lightning they wrapped themselves, one about each boy, and, before the horrified companions of the lads could do anything the unfortunate youths were whisked out of sight into the cavern.

For a few seconds no one knew what to do. To rush in to the rescue of the boys would have been foolhardy, as the terrible octopus, which they knew had grabbed the lads, would have been a match for all of the adventurers, unarmed as they were.

It would be necessary to return to the ship and come back with some of the electric guns, which they had neglected to bring with them. In the meanwhile the beast might, and probably would, kill Mark and Jack. But there was nothing else to do.

The professor motioned for Andy to remain on the watch at the mouth of the cavern, so as to be on hand in case he could help the

boys, while the others were hurrying toward the ship. Then, leading the way, the Professor signalled for Tom and Bill to follow him.

They could not hurry much for the heavy suits and the resistance of the water impeded their progress. But they made all the speed they could, urged on by a terrible fear.

Meanwhile old Andy stood in front of the cave, hoping against hope that there might be some way of aiding the boys. If it had happened above water he would not have hesitated to rush in and give battle to the beast, even though he was unarmed. If he had his knife now he would venture in, at the risk of his life.

"Oh, why didn't I bring my gun along!" thought Andy regretfully.

His hand dropped to his side and his fingers came in contact with a big knife in the belt of the diving suit. Here was a weapon he had forgotten all about.

He drew forth the blade. It seemed a small one with which to attack so large and terrible a creature as the octopus. Yet to remain there, knowing the boys were being killed was more than old Andy could stand. Grasping the handle with a firm grip he started toward the cave. His foot caught in something, and he nearly fell.

Looking down to see what had tripped him he saw a long thin pole, straight as a lance. It had once been a tree limb, but all the branches were stripped off.

"Now if I only had an iron point for that," Andy thought. Then he recollected the knife in his hand.

"The very thing," he remarked aloud, the words sounding startlingly loud in the confinement of the copper helmet. "If I only had something to fasten the knife on the pole I could make a spear to attack the octopus."

Then he saw long streamers of sea weed growing up from the ocean bed. They were very tough, a kind of wirey grass that was as strong as rope. Andy cut several streamers and, with a hunter's skill bound the knife to the end of the staff.

Now he had a weapon formidable enough to venture in and give

battle to the monster. He hesitated no longer, fearing that even the short delay might have been too much and that the boys were dead. He entered the cave. At first he could perceive nothing for it was quite dark. Then, as his eyes became used to the gloom, which the lamp in his helmet faintly illuminated, he saw, far back in the rear, the horrible octopus.

Two dark objects, around which were wrapped several folds of the terrible arms, Andy guessed to be Mark and Jack, and when he was a faint glow coming from them he was sure they were the boys, the gleams coming from the lamps in their helmets.

Warily the hunter approached the creature. If he had hoped to take it unawares he was disappointed, for, when he had come within ten feet, holding his improvised lance outstretched ready for a deadly thrust, the creature shot out two long arms toward Andy.

Now the battle began. The snake-like feelers, armed with big saucer shaped suckers, lashed about in the water, seeking to clasp the hunter in their deadly embrace. But Andy, who had fought many kinds of wild animals on land, did not lose his presence of mind in confronting this beast of the sea.

Nimble, in spite of the handicap of the heavy diving suit, Andy dodged the arms. Watching his chance he thrust at one, and the sharp knife severed the end. But another arm shot out, while the wounded one was drawn in, and the battle was as much against the old hunter as before.

Once more he thrust his lance, and this time he severed one of the arms close to the ugly body. The creature, in its rage and pain, redoubled its efforts to clasp Andy.

The hunter decided to try to get to closer quarters where he could use his spear on the body of the beast. He stooped down and wiggled along on the bottom of the cave. But the creature saw him, and darted an arm out to pull the old man in. Andy squirmed to one side, and then, being as close as he desired, he rose to his feet and, drawing back the pole thrust it with all his force straight at the centre

of the whitish-yellow body that was like a horrible lump of soft fat directly in front of him.

At the first touch of the knife the creature squirted out an inky substance that made the water about it as black as night. Andy could not see, but he could feel that the lance was still in the body. He pulled it back a little and thrust again and again, turning it around to enlarge the wound he had made.

