

TOM SWIFT AND HIS UNDERSEA SEARCH

(OR The Treasure on the Floor of the Atlantic)

VICTOR APPLETON

CHAPTER I

UNTOLD MILLIONS

"Tom, this is certainly wonderful reading! Over a hundred million dollars' worth of silver at the bottom of the ocean! More than two hundred million dollars in gold! To say nothing of fifty millions in copper, ten millions in--"

"Say, hold on there, Ned! Hold on! Where do you get that stuff; as the boys say? Has something gone wrong with one of the adding machines, or is it just on account of the heat? What's the big idea, anyhow? How many millions did you say?" and Tom Swift, the talented young inventor, looked at Ned Newton, his financial manager, with a quizzical smile.

"It's all right, Tom! It's all right!" declared Ned, and it needed but a glance to show that he was more serious than was his companion. "I'm not suffering from the heat, though the thermometer is getting close to ninety-five in the shade. And if you want to know where I get 'that stuff' read this!"

He tossed over to his chum, employer, and friend--for Tom Swift assumed all three relations toward Ned Newton--part of a Sunday newspaper. It was turned to a page containing a big illustration of a diver attired in the usual rubber suit and big helmet, moving about on the floor of the ocean and digging out boxes of what was supposed to be gold from a sunken wreck.

"Oh, that stuff!" exclaimed Tom, with a smile of disbelief as he saw the source of Ned's information. "Seems to me I've read something like that before, Ned!"

"Of course you have!" agreed the young financial manager of the newly organized Swift Construction Company. "It isn't anything new. This wealth of untold millions has been at the bottom of the sea for many years--always increasing with nobody ever spending a cent of it. And since the Great War this wealth has been enormously added to because of the sinking of so many ships by German submarines."

"Well, what's that got to do with us, Ned?" asked Tom, as he looked

over some blue prints and other papers on his desk, for the talk was taking place in his office. "You and I did our part in the war, but I don't see what all this undersea wealth has to do with us. We've got our work cut out for us if we take care of all the new contracts that came in this week."

"Yes, I know," admitted Ned. "But I couldn't help calling your attention to this article, Tom. It's authentic!"

"Authentic? What do you mean

"Well, the man who wrote it went to the trouble of getting from the ship insurance companies a list of all the wrecks and lost vessels carrying gold and silver coin, bullion, and other valuables. He has gone back a hundred years, and he brings it right down to just before the war. Hasn't had time to compile that list, the article says. But without counting the vessels the Germans sank, there is, in various places on the bottom of the ocean today, wrecks of ships that carried, when they went down, gold, silver, copper and other metals to the value of at least ten billions of dollars!"

Tom Swift did not seem to be at all surprised by the explosive emphasis with which Ned Newton conveyed this information. He gazed calmly at his friend and manager, and then handed the paper back.

"I haven't time to look at it now," said Tom. "But is there anything new in the story? I mean has any of the wealth been recovered lately--or is it in a way to be?"

"Yes!" exclaimed Ned. "It is! A company has been formed in Japan for the purpose of using a new kind of diving bell, invented by an American, it seems. The inventor claims that in his machine he can go down deeper than ever man went before, and bring up a lot of this lost ocean wealth."

"Well, every so often an inventor, or some one who calls himself that, crops up with a new proposal for cleaning up the untold millions on the floor of the Atlantic or the Pacific," replied Tom. "Mind you, I'm not saying it isn't there. Everybody knows that hundreds of ships carrying gold and silver have gone down in storms or been sunk in war. And some of the gold and silver has been recovered by divers--I admit that. In fact, if you recall, my father and I perfected a new style diving dress a few years ago that was successfully used in getting down to a wreck off the Cuban coast.

A treasure ship went down there, and I believe they recovered a large part of the gold bullion--or perhaps it was silver.

"But this diving bell stunt isn't new, and it hasn't been successful. Of course a man can go down to a greater depth in a thick iron diving bell than he can in a diving suit. That's common knowledge. But the trouble with a diving bell is that it can't be moved about as a man can move about in a diving suit. The man in the bell can't get inside the wreck, and it's there where the gold or silver is usually to be found."

"Can't they blow the wreck apart with dynamite, and scatter the gold on the bottom of the ocean?" asked Ned.

"Yes, they could do that, but usually they scatter it so far, and the ocean currents so cover it with sand, that it is impossible ever to get it again. I admit that if a wreck is blown apart a man in a diving bell can perhaps get a small part of it. But the limitations of a diving bell are so well recognized that several inventors have tried adjusting movable arms to the bell, to be operated by the man inside."

"Did they work?" asked Ned.

"After a fashion, yes. But I never heard of any case where the gold and silver recovered paid for the expenses of making the bell and sending men down in it. For it takes the same sort of outfit to aid the man in the diving bell as it does the diver in his usual rubber or steel suit. Air has to be pumped to him, and he has to be lowered and raised."

"Well, isn't there any way of getting at this gold on the floor of the ocean?" asked Ned, his enthusiasm a little cooled by the practical "cold water" Tom had thrown.

"Oh, yes, of course there is, in a way," was the answer of the young inventor. "Don't you remember how my father and I, with Mr. Damon and Captain Weston, went in our submarine, the Advance, and discovered the wreck of the Boldero?"

"I do recall that," admitted Ned.

"Well," resumed Tom, "there was a case of showing how much trouble we had. An ordinary diving outfit never would have answered. We had to locate the wreck, and a hard time we had doing it. Then, when we found it, we had to ram the old ship and blow it apart before we could get inside."

Even after that we just happened to discover the gold, as it were. I'm only mentioning this to show you it isn't so easy to get at the wealth under the sea as writers in Sunday newspaper supplements think it is."

"I believe you, Tom. And yet it seems a shame to have all those millions going to waste, doesn't it?" And Ned spoke as a banker and financial man, who is not happy unless money is earning interest all the while.

"Well, a billion of dollars is a lot," Tom admitted. "And when you think of all that have been sunk, say even in the last hundred years, it amazes one. But still, all the gold and silver was hidden in the earth before it was dug out, and now it's only gone back where it came from, in a way. We got along before men dug it out and coined it into money, and I guess we'll get along when it's under water. No use worrying over the ocean treasures, as far as I'm concerned."

"You're a hopeless proposition!" laughed Ned. "You'd never make a banker, or a Napoleon of finance."

"That's why my father and I got you to look after our financial affairs," and Tom smiled. "You're just the one--with your interest-bearing mind--to keep us off the shoals of business trouble."

"Yes, I suppose I can do that, while you and your father go on inventing giant cannons, great searchlights, submarines, and airships," conceded Ned. "But this, to me, did look like an easy way of making money."

"How's that, Ned?" asked Tom, a new note coming into his voice. "Were you thinking of going to Japan and taking a hand in the undersea search?"

"No. But stock in this company is being sold, and shareholders stand to win big returns--if the wrecks are come upon."

"That's just it!" exclaimed Tom. "If they find the wrecks! And let me tell you, Ned, that there's a mighty big 'if' in it all. Do you realize how hard it is to find anything on the ocean, to say nothing of something under it?"

"I hadn't thought of it."

"Well, you'd better think of it. You know on the ocean sailors have to

locate a certain imaginary position by calculation, using the sun and stars as guides. Of course, they have navigation down pretty fine, and a good pilot can get to a place on the surface of the ocean and meet another craft there almost as well as you and I can make an appointment to meet at Main and Broad streets at a certain hour.

"But lots of times there are errors in calculations or a storm comes up hiding the sun and stars, and, instead of a captain getting to where he wants to, he's anywhere from one to a hundred miles out. Now the location of Broad and Main Streets doesn't change even in a storm.

"And I'm not saying that a location on an ocean changes. I'm only saying that the least disturbance or error in calculation makes it almost impossible to find the exact spot. And if it's that hard on the surface, where you can see what you're doing, how much harder is it in regard to something on the bottom of the sea? So don't take any stock in these ocean treasure recovering companies. They may not be fakes, but they're mighty uncertain."

"Oh, I don't know that I was really going to buy any stock in this Japanese concern, Tom. I only thought it would be interesting to think about. And perhaps you might sell them a submarine or some of your diving apparatus."

"Nothing doing, Ned. We've got other plans, my father and I. There's that new tractor for use in the big wheat-growing belt, to say nothing of--"

Tom's remarks were interrupted by voices outside his office door. One voice, in particular, rose above the others. It said:

"No can go in! The Master he am busily! No can go in!"

"Nonsense, Koku!" exclaimed a man, and at the sound of his voice Tom and Ned smiled. "Nonsense! Of course I can go in! Why, bless my watch fob, I must go in! I've got the greatest proposition to lay before Tom Swift that he ever heard of! There's at least a million in it! Let me pass, Koku!"

"Mr. Damon!" murmured Tom Swift. "I wonder what he has on his mind now

As he spoke the door opened rather violently and a short, stout man, evidently much excited, fairly burst into the room, followed, more

sedately, by a stranger.

CHAPTER II

A STRANGE OFFER

"Hello, Tom Swift! Hello, Ned! Glad to see you both! Busy, as usual, I'll wager. Bless my check book! I never saw you when you weren't busy at some scheme or other, Tom, my boy. But I won't take up much of your time. Tom Swift, let me introduce my friend, Mr. Dixwell Hardley. Mr. Hardley, shake hands with Tom Swift, one of the youngest, and yet one of the greatest, inventors in the world! I've told you a little about him, but it would take me all day to tell you what he really has done and--"

"Hold on, Mr. Damon!" laughed Tom, as he shook hands with the man whom Mr. Damon had named Dixwell Hardley. "Hold on, if you please. There's a limit to it, you know, and already you've said enough about me to--"

"Bless my ink bottle, Tom, I haven't said half enough!" interrupted the little, eccentric man. "Wait until you hear what he has done, Mr. Hardley. Then, if you don't say he's the very chap for your wonderful scheme, I'm mighty much mistaken! And shake hands with Ned Newton, too. He's Tom's financial manager, and of course he'll have something to say. Though when he hears how you are going to turn over a couple of million dollars or more, why, I know he'll be on our side."

Ned's eyes sparkled at the mention of the money. In truth he dealt in dollars and cents for the benefit of Tom Swift. Ned shook hands with Mr. Hardley and Tom motioned Mr. Damon and his friend to chairs.

"Now, Tom," went on the strange little man, "I know you're busy. Bless my adding machine, I never saw you when--"

At that moment there arose in the corridor outside Tom's private office a discord of voices, in which one could be heard exclaiming:

"Now yo' clear out oh heah! Massa Tom done tole me to sweep dish yeah place, an' ef yo' doan let me alone, why--why--"

"Huh! Radicate him big stiff--dat's what! Big stiff! Too stiff for sweep Master's floor. Koku sweep one hand!"

"Oh, yo' t'ink 'case yo' is sich a big giant, yo' kin git de best ob ole

black Rad! But I'll show yo' dat--"

"Excuse me a moment," said Tom, with a smile to his guests as he arose. "Eradicate and Koku are at it again, I'm sorry to say. I'll have to go out and arbitrate the strike," and he left the room.