Then, what he had feared all along happened. Two of the creatures arms found him, and he felt the terrible pressure as they wound themselves about him, the sucker-plates clinging fast. Yet in it all he did not lose his presence of mind, nor did he let go of the pole.

Tighter and tighter the arms clasped him. He struggled with all his strength but he was in a grip more powerful than that of a boa constrictor. Suddenly the pole he was holding snapped off. He let go the useless end and pulled the shorter part, to which the knife was bound, toward him. Andy felt his senses beginning to leave him, but he determined to make one more effort.

One hand was free, that holding the knife. With his last remaining strength he cut and slashed at the arms of the creature that were clasped about him.

Again and again he stuck the blade into the gristle like substance. Could he win? Could he save his own life, to say nothing of that of the two boys?

The creature was lashing about now so that the water was a mass of black foam. The ink-color was beginning to fade away. Andy could dimly observe the horrible front of the octopus, and see the wound his lance had made. Then all seemed to grow dark again. He dimly remembered trying to thrust the knife into one of the saucer-shaped eyes, and then of a sudden his senses left him.

When Andy came to his senses he found himself lying on the ocean bed just outside the cave. About him stood the professor, Washington, Tom and Bill. His head buzzed and he felt weak, but he knew he was uninjured, and that his diving suit had not been

punctured in the fight with the octopus, for he could feel the fresh air entering from the tank at the back of his helmet.

Were the boys killed, Andy wondered. Had his fight to save them been in vain? He managed to stand up, and then, to his relief he saw Mark and Jack standing behind Tom and Bill. The boys seemed weak but otherwise uninjured.

The professor motioned to know if Andy could walk and the old hunter soon demonstrated that he could by stepping forward. Then the party proceeded slowly to the ship.

Little time was lost by each one in divesting himself of his diving suit as soon as they had left the water chamber. The first thing Andy asked when his helmet was off, was:

"Did I kill the beast?"

"Indeed you did," replied the professor. "And just in time, too. You were about done for when we came back with the guns, but they were not needed. My! But you must have had a terrible fight!"

"I did, while it lasted," said the hunter. "But were the boys hurt?"

"They can speak for themselves," replied Mr. Henderson. "I guess not, though."

"Having the wind almost squeezed out of us was the worst that happened," said Mark. "The octopus must have recently dined when it grabbed us, for it didn't offer to eat us. And it didn't grip us as tightly as it might have or I reckon we wouldn't have come out alive. I thought sure we were going to be killed, however."

"So did I," put in Jack.

"I don't want any more such fights this trip," said Andy with a weak smile.



## OUT OF THE ICE

Worn out with their encounter with the octopus, Andy and the boys were glad to take to their bunks. The others, too, who were weary from traveling under water, felt the need of rest, and so it was decided to let the ship remain stationary down on the bottom of the ocean for several hours before going on further.

"When we get rested up we'll have a good meal, and then try to gain the surface of the ocean," said the professor.

There was quiet on board the *Porpoise* for a long time. Washington was the first to awake and he at once set about getting a meal. When it was ready he called the professor, and, one after another all the adventurers rose from their bunks and refreshed themselves with hot coffee, bacon, eggs and preserves, all prepared from condensed foods, of which a large supply had been brought.

"Now to see if we can make our way upward through the ice," announced Mr. Henderson.

"We ought to be far enough south to strike the open polar sea which I believe exists."

The engine was started after the small leaks in the bow, caused by the ramming of the boat on the rocks, had been stopped up, and the professor, entering the conning tower, turned her due south.

The screw vibrated in the tunnel, the water rushed out in a big stream, the engines and dynamos hummed, and the hearts of all were lightened as they knew they were nearing the goal of their journey.



Several hours passed and the professor, who was keeping watch of the gages noted they had covered more than one hundred miles. As the supply of compressed air was getting low Mr. Henderson, not wanting to run any chances, decided to make an attempt to reach the surface and refill the tanks.

Accordingly the water tanks were emptied of their ballast, the rudder was set to force the ship to the surface, and soon the depth gage showed a constantly decreasing amount of water over the heads of the adventurers.

"Now, if we don't hit the ice above us we'll be all right," spoke Mr. Henderson. "We are within fifteen feet of the surface."

Hardly had he ceased speaking when the *Porpoise* brought up against something with a bump that jarred everyone. Then the submarine went scraping along, hitting the conning tower every now and then.

"Not clear of the ice yet," said Mr. Henderson. "We must go down a little and try again."

The tanks were filled with enough water to keep the boat about fifty feet under the surface, and at that depth she was sent ahead at full speed. The professor's face wore an anxious look, and when Washington asked him if it was not time to replenish the air supply of the boat the inventor told the colored man to be very sparing of the contents of the compressing tanks.

"I'm afraid we are not as near the open sea as I at first thought," Mr. Henderson finished.

On and on rushed the *Porpoise*. The engines were kept at full speed, and after two hours of this fast run another attempt was made to reach the surface. Once more the thick ice intervened.

"Guess we'll have to blast our way out," observed Andy. "We seem to have lots of trouble on this trip."

"Why not try to ram your way through," suggested Jack.

"How do you mean?" asked Mr. Henderson.

"I mean to sink the boat say two hundred feet. Then start her up

obliquely and perhaps the sharp prow will cut a hole through the ice."

"Hardly through ice fifteen feet or more thick," said the captain despondently.

"But it may be thinner now," persisted Jack.

"At any rate it will do no harm to try," the inventor admitted. "We can not last much longer down here."

Again the tanks were filled, and by the aid of the deflecting rudder the *Porpoise* went down into the depths. Then the ballast tanks were quickly emptied, and the rudder turned so as to force the craft upward on a slant. The engine was set going at top speed.

"Hold fast everybody!" called the professor. "It is kill or cure this trip!"

Like an arrow from a bow the *Porpoise* shot upward. On and on it sped, gathering momentum with every foot she traveled.

Suddenly there came a terrible crash, a grinding sound and a rending and tearing. The ship trembled from end to end. Every one was knocked from his feet. There were bumpings and scrapings all along the sides of the submarine. Then, with one final spurt of speed, the little ship tore her way through the ice and emerged, with a splash and shower of foam into the open sea!

Quickly the man hole was opened and, half dead from lack of fresh air, the adventurers crawled out on deck. It was night and the stars glittered in the sky above. They were just beyond the edge of the ice field, and all about them was a wide open sea.

"I was right after all," said the professor, "but I miscalculated the distance. Had we gone on a few feet farther it would not have been necessary to break through the ice."

"I guess it's a lucky thing we didn't try it before either," remarked Andy. "We never could have bored through fifteen feet of the frozen stuff. Where we plowed up it is less than two feet," and he pointed to where the immense floe came to an end.

It was decided to go no farther that night, however, as the professor wanted to take some observations by daylight and

ascertain his position. So filling their lungs with the air, cold and piercing though it was, the adventurers descended to their cabin, and lots were drawn to see who would stand the two night watches. It fell to Mr. Henderson to take the first, and Washington the second. The captain accordingly took up his position in the conning tower and prepared to pass several hours.

He was busy thinking over the exciting times he and his companions had passed through, and planning new trips to see more wonders of the world, when his attention was attracted by slight noise near the man hole leading to the amidship companionway.

The professor looked up, and was startled to see a tall white object, with outstretched arms advancing toward him with slow and stealthy tread.

"The ghost again!" exclaimed the inventor softly. "I must catch it now, and see what foolishness it is," for the professor did not believe in spirits.

He got down on his hands and knees the better to escape observation, should the white thing prove to be a bodily substance, and started to crawl toward it. He came within ten feet of the thing, and could make out that it was a man, or at least the semblance of one, all clothed in white.

Nearer and nearer the inventor crawled to the thing. It turned to face him now and Mr. Henderson could not help feeling startled as he saw the object had no head. The neck ended in a white stump.

In spite of a little feeling of qualmishness, which even his boasted disbelief in ghosts did not save him from, Mr. Henderson was about to spring upon the thing and solve the mystery.

At that instant, however, Washington, who was coming on deck to take up his watch, appeared at the head of the companionway, and caught sight of the terrible object.

The yells of the colored man as he dove downward and back into the cabin, aroused the ship. Determined to solve the mystery, in spite of everything, the professor made a leap forward. He slipped, and

tumbled down the iron stairway. At the same time, the ghost, with a blood curdling yell, leaped over the professor's back, and disappeared down the stairs of the conning tower.

In an instant the crew were rushing from their bunk rooms, seeking a meaning for the disturbance.