While he is settling the differences between his faithful old black servant and Koku, the giant, I will take the opportunity of telling my new readers something about Tom Swift.

Those who are familiar with the previous books of this series may skip this part. But it will give my new audience a better insight into this story if they will bear with me a moment and peruse these few lines.

As related in the first book, "Tom Swift and His Motor Cycle," the hero seemed born an inventive genius. It was this inventive faculty which enabled him to take the motor cycle that tried to climb a tree with Mr. Wakefield Damon on it and make the wreck into a serviceable bit of mechanism. Thus Tom became acquainted with Mr. Damon, who among other eccentricities, was always "blessing" something personal.

Tom Swift lived in the city of Shopton with his father and their faithful housekeeper, Mrs. Baggert. It was so named because the Swift shops were an important industry there. Tom's father, as well as Tom himself, was an inventor of note, and employed many men in building machines of various kinds. During the Great War the services of Tom and his father had been dedicated to the government.

There are a number of books dealing with Tom's activities, the list of titles of which may be found at the beginning of this volume.

Sufficient to say here, that Tom invented and operated motor boats, airships, and submarines. In addition he traveled on many expeditions with Mr. Damon, Ned, and others. He went among the diamond makers and it was when he escaped from captivity that he managed to bring away Koku, the giant, with him. Since then Koku and Eradicate Sampson, the faithful colored man, had periodic quarrels as to who should serve the young inventor.

Besides inventing and using many machines of motive power, Tom Swift engaged in other industries. He helped dig a big tunnel, he constructed a photo-telephone, a great searchlight and a monster cannon.

Occasionally he had searched for treasure, once under the sea, with considerable success.

Of late his and his father's industries had become so important that a number of new buildings had been constructed and the plant greatly enlarged. Ned Newton, who had once worked in a Shopton bank, became financial manager for Tom and his father, and plenty of work he found with which to occupy himself.

Just prior to the opening of this story Tom had perfected a noiseless aeroplane--or one so nearly silent as to justify the name. The details of it will be found in the book called "Tom Swift and His Air Scout." In this mechanism of the air Tom had had some wonderful experiences, and they had not been at home more than a few weeks when New Newton broached the subject of undersea wealth.

The talk of Tom and his financial manager was interrupted by the arrival of Mr. Damon and the stranger he had introduced as Mr. Hardley.

Eradicate, or "Rad," and Koku, have been mentioned. Rad was an ancient colored man who once owned a mule named Boomerang. Sampson was the colored servant's last name, and he declared he had chosen the one "Eradicate" because in his younger days he was a great cleaner and whitewasher, "eradicating" the dirt, so to speak.

Boomerang had, some time since, gone where all good mules go, though Eradicate declared he would get another and call him Boomerang II. But, so far, he had not done so.

Rad, though too old to do heavy work, still believed he was indispensable to the welfare of Tom and his father; and as the giant Koku, who was physically an immense man, held the same view, it followed there were frequent clashes between the two, as on the occasion just mentioned.

"What was the matter, Tom?" asked Ned, when the young inventor came back into the room.

"Oh, the same old story," replied Tom. "Rad wanted to sweep the hall, and Koku insisted he was to do it."

"What'd you do, Tom?" asked Mr. Damon.

"I settled it by having Rad sweep this hall and sending Koku to do

another--a bigger one I told him. He likes hard work, so he was pleased. Now we'll have it quiet for a little while. Did I understand you to say, Mr. Damon, that--er--Mr. Hardley I believe the name is--had a proposition to make to me

"That's exactly it, my dear Mr. Swift!" broke in the man in question. "I have a wonderful offer to make you, and I'm sure you will admit that it will be well worth your while to consider and accept it. There will be at least a million in it--"

"Bless my check book, I thought you said several millions!" exclaimed Mr. Damon.

"So I did," was the rather nettled answer. "I was about to say, Mr. Damon, that there will be at least a million in it for Mr. Swift, and another million for myself. There may be more, but I want to be conservative."

"Talking in millions, and calling himself conservative," mused Ned Newton. "Somehow or other I don't just cotton to this fellow!"

"When our mutual friend, Mr. Damon, told me about you, my dear Mr. Swift," went on Mr. Hardley, "I at once came to the conclusion that you were the very man I wanted to do business with. I'm sure it will be to our mutual advantage."

Tom Swift said nothing. He was willing to let the other talk, while he waited to see how far he would go. And, as Tom said afterward, he, as had Ned, took an instinctive dislike to Mr. Hardley. He could not say definitely what it was, but that was his feeling. That he might be mistaken, he admitted frankly. Time alone could tell.

"Have you a half hour to give me while it explain matters?" asked Mr. Hardley. "I may go farther and say I need considerable time to go into all the details. May I speak now?"

To tell the truth Tom Swift had many important matters to consider, and, in addition, Ned Newton was prepared to go over some financial ends of the business with Tom. But the young inventor felt that, in justice to his friend Mr. Damon, who had brought Mr. Hardley, he could do no less than give the stranger a hearing. But only the introduction by Mr. Damon brought this about.

"I shall be glad to hear what you have to say, Mr. Hardley," said Tom,

as courteously as he could. "I will not go so far as to say that my time is unlimited, but I will listen to you now if you care to go into details."

"That's good!" exclaimed the visitor. "I'm sure that when you have listened you will agree with me."

"He's a little bit too sure!" mused Ned.

"Bless my pocketbook, Tom, but there are millions in it!" exclaimed Mr. Damon. "Literally millions, Tom!"

Mr. Hardley settled himself comfortably in his chair and looked from Tom to Ned.

"May I speak freely here?" he asked, with obvious intent.

"You may," the young inventor answered. "Mr. Newton is my financial manager, and I do nothing of importance without consulting him. You may regard him as a member of the firm, in fact, as he does own some stock. My father is practically retired, and I do not trouble him with unimportant details. So Mr. Newton and I are prepared to listen to you."

"Very well, Mr. Swift, I'm going to ask you a question. Have you all the money you want?"

Tom laughed.

"I suppose any man would answer that question in the negative," he replied. "Frankly, I could use more money, though I am not poor."

"So I have heard. Well, would a million dollars clear profit appeal to you?"

"It certainly would," was the answer.

"Then I am prepared to offer you that sum," went on Mr. Hardley. "But there are certain conditions, and I may say that this vast wealth is not easy to come at. However, with your inventive genius, I am sure you will be able to solve the mystery of the sea. Now then as to details. There lies, on the floor of the ocean--"

"Hark!" exclaimed Tom, raising a hand to enjoin silence. "I think I hear some one coming." At that moment there was a knock at the door.

CHAPTER III

THINKING IT OVER

"FATHER, is that you?" asked Tom. "Father hasn't been feeling well, of late," he said to the assembled company, "and I told him to go to lie down. But he's hard to manage, and he won't rest more than ten minutes at a time. My father, I might explain, Mr. Hardley," Tom went on, "is actively associated with me in business."

"So I have understood," said the man who had been introduced by Mr. Damon.

"Dis Koku!" came the guttural voice of the giant from the other side of the door. "Koku want more work. Hall, him all clean. Maybe I help dat no-good Rad now."

"No you don't, Koku!" exclaimed the young inventor, with a laugh. "You keep away from Rad. You'll get to disputing again and interrupt me, and I have business on hand. Here, wait a minute. I'll find something for you to do," he went on, opening the door to disclose the immense man standing outside, a broom in his hand seeming like a toy.

"Excuse me one moment," went on Tom to his friends. Taking up his desk telephone he called one of the shops, asking: "Have you any heavy work on hand this morning; lifting big castings, or anything like that? You have? Good! I'll send Koku right over."

Turning to the giant who apparently had not paid much attention to the talk over the wire, Tom said:

"Koku, go over to shop number ten, ask for the foreman, and he'll keep you busy. There are some five-hundred-pound castings that need assembling, and you can help him."

"Good!" exclaimed the giant, with a cheerful grin. "Koku like big work--no like sweep. Good for women and Rad, but not for Koku!"

"He spoke the truth there," remarked Ned Newton, as the giant stalked down the hall. "I never saw such a strong man. I'm afraid to shake hands with him, for fear I'll be minus a couple of fingers in the operation."

"Well, he's disposed of," remarked Tom, as he closed the door. "And

now, Mr. Hardley, I'm at your service, as far as listening to your proposition is concerned."

"Thank you. I shall endeavor to be brief," remarked the visitor. "Am I correct in assuming that you have had some experience in submarine work? I believe Mr. Damon mentioned something of that sort."

"Submarine work? Bless my hydrometer, I should say so!" exclaimed the eccentric man. "And not only in submarine, but in aeroplane! but you don't need any aeroplanes, my dear Mr. Hardley. It's the submarine end of it that you are interested in, as far as Tom Swift is concerned. Now go ahead and tell him what you told me, and how many millions there are in it."

"Very well," assented the visitor. "Have you ever had any experience in recovering treasure from sunken wrecks?" he asked Tom.

"Yes," was the answer. "And it is curious that you should ask me that, for my friend here, Ned Newton, and I were just talking about that very matter. Here's what brought it up," and Tom showed the page from the Sunday paper.

"Hum! Yes!" musingly remarked Mr. Hardley. "That's all very well. Part of it is true; but I imagine most of it is the work of imagination of some enterprising reporter. Of course there is no question but that there are untold millions on the bottom of the ocean. The only trouble, as I think you will agree with me, Mr. Swift, is in coming at the money."

"Exactly," said Tom.

"And will you bear me out when I say that if the wreck of a treasure ship could be exactly located in water that is not too deep, half the trouble would be solved?" asked Mr. Hardley.

"A good share of it would," answered Tom. "That is usually the chief difficulty--locating the wreck. Nearly always they are anywhere from one to five miles from where the persons seeking them think they are. And five miles, or even half a mile, is a good distance on the bottom of the ocean."

"Exactly," echoed Mr. Hardley. "Then if I could give you the exact location of a sunken treasure ship, and prove to you that the owners had given up the search for it, leaving it open to salvage on the part of whoever wished to try--would that be any inducement to you to make an attempt,

Mr. Swift?"

"I should want to hear more about it before I gave an answer," replied Tom. "As perhaps Mr. Damon has told you, I once went on a hunt for treasure in my submarine. We found it, but only after considerable trouble, and then I declared I'd never again engage in such a search. There wasn't enough net profit in it." "But there are millions in this, Tom! Bless my gold tooth, but there are millions!" cried the excitable Mr. Damon. "Hurry up and tell him!" he urged his friend.

"I will," assented Mr. Hardley. "I can readily believe," he went on, "that the cost of hunting for undersea treasure is great. I have taken that into consideration. Now, in brief, my plan is this. I will join forces with you, and bear half the expense if I am allowed to share half the proceeds. That's fair, isn't it?" he asked Tom.