"It was the ghost again," explained the professor as he picked himself up, not much the worse for his tumble. "I tried to catch it, but I didn't. Come, Washington, it is your turn to stand watch."

"Not to-night," said Washington firmly.

It was no use to urge him, so Jack good-naturedly stood Washington's trick. Nothing further however occurred that night.

In the morning the professor made several observations and found that he was within one hundred and fifty miles of the south pole.

"We'll make it to-morrow, if we have luck," he said.



## THE BOILING WATER

The hours passed and the strange voyage continued.

The *Porpoise* traveled along at good speed, and the professor devoted most of his time to looking after the different scientific instruments and gages, for they were nearing the south pole. The deflecting compass, which when it came directly over the place corresponding to the pole, would point straight up and down, was assuming more and more of a perpendicular position.

"We are getting there!" exclaimed the professor with delight. "A few hours more and we will have won the goal!"

There was considerable excitement on board when the professor's announcement was made. Though few of the adventurers cared as much for the scientific achievement as did Mr. Henderson, they were all glad he was about to succeed. To most of them the locating of the south pole was no different from visiting some new country, excepting that there were more adventures than on most voyages.

At dusk the *Porpoise* went to the surface and during the night traveled along atop of the billows. In the morning she dived below again. The engine was started at high speed and the deflecting needle dipped still more.

"We's gittin' dar!" exclaimed Washington as he oiled the various bearings of the machinery.

Breakfast was served and hurriedly eaten, for the excitement was telling on every one. After the meal had been cleared away they all sat in the darkened cabin looking out at the water as it slipped past

the glass windows. Big and little fish swam up and peered into the bull's-eyes and then darted away.

"That's sort of queer," remarked Jack a little later.

"What is?" asked Mark, who was sitting near his chum.

"All the fish seem to have suddenly disappeared," replied Jack. "There were hundreds a little while ago, and now I haven't seen one looking in the windows for some time."

"Perhaps there's a big fish on their trail," observed Mark. "That's what makes 'em take to the deep sea weed."

"Maybe so," replied Jack.

A little later Professor Henderson entered the room. He went over, looked at the thermometer, and then called to Washington:

"Have you got the heat turned on?"

"No, sah! I ain't done truned on no superheated vapor into de radiators," replied the colored man. "I were jest thinkin' dat we'd hit de south pole by de feel of it."

"It is getting strangely warm," admitted Mr. Henderson.

"Ain't that what you expected at the south pole?" asked Andy. "I thought it was hot at the south pole and cold at the north."

"That's what lots of people imagine," said the professor, "but except for the open sea, which I have proved does exist, I guess it's just as cold at the south as at the north, especially in the winter. We have struck the summer season."

"And a mighty warm one at that," observed Jack. "Whew! I've got to take off my coat."

Indeed it was getting uncomfortably warm in the ship, and the adventurers who had dressed in thick clothing to guard against the rigors of the icy climate, soon had to lay aside many of their garments.

"No wonder!" exclaimed Mr. Henderson, as he looked at a thermometer. "It is eighty degrees in here!"

"Worse than workin' in a hay field," observed Bill, as he wiped the beads of perspiration from his forehead.

"Let us see what sort of water we are traveling through," suggested the professor, as he again turned off the lights in the cabin so that a view could be had from the bull's-eyes.

Wondering what would meet their gaze the adventurers peered out of the small circular windows. At first they could hardly believe their eyes.

There, right before them, the sea was bubbling as if it was an immense tea kettle. Steam formed on the glass, and big clouds of vapor could be seen. The atmosphere of the cabin became almost unbearable.

"We are in the midst of a boiling hot ocean!" cried the professor.

"Are we sailing through hot water?" asked Andy.

"I should say so, from the feel of it," answered Mr. Henderson. "Put your hand on the side of the cabin."

Andy laid his fingers against the steel plates. He drew back.

"I burned myself!" he exclaimed.

"What are we to do?" cried Jack.

"Get out of this by all means!" exclaimed the inventor. "If we stay in this hot ocean we will be boiled alive like fishes in a pot. Send the ship up, Washington!"

Indeed it was high time. The thermometer marked one hundred and ten degrees, and was rising. The interior of the *Porpoise* was like that of a steam laundry three times heated. Stripped to their undergarments the adventurers were obliged to lie down on the floor of the cabin where it was a little cooler.