"So far, yes," replied the young inventor.

"Now then, to business!" exclaimed the visitor. "Will you join with me in searching for some of the wealth-laden wrecks that are rotting at the bottom of the sea, Mr. Swift?"

"Do you mean make an indiscriminate search for any one of a number of wrecks?" Tom wanted to know.

"I should want the understanding broad enough to include all wrecks we might discover," was the answer, "but I have in mind one in particular now. It is the wreck of the steamer Pandora which was sunk off the coast of one of the West Indian Islands about a year ago."

Ned Newton quickly caught up the page of the Sunday supplement and scanned the list of wrecks given there.

"No mention of the Pandora here," he said.

"No," agreed Mr. Hardley, "the story of this wreck is not generally known, and the story of the treasure she carried is hardly known at all. As a matter of fact, this money, mostly in gold, was to finance a South American revolution, and such matters are generally kept quiet. That is why nothing much appeared in the papers about the Pandora. But I happen to know that she carried over two million dollars in gold, and I know--"

"Think of that, Tom! Think of that!" cried Mr. Damon. "Two million dollars in gold! Why bless my--bless my--"

But the eccentric man could think of nothing adequate to bless under the circumstances, and he subsided with a murmur.

"Excuse me for interrupting you," he said to his new friend. "But I just couldn't help it."

"That's all right," Mr. Hardley remarked, with a smile that showed two rows of very even, white teeth. "I don't blame you for getting excited. Does that interest you?" he asked Tom. "Two million dollars in gold, besides a quantity of silver --just how much I don't know."

"It certainly sounds interesting," replied Tom, with a smile. "But are you sure of your facts?"

"Absolutely," was the answer. "I was a passenger on the Pandora when she was wrecked in a storm. I saw the gold put on board. It was not taken off, and is on her now as she lies at the bottom of the sea."

"And the location?" queried Tom.

"I know that, too!" said Mr. Hardley eagerly. "I was with the captain just before we had to abandon ship, and I heard the exact nautical location given him by an officer who made the calculation. I have it written down to the second--latitude and longitude. That will be a help in locating the wreck, won't it?"

"Why, yes," Tom had to agree, "it will be. but if you know it, then the captain and others must know it. And what is to prevent them from making a search for the Pandora if they have not already done so

"The best reason in the world," was the answer. "The boat containing the captain and the officer who gave him the ship's position was sunk, and all on board lost. The boat I was in was the only one picked up, and I believe I am the only one who knows exactly where the Pandora lies.

"Now, here is my offer, Mr. Swift," went on the seeker after the ocean's hidden wealth. "I will bear half the expense of fitting out a submarine, or for any other kind of expedition to go in search of the wreck of the Pandora. I will furnish you with the exact nautical location, as I have it. And when the wealth is found and brought to the surface, I will give you half--in other words at least a million dollars! Does that appeal to you?"

"I must say it is a fair, though perhaps strange, offer," conceded Tom.

"And a million dollars is not made every day nor every year. But what about the title to this money? After we have recovered it--provided we are successful--will not some person or some government lay claim to it?"

"None can successfully," declared Mr. Hardley. "As I told you, the money was to finance a revolution. It was raised for an unlawful purpose, so to speak, and no one has a valid claim to it under the circumstances, so lawyers whom I have consulted have told me. But if that is not enough, I have papers to prove that those who might be called the owners have given up the search for it. More than a year has elapsed, and though I don't know just how long it takes to outlaw an under-ocean claim, I feel sure that we would have a legal and moral right to take this gold if we could find it."

"I should want to be satisfied on that point before I undertook the search," said Tom.

"Then you will undertake it?" eagerly exclaimed Mr. Hardley.

"I will think it over," Tom answered quietly--so quietly that distinct disappointment showed on the face of the visitor.

CHAPTER IV

AGAINST HIS WILL

For a moment it seemed that Mr. Damon, as well as Mr. Hardley, felt disappointment at Tom's answer, for the eccentric man exclaimed:

"Bless my leather belt, Tom, but you aren't very keen on making a million dollars!"

"Oh, yes, I like to make money," the young inventor answered. "I guess you know that, as well as any one, for you've been with me on several trips. And I don't mind hard work, nor danger."

"I'll say you don't!" added Ned, as he thought of some of Tom's perilous voyages, among the diamond makers and in the caves of ice.

"Well, if you are anxious to make money, as I admit I am," said Mr. Hardley, "why can't you give me an answer now?"

"Because," answered Tom, "there are many things to be considered. Hunting for a treasure on the floor of the Atlantic isn't like going to some location on land, however wild or inaccessible it might be. Do you realize, Mr. Hardley, what a large difference in miles a small error in nautical calculations makes? We might go to the exact spot where you thought the wreck of the Pandora lies, only to find that we would have to hunt around a long time.

"I must think of that, and also think of my other business affairs. Then, too, there is my father. He is getting old, and while he is still active in the affairs of the company, particularly when it comes to taking up new lines of work, I do not like to think of leaving him, as I should have to, in case I went on this trip."

"Take him along!" exclaimed Mr. Damon. "He's gone with us before, Tom."

"He's too old now," said the young inventor a bit sadly. "Father will never make another extended trip. But I will let you have my answer as soon as I can, Mr. Hardley, and I will give the matter considerable thought."

"I'm sure I hope you will, and also that you will consent to go," was

the answer. "A million is not easily to be come at in these days after the Great War."

"I realize that," agreed Tom with a smile. "And you shall have my answer as soon as possible."

With this the visitor was forced to be content, and a little later he withdrew with Mr. Damon, the latter telling Tom that he would see him again soon.

"Well, that was queer, wasn't it?" remarked Ned, when he and Tom were alone again.

"What was?" asked Tom, as though his mind was far away, as indeed it was.

"That this man should come in with his project to search for a sunken treasure wreck just as we were talking about how many millions were on the bottom of the ocean."

"Yes, it was quite a coincidence," Tom admitted.

"What do you think of it--and him?" asked Ned.

"Well, to tell you the truth, I didn't take a great fancy to Mr. Hardley," Tom said. "I think he's altogether too cocksure, and takes too much for granted. Still I may misjudge him. Certainly he doesn't have a chance at a million dollars every day."

"Do you think you could get the treasure out of this wreck, Tom, if you could locate her?"

"Why, it's possible; yes. We proved that with the Boldero."

"Would you use the same submarine?"

"No, I think I'd have to rebuild it, or make an altogether new one. Possibly I might get one of Uncle Sam's and add some improvements of my own."

"Yes, you could do that," agreed Ned. "You've done so much for the government that it couldn't refuse you something reasonable, now that the war is over. Then do you think you'll go?"

"Really, Ned, I can't make up my mind yet. Now let's forget the Pandora and all the millions and get down to business. This Criterion company seems to me to want altogether too much, We'll have to trim their request down a bit. They owe the money and ought to pay it."

"Yes, I'll get after them," said Ned, and then he and his chum, as well as employer, plunged into a mass of business details.

It was the next afternoon, when Tom, following a strenuous morning of work, leaned back in his chair at his desk, that Mr. Damon was announced.

"Tell him to come in," ordered Tom, always glad to see his friend. "Wait a minute, though!" he called to the messenger. "Is any one with him?"

"No, sir; he is alone."

"Good! Then show him right in. I was afraid," said Tom to Ned, who was also in the office, "that he had Hardley with him. I'm not quite ready to see him yet."

"Then you haven't made up your mind about going for the treasure?"

"Not exactly. I shall, perhaps, this week."

"Bless my matchbox, Tom, but I'm glad to see you!" cried Mr. Damon, as he hastened forward with outstretched hand. "I was afraid you might be out. Now look here! What about my friend Hardley? He's very anxious to know your decision about going for that treasure, and I said I'd come over and sound you. I don't mind saying, Tom, that if you go I'm going too; if you'll take me, of course."

"Well, Mr. Damon, you know you'll always be welcome, as far as I am concerned," said the young inventor; "but, as a matter of fact, I don't believe I'm going."

"What? Not going to pick up a million dollars off the floor of the ocean, Tom? Bless my bank balance! but that's foolish, it seems to me."

"Perhaps it is, but I can't help it."

"What's your principal objection?" asked the eccentric man. "It isn't that you don't want the money, is it?"

"Not exactly."

"Then it must be that you object to Mr. Hardley personally." went on Mr. Damon. "I began to suspect that, Tom, and I want to say that you are wrong. Mr. Hardley is a friend of mine--a good friend. I have not known him long, but he strikes me as being all right. He had some good letters of introduction, and I believe he has money."

"Where'd he get it?" asked Tom.

"I don't know, exactly. Seems to me I heard him mention silver mines, or it may have been gold. Anyhow, it had something to do with getting wealth out of the ground. Now, Tom, I don't mind saying that I stand to make a little money in case this thing goes through."

"How's that, Mr. Damon?" asked the young scientist in surprise.

"Why, I agreed to bear part of the expense," was the answer. "I thought this was a pretty good scheme, and when Mr. Hardley came to me and told me of the possibilities I agreed to help him finance the expenses. That is, I have taken shares in the company he formed to raise his half of the expense money.

"Of course I thought of you at once when he spoke of having to search out a sunken wreck, and I proposed your name. He'd heard of you, he said, but didn't know you. So I brought you together and now--bless my apple pie, Tom! I hope you aren't going to turn down a chance to make a million and, incidentally, help an old friend."

"Well," remarked Tom, slowly, "I must admit, Mr. Damon, that I didn't think you'd go into a thing like this. Not that it is more risky than other schemes, but I thought you didn't care for speculation."

"Well, this sort of appealed to me Tom. You know--sunken wreck under the ocean, down in a diving bell perhaps, and all that! There's romance to it."

"Yes, there is romance," agreed Tom. "And hard work, too. If I undertook this it would mean an extra lot of work getting ready. I suppose I could use my own submarine. I could get her in commission, and make improvements more quickly than on any other."

"Then you'll go?" quickly cried the eccentric man.

"Well, since you tell me you are interested financially, I believe I will," assented Tom, but he spoke reluctantly. "As a matter of fact, I am going against my better judgment. Not that I fear we shall be in danger," he hastened to add; "but I think it will prove a failure. However, as Mr. Hardley will bear half the expense, and as by using my own submarine that will not be much, I'll go!"

"Then I'll tell him!" exclaimed Mr. Damon. "Hurray! This is great! I

haven't had an exciting trip for a long while! Don't tell my wife about it," he begged Tom and Ned. "At least not until just before we start. Then she can't object in time. I'll have a wonderful experience, I know. This will be good news to Dixwell Hardley!"

And as Mr. Damon hastened away to acquaint his new friend with Tom's decision, the young inventor remarked to Ned:

"I'll go; but, somehow, I have a feeling that something will happen."

"Something bad?" asked the financial manager. "No, I wouldn't go so far as to say that. But I believe we'll have trouble. I'll start on the search for the sunken millions, but rather against my better judgment. However, maybe Mr. Damon's luck and good nature will pull us through!"

CHAPTER V

BUSY DAYS

ONCE Tom Swift had made up his mind to do a thing he did it-- even though it was against his better judgment. His word, passed, was his bond.

In conformity then with his decision to take Mr. Damon and the latter's friend, Mr. Hardley, on an undersea search for treasure, Tom at once proceeded to make his preparations. Ned, too, had his work to do, since the decision to make what might be a long trip would necessitate a change in Tom's plans. But, as in everything he did, he threw himself into this whole-heartedly and with enthusiasm.

Not once did Tom Swift admit to himself that he was going into this scheme because he thought well of it. It was all for Mr. Damon, after Tom had learned that his friend had invested considerable money in a company Mr. Hardley had formed to pay half the expenses of the trip.

Tom even tried to buy Mr. Damon off, by offering the latter back all the money the eccentric man had invested with his new friend. But Mr. Damon exclaimed:

"Bless my gasoline tank, Tom! I'm in this thing as much for the love of adventure, as I am for the money. Now let's go on with it. You will like Hardley better when you know him better."

"Perhaps," said Tom dryly, but he did not think so.

The young inventor insisted, before making any preparations for the trip, that all the cards be laid on the table. That is, he wanted to be sure there had been such a ship as the Pandora, that she was laden with gold, and that she had sunk where Mr. Hardley said she had. The latter was perfectly willing to supply all needful proofs, even though some were difficult, because of the nature of the voyage of the treasure craft. As a filibuster she was not trading openly.

"Here are all the records," said Mr. Hardley to Tom one day, when the young inventor, Ned, and Mr. Damon were gathered in Tom's office. "You may satisfy yourself."

And, with Ned's help, Tom did.

There was no question but what the Pandora had sailed from a certain port on a certain date. The official reports proved that. And that she did carry a considerable treasure in gold was also established to the satisfaction of Tom Swift. Because the gold was to be used for furthering ends against one of the South American governments, the gold shipment was not insured and, in consequence, no recovery could be made.

"Then you are satisfied, are you, Mr. Swift, that the ship, set out with over two millions in gold on board?" asked Mr. Hardley. "Yes, that seems to be proved," Tom admitted, and Ned nodded. "The next thing to prove is that she foundered in a storm about the position I am going to tell you," went on Mr. Damon's friend.

"He doesn't tell you the exact location now, Tom," explained Mr. Damon, "because it might leak out. He'll disclose it to us as soon as we are out of sight of land in the submarine." "I'm willing to agree to that proposition," Tom said. "But I want to be sure she really did sink."

This was proved to him by official records. There was no question but that the Pandora had gone down in a big storm. And Mr. Hardley was on board. He proved that, too, a not very difficult task, since the official passenger list was open to inspection.

Mr. Hardley repeated his story about having overheard the exact location of the ship a few minutes before she sank, and he also told of the captain and several members of the ship's company having been drowned. This, too, was confirmed.

"Then," went on Mr. Hardley, "all that remains for me to do is to deposit at some bank my half of the expenses and await your word to go aboard the submarine."

"I believe that is all," returned Tom. "But, on my part, it will take some little time to fit the submarine out as I want to have her. There are some special appliances I want to take along which will aid us in the search for the gold, if we find the place where the Pandora is sunk."

"Oh, we'll find that all right," declared Mr. Hardley, "if you will only follow my directions."

Tom looked slightly incredulous, but said nothing.

Then followed busy days. The submarine Advance, which had made

several successful trips, as related in the book bearing the title, "Tom Swift and His Submarine Boat," was hauled into dry dock and the work of overhauling her begun. Tom put his best men to work, and, after a consultation with his father, decided on some radical changes in the craft.

"Tom, my boy," said the aged Mr. Swift, "I wish you weren't going on this trip."

"Why, Dad?" asked the young inventor.

"Because I fear something will happen. We don't really need this money, and suppose--suppose--"

"Oh, I'm not worrying, Dad," was the answer. "I've taken worse risks than this, many a time. I'm really doing it as a favor to Mr. Damon. He's got too much money invested to let him lose it. And we can use a million dollars ourselves. It will enable me to put in operation a plan to pension our workmen. I've long had that in mind, but I've never had enough capital to carry it out."

"Well, of course, Tom, that's a worthy object, and I won't make any further objections. But take my advice, and strengthen the submarine."

"Why, Dad?" asked Tom in some surprise. "Because you'll find the water there of a greater depth than you think," was the answer. "I know you have the official hydrographic charts, but there's a mistake, I'm sure. I once made a study of that part of the ocean, and there are currents there at certain seasons of the year that no one suspects, and deep caverns that aren't charted. If the Pandora lies in one of these you'll need a great strength of walls to your submarine to withstand the pressure of deep water."

The craft Tom Swift proposed to use in searching for the treasure ship Pandora was of the regular cigar-shape, but inside it had many special features. It was more comfortable than the usual submarine, not being intended for fighting, though it did carry guns and a torpedo tube. Tom intended renaming the craft, which had been called Advance, and one day, when there had been some discussion as to what the undersea craft ought to be called, Ned explained:

"Why don't you name it after her?"

"After whom?" inquired Tom, in some surprise, looking up from a

letter he was writing.

"Your friend and future wife, Mary Nestor," answered Ned. "I'm sure she'd appreciate it."

"That isn't such a bad idea," conceded Tom musingly. "The only thing about it is that I don't want Mary's name bandied about that way."

"Use her initials, then," suggested Ned.

"How do you mean

"Why not call it the M. N. 1.? Isn't that a good name?"

"The M. N. 1." mused Tom. "Not so bad. If the N. C. 4 flew over the ocean the M. N. 1 ought to be able to navigate under it. I think I'll do that, Ned."

So the Advance, rebuilt and refitted in many ways, was christened the M. N. 1, and a wonderful craft she proved to be. Mary Nestor was quite pleased when Tom told her what he had done. She appreciated the delicate compliment he had paid her.

Busy and more busy were the days that passed. As the M. N. 1 had to be refitted some miles from Tom's home, where it was feasible to launch her for the trip, he had to make the journey between the drydock and his shop either by automobile or aeroplane. Often he choose the latter, since he had a number of small, speedy craft in his hangars. Sometimes Ned or Mr. Damon went with him, but Mr. Hardley could never be induced to ride in an airship.

"I'll travel on the ocean or under it," he said, "but I'm not going to take a chance in the air. I'm too afraid of falling."

"Tom, what's this?" asked Ned one day, when he and Tom had come to see how the work of remodeling the submarine was getting along. "It looks like something you used when you dug your big tunnel."

"That's a new kind of diving bell," Tom answered. "You know it isn't easy to get treasure out of a sunken ship. It isn't like picking it off the bottom of the ocean. We've got to get it out from inside--perhaps from inside a strong box or a safe. This bell may come in useful."

"Can't you use the special diving suits that you always used to carry?" the financial manager wanted to know.

"We might, if the water isn't too deep," replied Tom. "But you know

there is a limit to how far down a man in even my kind of diving dress can go. With this diving bell a much greater depth can be reached. And this diving bell is not like any you have ever seen or read about. My father gave me the idea for it. I'll demonstrate it to you some day."

A diving bell is shaped like its name. A common glass tumbler thrust down into a pail of water, with the open side down, will show exactly the principle on which a diving bell works. It illustrates the fact that two things cannot occupy the same place at the same time.

Pushing the tumbler, open end down, into the pail of water, leaves a space in the upper end of the tumbler which the water cannot fill, because it is already occupied with air. Imagine a big tumbler, made of thick steel, lowered into the water. Air pumped into the upper part not only keeps the water from entering, but also enables a man inside to breathe and to move about inside the bell which may be lowered to the floor of the ocean. But, as Tom told Ned, his diving bell was a big improvement over those commonly used.

The two young men inspected the progress made in refitting the submarine, and Tom expressed himself as satisfied.

"How soon do you think you can start?" asked Ned.

"In about two weeks," was the answer. "I'll want to get to the West Indies before the fall storms start. Not only will it be impossible to make a search then, but the very location of the sunken wreck may be changed."

"How so?" asked Ned.

"Because of undersea currents. They are strong enough, not only to sweep a wreck away from the place where it may have settled, but they may cover it with sand, and then it is hopeless to try to dig it out. So We've got to go soon, if we go at all."

"Well, I'm with you!" exclaimed Ned. "Hello! here's some one looking for you, I guess," he added, as a boy came hurrying down to the dock from the temporary office Tom had set up there.

"You're wanted on the telephone, Mr. Swift," said the messenger. "It's important, too."

"All right. I'll come at once," was the answer. "Hope it isn't bad news," mused Ned, as his chum hurried on in advance. "Maybe Hardley has

found out he hasn't a right to search for that sunken gold after all. That would be too bad for Mr. Damon!"

CHAPTER VI

MARY'S ODD STORY

"HELLO! Hello! Yes, this is Tom Swift. What's that? You've had an accident? Great Scott, Mary! I hope you aren't hurt."

Ned overheard these words as he stood outside the temporary office, from inside which Tom Swift was telephoning.

"There's been an accident!" thought the financial manager. "I wonder if I can help?"

He was about to hurry in to offer his services when he heard Tom laugh, and then he knew it was all right. He heard his chum say:

"I'll be right over and get you. Just where are you?"

Then followed a period of listening on the part of Tom, to be broken by the words:

"All right, I'll be right with you. Lucky I have my Air Scout with me. You aren't afraid to ride in that, are you? No, that's good! I'll be right over. Ned is here with me, and I'll have him telephone to your father and mother."

With that Tom hung up the receiver and joined his chum.

"Mary had a slight automobile accident about five miles from here," Tom told his chum. "Some green driver ran into her and dished one of her wheels. No one hurt, but she hasn't a spare wheel and can't navigate. She called me up at the house, not wishing to alarm her father, and Mrs. Baggert told her you and I had come down to the dock, so she reached me here. I'll go in the small aeroplane and get her. Luckily I left it here the last time I made a trip. Will you call up Mary's home and let them know she's all right and that I'll soon be home with her? They might hear an exaggerated account of the accident."

Ned promised to do this, and at once put in a call for the home of his chum's fiancée, while Tom had one of his men run out the Air Scout. This was an aeroplane recently perfected by the young inventor which slipped through space with scarcely a sound. So silent was it that the craft had been dubbed "Silent Sam," and it stood Tom in good stead as those of you

know who have read the volume just before the present book. This sky glider Tom would now use in going to the rescue of Mary Nestor was not, however, the same large craft that figured in the previous story. That airship had been given to the United States government for war purposes. But Tom had built himself a smaller one for his own use. It had the advantage of enabling him to carry on a conversation with his passenger when he took one aloft.

About a week before Tom and Ned had flown from Shopton to the dry dock where the submarine was being reconstructed in this small airship. Engine trouble had developed after they had landed, and they had gone back by automobile, leaving the Air Scout to be repaired. This had been done, and now Tom intended to use it in going to Mary's rescue.