It was all Washington could do, used as colored people are to the heat, to go into the engine room, and start the machinery that emptied the tanks, so as to allow the ship to mount to the surface.

The *Porpoise* began to rise slowly, and to the suffering men and boys it seemed that she never went up so reluctantly. The heat was becoming unbearable. They could hear the water bubbling even through the steel sides of the submarine.





## CONCLUSION

Could they live to reach the surface? was the thought in the mind of every one. The heat was terrific. They were breathing in gasps. Professor Henderson went to the water tank, thinking to throw some of the fluid over himself and his companions, but he found it so warm that it almost burned his hand.

"Keep up your courage!" exclaimed the inventor. "We will soon be at the top!"

Almost as he spoke the *Porpoise* bounded from the waves, and fell back in a splash of foam on the surface of the billows. They were at the surface.

The professor rushed for the manhole and soon opened it. He crawled out on the deck, followed by the others. They breathed in deep breaths of the fresh air.

The submarine continued to sail on. Every minute the sea seemed to boil more violently, until at last the waves were covered with a cloud of steam, through which it was difficult to observe where they were going.

"Hadn't we better turn back," suggested Mark.

"Our only hope is to press on," replied Mr. Henderson. "We may cross this zone of boiling water soon."

He went into the conning tower to make an observation. He came on the deck the next minute, very much excited.

"What's the matter? Are we sinking?" asked Andy.

"We are directly over the south pole!" exclaimed the professor.

"We have reached the goal! We have come to the spot hundreds of men have tried to reach! It has been left for us to succeed. Look at the deflecting needle!"

They crowded into the conning tower to note it. The slender hand of steel stood straight up and down, indicating that the ship was over the south pole, one of the two chief centres of magnetism of the earth.

"If we only dared stop to make some scientific notes and observations," said the professor, "we could render much valuable aid to the seekers after truth. But it would be sure death to stay in the boiling water!"

"I guess we'd better be getting out of this if we want to reach home alive," spoke Andy.

Indeed they were all suffering very much, for the heat from the water was awful.

"Speed her up, Washington!" called the professor. "We must get out of here!"

"Which way shall I steer?" asked the colored man.

"Straight ahead. We are now bound north!"

"Bound north!" cried Jack.

"Certainly," answered the professor. "We have passed over the exact spot where the south pole is. The deflecting needle is beginning to tilt again. The compass is indicating a northerly direction. You know that after you go as far south as you can, you have to begin to go back north. Well, we have gone as far south as we can. Now we are going north. We have turned the southern end of the globe, and are on our way back."

For several hours the *Porpoise* continued along on top of the water. By degrees, as they left the vicinity of the boiling ocean, it became cooler. The water ceased to seethe and bubble, and Jack found, on experiment, that he could bear his hand in it.

"Hurrah!" he cried, "we are safe now."

"Next we'll have to prepare to freeze to death," spoke Mark. "It's either one extreme or the other this trip. But we've had lots of fun and

excitement."

"Plenty of the last," agreed Jack.

On and on went the submarine. Once it was out of the range of the terrible heated zone, the atmosphere rapidly cooled, until the adventurers were glad to don their heavy garments again.

"This marks the ending of the first half of the voyage," announced the professor. "Now we are going back. We have accomplished something no other living man has done and I am proud of it. Proud of all of you, and proud of the ship!"

Several hours later, when it was deemed safe, the *Porpoise* was sunk beneath the waves, and once more she speeded along through the water at a fast speed. The ship seemed to know she was going home, for never had she made better time.

"We have solved every problem that we met," said the professor while he, with Jack and Mark, were in the conning tower, as Washington was preparing a meal.

"Except two," said Jack.

"What are they?"

"The ghost of the submarine, and the identity of the anarchists who blew up the Easton hotel."

"Perhaps both riddles may be solved before we get back to Maine," answered Mr. Henderson.

They both were, sooner, and in stranger ways than either of the boys expected. That night it was Jack's first watch on deck. The ship was speeding on, and by the air the boy knew they were approaching icebergs. At midnight a strange and sudden chill in the air made him look up.

Almost dead ahead was a big berg. He quickly shut off the engine, and narrowly avoided a collision. Then happening to glance back he saw, standing near the companionway leading down into the man-hole a ghostly white shape.