Now, when the Air Scout had been run out of the hangar, Tom climbed into it.

"Sorry I can't take you along," he called to Ned, who had finished telephoning to Mary's home, "but, under the circumstances--"

"Two's company and three's a crowd!" laughed Ned. "I know!"

"No, I didn't mean that," Tom said. "You know Mary likes you, but this will carry only two."

"I know!" answered his chum. "On your way!"

And with an almost noiseless throb of her engine and a whirr of her propeller, the aeroplane rolled swiftly over the level starting ground and took the air like a swan leaving its lake.

Tom did not rise to a great height, as he would need only a few minutes to reach the place where Mary was stalled by the accident to her machine. Soon he was hovering over a level field, one of several that lined the country highways in that section. A small crowd on the turnpike gathered about an evidently disabled automobile gave Tom the clew he needed, and presently he made a landing. Instantly the throng of country people who had gathered to look at the automobile crash deserted that for a view of something more sensational--an airship.

Cautioning the boys who gathered about not to "monkey" with any of the mechanism, Tom hastened over to where Mary was standing near her car.

"Are you sure you aren't hurt?" he asked her anxiously.

"Oh, yes, very sure," she replied, smiling at him. "It isn't much of an accident--only one wheel smashed. We were both going slowly."

"But it was all my fault!" insisted a young fellow who had been driving the car that crashed into Mary's. "I'm all kinds of sorry, and of course I'll pay all damages. I wanted this young lady to let me drive her home and then send a garage man to tow her car, but she said she had other plans. I don't blame her for not wanting to ride in my jitney bus when I see what kind of car you have," and he looked over toward Tom's aeroplane.

"Thank you, just the same," murmured Mary. "I'm not quite sure that it was all your fault. But if you will be so good as to send a man after my machine I'll go back with Mr. Swift. Wait until I get my bag," she added, and she extracted it from the seat in her automobile. "There'll be room for this, won't there?" she asked. "I've been shopping."

"You must have made some large purchases," laughed Tom, looking critically at the small bag. "Yes, there'll be room for that, all right."

He made a brief examination of Mary's machine, ascertaining that the dished wheel was the main damage, and then, having given the young man who caused the accident directions for the garage attendant, Tom led his pretty companion across the field to the waiting airship.

Of course a crowd gathered to see them start off, and this was not long delayed, as Tom was not fond of curiosity seekers. In a few minutes he and Mary were soaring aloft.

"Well, how are you?" he asked Mary, when they were alone well above the earth.

"Fine and dandy," she answered, smiling at him, for they were riding side by side and could converse with little difficulty owing to the silent running of Tom's latest invention. "I'm sorry to have called you away from your work," she added, "but when Mrs. Baggert told me you were at the submarine dock I thought perhaps you could run out and get me in your machine. I didn't expect you to fly to me."

"I'm always ready to do that!" exclaimed Tom, as he shot upward to avoid a bank of low-lying clouds. "Were you frightened at the crash in the

machine?"

"Not greatly. I saw it coming, and knew it was unavoidable. That chap hasn't been running autos very long, I imagine, and he lost his head in the emergency. But I had my brakes on and he just coasted into me. I was lucky in that it wasn't worse."

"I should say so! Do you want to get right home?"

"I think I'd better. Mother and father may be a little worried about me. And they've had trouble enough of late."

"Trouble!" exclaimed Tom, in a questioning voice. "Anything serious?"

"No, just family financial matters. Not ours she hastened to add, as she saw Tom look quickly at her. "A relative. I shouldn't have mentioned it, but father and mother are a little worried, and I don't want to add to it."

"Of course not," agreed Tom. "If there's anything I can do?"

"Oh, I expected you to say that!" laughed Mary. "Thanks. If there is we'll call on you. But it may all be straightened out. Father was expecting a message from Uncle Barton today. So, though I'd like to take a cloud-ride with you, I think I'd better get home."

"All right," agreed Tom. "I told Ned to telephone that you were all right, so they won't worry. And now try to enjoy yourself."

"I'll try," promised Mary, but it was obvious, even from the quick glances Tom gave her, that she was worried about something. Mary was not her usual, spontaneous, jolly self, and Tom realized it.

"Well, here we are!" he announced a little later, as they soared above a level field not far from her home. "Sorry I can't let you down right on your roof, but it isn't flat enough nor big enough."

"Oh, I don't mind a little walk, especially as I didn't have to hike it all the way in from Bailey Corners," she said, referring to the place of the automobile accident. "I suppose the time will come when everybody who now has an auto will have an airship and a landing place, or a starting place, for it at his own door," she added.

"Either that, or else we'll have airships so compact that they can set off and land in as small a space as an auto now requires," said Tom. "The latter would be the best solution, as one great disadvantage of airships now

is the manner of starting and stopping. It's too big."

Tom left his Air Scout in a field owned by Mr. Nestor, where he had often landed before, and walked up to the house with Mary.

"Oh, I'm glad you're back!" exclaimed Mrs. Nestor, when she saw the two coming up the steps.

"You weren't worried, were you, after Ned telephoned?" asked Tom.

"Not exactly worried, but I thought perhaps he was making light of it. Do tell me what happened, Mary!"

Thereupon the girl related all the circumstances of the smash, and Tom added his share of the story.

"Did father hear anything from Uncle Barton?" asked Mary, after her mother's curiosity had been satisfied.

"Yes," was the answer, in rather despondent tones, "he did, but the news was not encouraging. The papers cannot be found."

"It's mother's brother we're talking about," Mary explained to Tom. "Barton Keith in his name. Perhaps you remember him?"

"I've heard you speak of him," Tom admitted.

"Well," resumed Mary, "Uncle Barton is in a peck of trouble. He was once very rich, and he invested heavily in oil lands, in Oklahoma, I believe."

"No, in Texas," corrected Mrs. Nestor.

"Yes, it was Texas," agreed Mary. "Well he bought, or got, somehow, shares in some valuable oil lands in Texas, and expected to double his fortune. Now, instead, he's probably lost it all."

"That's too bad!" exclaimed Tom. "How did it happen?"

"In rather an odd way," went on Mary. "He really owns the lands, or at least half of them, but he cannot prove his title because the papers he needs were taken from him, and, he thinks, by a man he trusted. He's been trying to get the documents back, and every day we've been expecting to hear that he has them, but mother says there has been no result."

"No," said Mrs. Nestor. "My brother thought sure he had a trace of the man he believes has the papers, or who had them, but he lost track of him. If we could only find him--"

At that moment a maid came into the room to announce that Tom

Swift was wanted at the telephone.

CHAPTER VII

THE TRIAL TRIP

"THIS is my busy day!" announced the young inventor as he went into the Nestor sitting room, where the telephone was installed.

"Perhaps it is some one else who wants you to come to their rescue," suggested Mary.

But it was not, as Tom related a little later when he had finished his talk over the wire.

"Just a business matter," he announced to Mary and her mother, when he rejoined them. "A gentleman with whom I expect to make a submarine trip is at the house, and wants to consult with me about details. He is getting anxious to start. Mr. Damon is there, too."

"Blessing every thing he lays eyes on, I suppose," remarked Mrs. Nestor, with a smile.

"Yes, and some things he doesn't see," agreed Tom. "He is going with us on this submarine trip."

"Oh, Tom, are you going to undertake another of those dangerous voyages?" asked Mary, in some alarm.

"Well, I don't know that they are particularly dangerous," replied Tom, with a smile. "But we expect to make a search for a sunken treasure ship in a submarine. That's the vessel I'm working on now," he added. "We're rebuilding the Advance, you know, making her more up-to-date, and adding some new features, including her name--M. N. 1."

"I suppose Mr. Damon's friend is getting anxious to make a start, particularly as he has already invested several thousand dollars in the project," went on the young inventor. "He formed a company to pay half the expenses of the search, and they will share in the~ treasure--if we find it," Tom said. "I wish Mr. Damon, who holds most of the shares the promoter let out of his own hands, had not gone into it, but, since he has, I'm going to do the best I can for him."

"Then aren't you friendly with the other man?" asked Mary.

"I don't especially care for him," the young inventor admitted. "He

isn't just my style--too fond of himself, and all that. Still I may be misjudging him. However, I'm in the game now, and I'm going to stick. I'll have to be traveling on," he said. "Mr. Damon and his friend are at my house, and they've been telephoning all over to find me. I guess this was one of the first places they tried," he said with a smile, referring to the fact that he spent considerable time at Mary's home.

"Well, I'm glad they found you, but I'm sorry you have to go," Mary said with a smile.

A little later Tom Swift, with Ned, for whom he called, was on his way back home in his Air Scout, having said goodbye to Mary and her mother and expressing the hope that Mr. Keith would soon be over his business troubles.

"Oil wells are queer, anyhow," mused Tom.

Then Tom got to thinking about Dixwell Hardley: "I don't like the man, and the more I see of him the less I like him. But I'm in for it now, and I'll stick to the finish. I only wish I could locate the treasure ship, give him his share, and get back to my work. I'm going to try to turn out an airship that a man can use as handily as he does a flivver now."

Musing on the possibilities in this field, Tom, having left Ned at the latter's home, soared down from aloft, and a little later, having told Koku to look after the Air Scout, much to the delight of the giant and the discomfiture of Rad, the young inventor was closeted with Mr. Damon and Dixwell Hardley.

"Bless my straw hat, Tom!" exclaimed the eccentric man, "but we just couldn't wait any longer. How are you coming on, and when can we start on this treasure-hunting trip? I declare it makes me feel young again to think about it!"

"Well, it won't be long now," was the answer. "The men are working hard to get the submarine in shape, and I should say that in another week, or two weeks at the most, we could set off!"

"Good!" exclaimed Mr. Hardley. "I have received additional information," he went on, "to the effect that the amount of gold on board the Pandora was even greater than we at first thought."

"That sounds encouraging," replied Tom. "It only remains to find the

sunken ship now. But what interests me greatly is whether, after we have gotten this gold, supposing we are successful, we shall be allowed to keep it."

"Bless my bank book! why not?" asked Mr. Damon. "Isn't it wealth abandoned at the bottom of the sea, and isn't finding keeping?"

"Not always," answered Tom. "There are certain rules and laws about treasure, and it might happen that after we got this--if we do--it could be taken away from us."

"I think there will be no difficulty on this score," said Mr. Hardley. "In the first place, two attempts were made to get this wealth, and were unsuccessful. Then it was practically abandoned, and I believe under the law the persons who now find it will be entitled to keep it. Besides the persons who gathered it together did so for an unlawful purpose--that of starting a revolution in a friendly country--and they would not dare claim it for fear of giving their secret away."

"Well, perhaps you are right," assented Tom. "We'll make a try for it, anyhow."

"You say the submarine is nearly ready?" asked Mr. Hardley.

"She will be ready for a trial trip at the end of this week," said Tom, "and be fitted up for the voyage within another seven days, I hope. Then for the great adventure!" and he laughed, though, truth to tell, he had no real liking for his task. The more he saw of Mr. Hardley the less he liked him.

"I shall begin getting my affairs in shape," said the latter, as he gathered up some papers he had brought to attempt to prove to Tom that the wealth of the Pandora was greater than had been supposed. "I have many large interests," he went on, rather pompously, "and they need looking after; especially if I undertake anything so extra hazardous as a submarine trip."

"Yes, there always is some danger," admitted Tom. "But then there is danger walking along the street."

"Oh, there's no danger with Tom Swift!" exclaimed Mr. Damon. "I've been under the sea and above the clouds with him, and, bless my rainbow! he always brought us safe home."

"And I'll try to do the same this time," said the young inventor.

Busy days followed for Tom Swift and his friends. The force at work on the submarine turned night into day to rush her completion, and in due season she was set afloat in the dry dock basin and formally rechristened the M. N. 1.

Mary blushed as she gave the boat her new name, and there was a little cheer from the group of workmen gathered at the dock. There was no launching in the real sense of the word, since as the Advance that ceremony had been gone through with for the undersea craft.

She had been greatly changed interiorly and outwardly. Her skin, or plates, having been doubled and strengthened. For Tom proposed to go to a much greater depth than ever before.

In addition to using the submarine herself in a search for the gold on the Pandora, Tom had installed on board some new kinds of diving apparatus and also a diving bell. If one would not serve, the other might, he reasoned.

"Well, Tom," remarked his aged father the night before they were to start on the trial trip, "I understand you have practically rebuilt the Advance."

"Yes; and I think she's a much better craft, too, Father."

"Glad to hear that, Tom. Of course you kept the gyroscope rudder feature?"

"No, I didn't," replied Tom. "If I had left that installed it would have meant carrying a smaller diving bell, and I think that last will be more useful than the gyroscope. I put in a set of double-acting depth rudders instead."

Mr. Swift shook his head.

"I'm sorry for that, Tom," he remarked. "There's nothing like the gyroscope rudder in a tight pinch--say when there's a storm. And for holding the boat steady, if you have to make a sudden turn under water, to avoid an obstruction you come upon unexpectedly, a gyroscope can't be improved on. It holds you steady and prevents your turning turtle."

"I've put side fin-keels to correct that," Tom explained.

But still his father was not satisfied.

"I'd rather you had kept the gyroscope," he said, and the time was to come when Tom Swift wished that himself.

But it was too late to make the change now, and so, with more than usual confidence in his own designing abilities, the next day the young inventor and his friends went aboard the M. N. 1 for the trial trip.

"You don't easily get seasick, do you?" Tom asked Mr. Hardley, as they descended the hatchway into the interior of the craft.

"No, I'm considered a good sailor."

"Well, you'll need to be," went on Tom, with a smile. "Not that we are likely to strike any rough water now, though the reports say a stiff breeze is blowing in the bay. But when we once start for the West Indies you are likely to experience a new sensation. I've known sailors who never had any qualms, even in terrible storms, to get ill in a submarine when she went through only a small blow. The motion is different from that on a surface boat."

"I can imagine so," returned Mr. Hardley. "But I'll be thinking of the millions in gold on the Pandora, and that will keep my mind off being seasick."

"Let us hope so," murmured Tom.

He gave the word, they all descended, the hatch covers were closed down, and the M. N. 1 was ready to start on a trial trip.

CHAPTER VIII

THE MUD BANK

"WHAT'S that noise?" asked Mr. Hardley.

Mr. Hardley, Tom Swift, Mr. Damon, Ned Newton, Koku, and one or two navigating officers of the craft, were gathered in the operating cabin of the M. N. 1.

"That's water being pumped into the tanks," explained Tom. "We are now going down. If you'll watch the depth gauge you can note our progress."

"Going down, are we?" remarked Mr. Hardley. "Well, it's interesting to say the least," and he observed the gauge, which showed them to be twenty feet under the surface.

"Bless my hydrometer, but he's got nerve for a first trip in a submarine! He's all right, isn't he?" whispered Mr. Damon to Tom.

"Well, I'm glad to see he isn't nervous," remarked Tom, honest enough to give his visitor credit for what was due him. And indeed many a person is nervous going down in a submarine for the first time. "Still we can't go more than thirty feet down in this water," went on Tom. "A better test will be when we get about five hundred feet below the surface. That's a real test, though as far as knowing it is concerned, a person can't tell ten feet from ten hundred in a submarine under water, unless he watches the gauge."

"Well, I think you'll find Mr. Hardley all right," said Mr. Damon, who seemed to have taken a strong liking to his new friend.

Certainly the latter showed no signs of nervousness as the craft slowly settled to the proper depth. He asked numberless questions, showing his interest in the operation of the M. N. 1, but he showed not the least sign of fear. However, as Tom said, that might come later.

"We are going down now," Tom explained, as he pointed out to Mr. Hardley the various controlling wheels and levers, "by filling our ballast tanks with water. We can rise, when needful, by forcing out this water by means of compressed air. When we are on the ocean we can go down by

using our diving rudders, and in much quicker time than by filling our tanks."

"How is that?" asked the seeker after the Pandora's gold.

"Filling the tanks is slow work in itself," replied Tom, "and they have to be filled very carefully and evenly, so we don't stand on our stern or bow in going down. We want to sink on an even keel, and sometimes this is hard to accomplish. But we are doing it now," and he called attention to an indicator which told how much the M. N. 1 might be listing to one side or to one end or the other.

"A submarine, as everyone knows, is essentially a water-tight tank, shaped like a cigar, with a propeller on one end. It can sink below the surface and move along under water. It sinks because rudders force it down, and water taken into tanks in its interior hold it to a certain depth. It can rise by ejecting this extra water and by setting the rudders in the proper position.

A submarine moves under water by means of electric motors, the current of which is supplied by storage batteries. On the surface when the hatches can be opened, oil or gasolene engines are used. These engines cannot be used under water because they depend on a supply of air, or oxygen, and when the submarine is tightly sealed all the air possible is needed for her crew to breathe. While cruising on the surface a submarine recharges her storage batteries to give her motive power when she is submerged.

There are many types of submarines, some comparatively simple and small, and others large and complex. In some it is possible for the crew to live many days without coming to the surface.

Tom Swift's reconstructed craft compared favorably with the best and largest ever made, though she was not of exceptional size. She was very strong, however, to allow her to go to a great depth, for the farther down one goes below the surface of the sea, the greater the pressure until, at, say, six miles, the greatest known depth of the ocean, the pressure is beyond belief. And yet is possible that marine monsters may live in that pressure which would flatten out a block of solid steel into a sheet as thin as paper.

"Well, we are as deep down as it is safe to go in the river," announced

Tom, as the gauge showed a distance below the surface of a little less than twenty-nine feet. "Now we'll move into the bay. How do you like it, Mr. Hardley?"

"Very well, so far. But it isn't very exciting yet."

"Bless my accident policy!" exclaimed Mr. Damon, "I hope you aren't looking for excitement."

"I'm used to it," was the answer. "The more there is the better I like it."

"Well, you may get your wish," said Tom.

He turned a lever, and those on board the submarine became conscious of a forward motion. She was no longer sinking.

She trembled and vibrated as the powerful electric motors turned her propellers, and Tom, having seen that all was running smoothly in the main engine room, called Mr. Damon, Ned, and Mr. Hardley to him.

"We'll go into the forward pilot house and give Mr. Hardley a view under water," he announced. "Of course, you'll see nothing like what you'll view when we're in the ocean," added the young inventor, "but it may interest you."

The four were soon in the forward compartment of the craft. She could be directed and steered from here when occasion arose, but now Tom was letting his navigator direct the craft from the controls in the main engine room. A conning tower, rising just above the deck of the craft, gave the pilot the necessary view.

"Here you are!" exclaimed Tom, as he switched out the lights in the cabin. For a moment they were in darkness, and then, with a click, steel plates, guarding heavy plate glass bull's-eyes, moved back, and Mr. Hardley for the first time looked out on an underwater scene. He saw the murky waters of river down which they were proceeding to the bay moving past the glass windows. Now and then a fish swam up, looking in, and, with a swirl of its tail, shot away again, apparently frightened well-nigh to death.

"Bless my shoe laces, Tom!" exclaimed Mr. Damon, "this isn't a marker compared to some of the sights we've seen, is it?"

"I can imagine not," said Mr. Hardley. "But it is interesting. I shall be anticipating more wonderful sights."

"And you'll get them!" exclaimed Ned. "Do you remember, Tom, the time the big octopus tried to hold us back?"

"Yes, indeed," answered the young inventor. "That gave us a scare for the time being."

Steadily the M. N. 1 kept on her way under water. Her path was illuminated to a considerable degree by a broad, diffused beam of light from a powerful searchlight that was fixed just back of the conning tower, giving the helmsman a certain degree of vision. This light also served to illuminate the water, so that those in the forward cabin could see what was going on around them.

"There isn't much of interest in the river," said Tom. "No big fish, or anything else of moment. Even in the bay we won't see much to attract our attention. But I want to make sure everything is working smoothly before we start for the West Indies."

"That's right!" agreed Mr. Hardley. "We want to make a success of this trip."

He remained at the glass bull's-eyes, now and then exclaiming as some shad or other fair-sized fish came into view. Suddenly, however, his exclamation was sharper than usual.

"Look!" he exclaimed. "There's part of a wreck!"

Ned, Mr. Damon, and Tom looked out and saw, sweeping past them, the ribs and worm-eaten timbers of some craft, lying on the bottom of the river.

"Yes, that's the remains of an old brick scow," the young inventor explained. "That's one of our water-marks, so to speak. It is at the bend of the river. We turn now, and head for the bay."

As he spoke they all became aware of a sudden swerve in the course of the submarine. The helmsman had, doubtless, noted the "water-mark," as Tom termed it, and as an automobilist on land might swing at the cross-roads, the steersman was changing the course of his craft.

"We'll go deeper," said Tom a moment later, as the wreck passed out of view. "We can go about fifty feet down now. Yes, he's sinking her," he added, as a gauge showed the craft to be descending. "Nelson knows his business all right."

"He is your captain?" asked Mr. Hardley.

"One of the best, yes. He'll go with us on the search for the Pandora."

They talked of various matters, Tom relating to Mr. Hardley how a tug had rammed the brick scow some years ago, and sunk it in the river.

The submarine was now about forty-eight feet below the surface, and suddenly they all became aware that her speed had increased.

"Guess he's going to give the motors a good try-out," observed Tom. "I think I'll go back to the engine room. You may remain here, if you like, and you'll probably see--" A cry from Mr. Damon interrupted him.

"Bless my rubber boots, Tom! Look!" cried the eccentric man. "We're going to ram a mud bank!"