"I'll find out what you are this time, or go overboard with you," said Jack to himself, clenching his teeth. He crawled along the deck until

he thought he was within leaping distance of the weird white thing. Then he made a leap.

He landed on something soft, which, the moment he struck it, let out a yell that sounded loud on the quiet night. Then the thing began to fight. But Jack fought back and held on bravely.

"Here! What are you tryin' to do?" exclaimed a voice in his ear.

"What are you trying to do?" asked Jack indignantly, finding that the words came from the "ghost."

"Nice way to treat a man! Half kill him!" the white thing went on. "Just when I'm trying to get a little sleep you come along and pull me out of bed!"

"Why, it's Bill Jones," exclaimed Jack, as the light from the conning tower lamp fell on the face of the "ghost."

"Of course it is; who did you think it was?" asked Bill.

"What are you doing on deck in your night shirt?" asked the boy, letting the helper rise.

"Me? On deck? Ain't I in my bunk?"

"I should say not," replied Jack. "What are you doing on deck?"

"Well! well!" remarked Bill, rubbing his eyes. "I've gone and done it again."

"Done what?"

"Walked in my sleep. I'm a great sleep walker. Greatest you ever knew. Once I climbed to the top of our barn when I was asleep."

"So you're the ghost of the submarine," exclaimed Jack. "That explains it."

"I guess you're right," admitted Bill, as the others came on deck to see what all the row was about. "I never thought of it when I heard about the ghost, but I can account for it now. I'd get out of my bunk, wander out on deck, and then crawl back again. Of course, being barefoot, or in fur slippers, I made no sounds. I don't wonder you thought I was a spirit. Queer I didn't wake up after some of the things I went through."

"And you always managed to get back to your bunk in time so that

we never caught you at it," said Jack. "However, it's all over now."

And so it was, for after that Bill tied a chair in front of his bunk, and if he did get out in his sleep he stumbled against it and awoke before he had gone far.

Northward the *Porpoise* continued on her journey. She entered a vast field of ice, and only her ability to sink below the surface enabled her to get through it unharmed. There were few adventures going home. Once a big whale rammed the ship, as had happened on the going voyage, and several times they were surrounded by hordes of wild polar fish and walruses, but there were no accidents, and in a couple of weeks the ship entered the temperate zone.

Then came lazy happy days of sailing through the tropical region. They landed at several islands and renewed their supply of food.

"I'm coming back this way some day," observed Mr. Henderson one afternoon as the ship was sailing along on top of the waves.

"What for?" asked Jack.

"To investigate that strange island with a big hole in the middle that seems to lead to the centre of the earth," was the answer. "I have a fancy we can explore that by means of a balloon. I'm going to try."

"Will you take us along?" asked the two boys.

"I'll see," replied the professor.

And later on he did take them on a trip, a thousand miles underground,—but that is another story to tell.

It was about a week later that the voyagers came within sight of Key West.

"Off there lies the United States," said Mr. Henderson.

"Hurrah for home!" cried Mark.

Three days later they landed at a small Florida town. The sight of the *Porpoise* attracted throngs of people to the dock where she tied up. Among them was a newsboy.

"Get me all the papers for the past month," said Jack. "I want to see what the news is."

"Same here," put in Mark, and the papers were soon brought.

"Hurrah!" exclaimed Jack, as soon as he had looked at several of the sheets.

"What is it?" asked Mark, who was unfolding a paper.

"Anarchists Confess," read Jack. "Two Englishmen Admit They Blew Up Hotel Where Lord Peckham Was Stopping. No Suspicion Attaches to Two Youths Who So Mysteriously Disappeared!"

"Hurrah!" joined in Mark.

"Those are only the head lines," went on Jack. "There's a long story, and I guess it lets us out."

The two boys were completely cleared of the slightest shade of suspicion of the outrage, and there was even an interview with the English detective in which he admitted that he was wrong.

A week later the *Porpoise* tied up at her own dock, whence she was launched.

"Back again," remarked the professor as he stepped ashore. "I've been to the south pole, and to the north pole. I wonder where I shall go next?"

"To the big hole and underground," suggested Jack.

"We shall see," said Mr. Henderson with a twinkle in his eyes.

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## **Victor Appleton**

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