As he spoke they all became aware of a solid black mass looming in front of the bull's-eye window. An instant later the submarine came to a jarring stop, as if she had struck some soft, yielding substance. There was a confused shouting throughout the craft, the noise of machinery, a trembling and vibration, and then ominous quiet.

CHAPTER IX

READY TO START

Characteristic it was of Tom Swift to act calmly in times of stress and danger, and he ran true to form now. Only for an instant did he show any sign of perturbation. Then with calmness and deliberation the young inventor quickly did a number of things to the controls within his reach.

First of all he signaled to the engine room that he was going to take charge of the boat. This meant that the navigator in the conning tower was to keep his hands off the various levers and wheel-valves. It was possible to operate the M. N. 1 from three positions, but Tom wanted no triplicate handling of his craft now.

Almost the instant Tom signaled that he would take charge back came flashing the electrical signal from the conning tower that his orders were understood. The next thing that those aboard the craft became aware of was a tremor that seemed to run through the whole under-sea ship. The quiet had changed to a subdued humming, and the ominous lack of motion was succeeded by violent vibration.

"Backing her up, Tom?" asked Ned, in a low voice.

"Trying to," was the answer. "But I'm afraid her nose has gone in pretty deep. I've reversed the propellers."

For perhaps a minute this vibration continued, showing that the powerful electric motors were turning over the twin propellers at the blunt stern of the craft. But she did not change her position.

With a touch of his hand, and still almost as cool as the proverbial cucumber (though why they should be cool it is hard to say), Tom stopped the motors. Once again the craft was quiet, but now, instead of the occupants being able to see clearly from the thick, glass windows in the forward cabin, the water showed muddy and murky in the glare of the underwater searchlight.

"Bless my postage stamps, Tom! what has happened?" exclaimed Mr. Damon. "Has a giant squid attacked us, as one did some time ago, and is he roiling up the water?"

"No, it isn't a squid, Mr. Damon," replied the young inventor easily; "though the water does look as if a squid had spilled a lot of his ink in it. This is just the effect of mud stirred up by our propellers. There may be more of it."

Ned looked toward Mr. Hardley to see how he was taking it. The seeker after gold apparently had good control of his nerves, or else he was ignorant of what was going on. For he asked, casually enough:

"Have we stopped?"

"We have," answered Tom. "I thought I'd give you a view of the scenery."

Perhaps he spoke sarcastically, but, if he did, Mr. Damon's friend did not seem to be aware of it. Coolly enough he replied:

"Well, if this is a fair sample of underwater scenery I prefer something up above, though I appreciate that this may be needful."

"We'll soon be traveling along," announced Tom. "Koku," he added to the giant, who had been calmly sitting during the excitement, "go to the engine room and help with the big levers."

"Yes, Master," was the answer. Koku had implicit faith in Tom.

Waiting a moment for his faithful servant to reach the post assigned to him, Tom again signaled to his helpers and then quickly turned a wheel which produced startling results. For all within the submarine suddenly slid forward across the cabin floor.

"Bless my hammock hooks, Tom! are you standing her on her head?" cried Mr. Damon.

"That's exactly what I'm doing," was the answer. "I've started to empty one of the after ballast tanks, and that, naturally, raises the stern while the nose is held down."

The submarine was indeed in a peculiar position. She was on a slant in the water, her nose held fast in the soft mud bank, and it was Tom's idea that by making the stern buoyant it might help to pull her free.

To this end he also gave what assistance the propellers were capable of adding by starting the motors again, so that the craft once more trembled and vibrated.

But it all seemed to no purpose. Aside from the slanting position, there

was no change in the M. N. 1. Ned, looking out into the murky water, which had cleared slightly, saw that the craft was still held fast. And then, for the first time, Mr. Hardley seemed to become aware that something serious was the matter. Up to now he seemed to think that all that had occurred was done for the purpose of testing the newly outfitted underseas boat.

"Is there anything wrong?" he asked sharply of Tom. "Why are we in this position, and why don't we go on out to the open ocean and make a test at considerable depth? We'll have to go down deeper than this if we find the Pandora!"

"I suppose so," agreed Tom. "But we have had an accident, and--"

"An accident!" interrupted the gold-seeker, and then Ned saw him turn pale. "Do you mean to say this is not part of the test?"

"We have run into a mud bank," said Tom. "The steersman must have become confused, or else, since we last used the submarine, there has been a shift of the mud banks in this river and one exists where there was none before. At any rate, we ran our nose deep into it, and here we are--stuck!"

"Can't we get loose--go up to the surface?" demanded Mr. Hardley.

"I'm trying to bring that about," announced Tom calmly. "So far her engines haven't been able to pull her loose."

"But Great Scott, man, we can't stay here!" cried the now excited adventurer. "We'll be drowned like rats in a trap! Let me out! Isn't there some way? I'll be shot through a torpedo tube, if necessary! I must get out! I can't stay here to be drowned! I have too much at stake!"

"Now wait a minute!" calmly advised Tom Swift. "You haven't any more at stake than the rest of us. None of us wants to be drowned, and there is only a remote possibility that we shall be. I haven't played all my cards yet. We can live on this boat for a week, if need be."

"You mean under water as we are now?" asked Mr. Hardley.

"Yes. I always keep the boat provisioned and with plenty of air and water for a long stay, if need be," replied Tom. "And I did not overlook the fact that we might have an accident on the trial trip."

"I don't see how you let an accident happen before we even got started," complained the gold-seeker. "I should think your steersman

would have been more careful."

"He is very careful," explained Tom. "But we have not used the craft for some time, and, meanwhile, there have been changes in the river, due, I suppose, to heavy tides. But we may get out of the grip of the mud bank soon."

"And if we don't, what then?" asked Mr. Hardley.

"Then there is always the torpedo tube," said Tom calmly. "And we are not very deep down. I think I can save you all."

"I certainly hope so!" was the fretful comment of the adventurer. "I have too much at stake to be drowned like a rat in a trap! You must send me up first if it becomes necessary to use the tube."

Tom did not answer. But as he looked out of the observation windows to see if possible the conformation of the mud bank, the young inventor whispered to Ned one word. And that word was:

"Yellow!"

"You said it!" was Ned's whispered rejoinder.

Tom Swift arrived at a sudden determination. Once again the motors were stopped, and the boat gradually assumed an even keel.

"What are you going to try, Tom?" asked Ned.

"I'm going to shove her farther into the mud bank," announced the young inventor. "I think that's the only way to get her loose."

"Bless my apple pie, Tom!" cried Mr. Damon, "doesn't that seem a foolish thing to do?"

"It's the only thing to do, I believe," was the answer. "This mud is of a peculiar sticky and holding kind. The sub's nose is in it like a peg in a hole. What I propose to do now is to enlarge the hole, and then our nose will come loose--I hope."

"But you haven't any right to shove our nose further in!" cried Mr. Hardley. "I won't allow it! I demand to be put on the surface! I won't be drowned down here before I get the gold that's coming to me--the gold and--"

"Now look here!" suddenly cried Tom. "I'm in command of this boat, and you'll do as I say. I'll gladly set you on the surface if I can, and this is the only way it can be brought about--it's the only way to save all of us."

"I'm going to enlarge the mud hole so we can pull out. Please keep still!"

Mr. Hardley stared at the young inventor a moment, seemed about to say something, and then changed his mind.

"Hold fast, everybody!" suddenly called Tom. The next moment the M. N. 1 began behaving in a most peculiar manner.

She appeared to be acting like a corkscrew. While her bow was comparatively steady, her stern described a circle in the water which was churned to mud by the two propellers, each being revolved in a different direction.

"I'm trying to make the hole bigger just as an amateur carpenter makes a nail hole bigger, so he can pull out the nail, by twisting it around," explained Tom. "The motion may be a bit unpleasant, but it is needful."

And indeed the motion was unpleasant. Tom, veteran airman and sailor that he was, began to feel a trifle seasick, and Mr. Hardley was in very evident distress.

Suddenly, however, something happened. The M. N. 1 gave a lurch to one side and then shot upward so quickly that Ned and Mr. Damon lost their balance and slumped over on the bench that ran around three sides of the room.

"Are we free?" cried Mr. Hardley.

"We have come loose from the mud bank," said Tom quietly. "By boring into it the hole was enlarged sufficiently to enable us to pull loose. There is no more danger!"

His announcement was received in momentary silence, and then Ned exclaimed:

"Hurray!"

"Bless my accident policy!" voiced Mr. Damon.

Mr. Hardley appeared dazed, and then, as the submarine was again moving through the water, seemingly none the worse for the accident, the gold seeker approached Tom Swift.

"I want to apologize, Mr. Swift, for my actions and words," said Mr. Hardley frankly. "I admit that I lost my head. But it's my first trip in a submarine."

"I realize that," said Tom, equally frank, "and we'll forget all about it."

It was a strain on you--on all of us--though there really was no very great danger. Now, are you game enough to continue the trip?"

"Try me!" exclaimed the adventurer. "You won't find me acting so like a baby again."

Nor did he, even when the craft reached the open ocean and went down to a considerable depth, where, had any accident occurred, there would have been grave danger to all. But Mr. Hardley seemed to enjoy it.

"Maybe I've misjudged him," Tom said to Ned, when they were getting ready to go back.

"It's possible," agreed the financial manager. This trial, which so nearly ended disastrously, was only one of several. No damage resulted from the collision with the river mud bank, and that trip and the ones following gave Tom some new ideas in interior construction which he followed out.

About a month later all was ready for the trip to the West Indies to look for the ill-fated Pandora. Tom's affairs were put in shape, the submarine was laden with stores and provisions, the new diving bell and other wonderful apparatus were put aboard, and the crew and officers picked. Ned, Mr. Damon, Koku, and Tom were, of course, together, and though Mr. Hardley was a stranger, he seemed to become more friendly as the days passed.

"Well, we start in the morning," said Tom to Ned one evening. "I'm going over to tell Mary goodbye."

"Give her my regards," requested Ned, and Tom said he would.

CHAPTER X

STARTLING REVELATIONS

"OH, Tom! And so you are really ready to start on that perilous trip!" exclaimed Mary Nestor, a little later that same evening, when Tom called at Mary's house in his speedy electric runabout, a car in which he had once made a sensational ride.

"Perilous? I don't know why you call it that!" exclaimed the young inventor.

"Didn't you tell me you were stuck in a mud bank away down under the river and had hard work to get loose?" asked the young lady, as she made a place for Tom on the sofa beside her.

"Oh, that! Why, that wasn't anything!" he declared.

"It would have been if you hadn't come up." "Ah, but we did come up, Mary."

"Suppose you get in a similar position when you find the wreck of the Pandora? You won't get up so easily, will you?"

"No. But there aren't any mud banks in that part of the Atlantic, so I can't be stuck in one," answered Tom.

For some time Tom Swift and Mary talked of mutual friends and happenings in which they were both interested. Mr. and Mrs. Nestor stepped into the room for a minute, to wish the young inventor good luck on his voyage, and when they had gone out, promising to see Tom before he left for the night, the latter remarked to Mary:

"Did your uncle ever find the oil-well papers and get his affairs straightened out?"

"No," was the answer, "he never did. And we feel very sorry for him. Just think, he had a fortune in his grasp, and now it is slipping away."

"Just what happened?" asked Tom, hoping there might be some way in which he could aid Mary's uncle. Of course, Tom wanted to help Mary, and this was one of the ways.

"Well, I don't exactly understand it all," she replied. "Father says I'll never have a head for business. But as nearly as I can tell, my uncle,

Barton Keith, went into partnership with a man to prospect for oil in Texas. My uncle has been in that business before, and he was very successful. He supplied the working knowledge about oil wells, I believe, and the other man put up the money. My uncle was to have a half share in whatever oil wells he located, and his partner supplied the cash for putting down the pipe, or whatever is done."

"I believe putting down a pipe is the proper term," said Tom.

"Well, anyhow," went on Mary, "my uncle spent many weary months prospecting in Texas. In fact, he made himself ill, being out in all sorts of weather, looking after the drilling. At last they struck oil, as I believe they call it. They drilled down until they brought in what my uncle called a 'gusher,' and there was a chance of him and his partner getting rich."

"Why didn't he?" asked Tom. "A gusher, I believe, is one of the best sort of oil wells. Why didn't your uncle clean up a fortune, to use a slang term?"

"Because he lost the papers showing that he had a right to half the oil well," answered Mary. "At least my uncle thinks he lost them, but he was so ill, directly after the well proved a success, that he says he isn't sure what happened. At any rate, his partner claims everything and my uncle can do nothing. He has been hoping he might find the papers somewhere, or that something would happen to prove the rights of his claim."

"And nothing has?" inquired Tom.

"Not yet. My father and mother have been trying to help him, and dad engaged a lawyer, but he says nothing can be done unless my uncle recovers the partnership and other papers. As it stands now, it is my uncle's word against the word of his partner, and both are equally good in a court of law. But if Uncle Barton could find the documents everything would come out all right. He could claim his half of the oil well then."

"Is it still producing?" Tom questioned.

"Yes, better than ever. But that's all the good it does my uncle. He is ill, discouraged, and despondent. All his fortune was eaten up in prospecting, and he depended on the gusher to make him rich again. And now, because of a rascally partner, he may be doomed to die a poor man. Of course we will always help him, but you know what it is to be dependent on

relatives."

"I can imagine," conceded Tom. "It is tough luck! I wish I could help, and perhaps I can after I get back from this trip."

"The only way you or any one could help, would be to get back my uncle's missing papers," said Mary. "And as he himself isn't sure what became of them, it seem hopeless."

"It does," Tom agreed. "But wait until I get back."

"I wish you weren't going," sighed Mary.

"So do I--more than a little," was Tom's remark. "I'm sorry I ever let Mr. Damon persuade me to go into this deal with Dixwell Hardley!"

Mary sat bolt upright on the couch.

"What name did you say?" she cried.

"Dixwell Hardley," repeated Tom. "That's he name of the man who claims to know where the wreck of the Pandora lies. He says she has two millions or more in gold on board, and I'm to get half."

"Well!" exclaimed Mary, with spirit, "if you don't get any bigger share out of the wreck than my uncle got out of the oil well, you won't be doing so very nicely, Tom."

"What do you mean?" asked the young inventor. "What has the oil well to do with recovering gold from the wreck?"

"A good deal, I should say," answered the girl, "seeing that the same man is mixed up in both."

"What same man?"

"Dixwell Hardley!"

"Is he the man who cheated your uncle?" cried Tom.

"I won't say that he cheated him," said Mary. "But Dixwell Hardley is the man who furnished the money when my uncle went into partnership with him to locate oil wells in Texas. The oil wells were located, Mr. Hardley got his share, and my uncle got nothing. And just because he can't prove there was a legal partnership! I hope you won't have the same experience with Mr. Hardley, Tom."

"Whew!" whistled the young inventor. "This is news to me! I can say one thing, though. Mr. Hardley doesn't take a dollar out of that wreck unless I get one to match it. I think I hold the best cards on this deal. But,

Mary, are you sure it's the same man?"

"Pretty sure. Wait, I'll call my father and make certain," she answered, and as she went from the room to summon Mr. Nestor, Tom felt a vague sense of uneasiness.

CHAPTER XI

BARTON KEITH'S STORY

"What's this Mary tells me, Tom?" asked Mr. Nestor, as he followed his daughter back into the room.

"You mean about Dixwell Hardley?"

"Yes. Do you suppose he can be the same man who has so meanly treated my brother-in-law?"

"I wouldn't want to say, Mr. Nestor, until you describe to me the Mr. Hardley you know. Then I can better tell. But from what little I have seen of the man to whom I was introduced by my friend Mr. Damon, I'd say, off hand, that he was capable of such action."

"Does Mr. Damon know this Mr. Hardley well?" asked Mrs. Nestor, who accompanied her husband.

"I wouldn't say that he did," Tom replied. "I don't know just how Mr. Damon met this chap--I think it was in a financial way, though."

"Well, if it's the same Mr. Hardley, I'll say he has some queer financial ways," said Mr. Nestor. "Now let's see if we can make the two jibe. Describe him, Tom."

This the young inventor did, and when this description had been compared with one given of the Mr. Hardley with whom Mr. Keith once was associated, Mrs. Nestor said:

"It surely is the same man! The Mr. Hardley who wants you to get wealth from the bottom of the ocean, Tom, is the same fellow who is keeping my brother out of the oil well property! I'm sure of it!"

"It does seem so," Tom agreed. "Dixwell Hardley is not a usual name; but we must be careful. In spite of its unusualness there may be two very different men who have that name. I think the only way to find out for certain is to see Mr. Keith. He'd know a picture of the Dixwell Hardley who, he claims, cheated him, wouldn't he?"

"Indeed he would!" exclaimed Mrs. Nestor. "But where could we get a picture of your Mr. Hardley? I call him that, though I don't suppose you own him, Tom," and she smiled at her future son-in-law.

"No, I don't own him, and I don't want to," was Tom's answer. "But I happen to have a picture of him. I made him furnish me with proofs that he was on the Pandora at the time she foundered in a gale, and among the documents he gave was his passport. It has his picture on. I have it here."

Tom drew the paper from his pocket. In one corner was pasted a photograph of the man who had been introduced to Tom by Mr. Damon.

"It looks like the same man my brother described," said Mrs. Nestor, "but of course I couldn't be sure."

"There is only one way to be," Tom stated, "and that is to show this picture to Mr. Keith. Where is he?"

"Ill at his home in Bedford," answered Mrs. Nestor.

"Then we'll go there and see him!" declared Tom.

"But it's a hundred miles from here!" exclaimed Mary. "And you are leaving on your submarine trip the first thing in the morning, Tom!"

"No, I'm not leaving until I settle this matter," declared the young inventor. "I'm not going on an undersea voyage with a man who may be a cheater. I want this matter settled. I'll postpone this trip until I find out. A day's delay won't matter."

"But it will take longer than that," said Mr. Nestor. "Bedford is a small place, and there's only one train a day there. You'll lose at least three days Tom, if you go there."

"Not necessarily," was the quick answer. "I can go by airship, and make the trip in a little over an hour. I can be back the same day, perhaps not in time to start our submarine trip, as Mr. Keith may be too ill to see me. But I won't lose much time in my Air Scout."

"Mary, will you go with me to see your uncle? We'll start the first thing in the morning and I'll show him this picture. Will you go?"

"I will!" exclaimed the girl.

"Good!" cried Tom. "Then I'll make preparations. I don't want to form any rash judgment, so we'll make certain; but it wouldn't surprise me a bit to have it turn out that the Dixwell Hardley who wants me to help him recover the Pandora treasure is the same one who is trying to cheat Mr. Keith."

Early the next morning, when Tom arose in his own home, he met Mr.

Damon and Mr. Hardley, both of whom were guests at the Swift house, pending the beginning of the undersea trip.

"Well, Tom," began the eccentric man, "we have good weather for the start. Bless my rubber boots! Not that it much matters, though, what sort of weather we have when we're in the submarine. But I always like to start in the sunshine."

"So do I," agreed Mr. Hardley. "I suppose we'll get off early this morning," he added.

"We'll go to the dock in the auto, as usual, shall we not?" he asked.

"We aren't going to start this morning," said Tom, as he sat down to breakfast.

"Not going to start this morning!" exclaimed Mr. Hardley. "Why -- why--"

"Bless my alarm clock!" voiced Mr. Damon, "has anything happened, Tom? No accident to the M. N. 1 is there? You aren't backing out now, at the last minute, are you?" "Oh, no," was the easy answer. "We'll go, as arranged, but not today. I had some unexpected news last night which necessitates making a trip this morning. I expect to be back tonight, if all goes well, and we'll start tomorrow morning instead of this. It's a matter of important business."

"Well, I don't know that we can find fault with Mr. Swift for attending to business," said Mr. Hardley, with a short laugh. "Business is what keeps the world moving. And we are a little ahead of our schedule, as a matter of fact. May I ask where you are going, Mr. Swift?"

"To Bedford, to call on a Mr. Barton Keith," answered Tom quickly, looking the adventurer straight in the eyes.

Mr. Hardley was a good actor, or else he was a perfectly innocent man, for he showed not the least sign of perturbation.

"Oh, Bedford," he remarked. "Don't know that I ever heard of the place."

"Or Mr. Keith, either?" asked Tom, a bit sharply.

"No, certainly not. Why should I?" he asked, boldly.

"I didn't know," Tom replied. "I'm sorry to postpone our trip, but it's necessary," he added. "I'll be back as soon as I can. Everything is in

readiness, so there will be no delay."

Tom made a hurried meal, and then, giving Ned a hint of what was in the wind, but cautioning him to say nothing about it, Tom had the small Air Scout brought out, and in that he flew over to Mary's home.

He found her waiting for him, and, after being duly cautioned by her mother to "be careful," though whether that was of any value or not is possibly debatable, the small, speedy craft again took the air.

"You haven't heard anything from your uncle since last night, have you?" asked Tom, as they flew along.

"Yes," answered Mary, "mother had a letter. He is worse, if anything, and the doctor says the only thing that will save him is the knowledge that the oil-well matter has turned out right and that my uncle will get his share of the wealth."

"That's too bad!" sympathized Tom. "I hope we can make it turn out that way. If the two Dixwell Hardley chaps are the same it may be that I can do something for your uncle. If not--we'll have to wait and see."

It was not difficult for Tom and Mary to talk while in the aeroplane, as it was almost noiseless. In due time, Bedford was reached without mishap, and Tom and Mary were soon at the home of her uncle.

An explanation to the housekeeper and an inspection on the part of the nurse, brought forth permission for Tom to see the patient. Though he had never known Mr. Keith he could see that the man's health was indeed fast waning.

Wasting little time in preliminaries, the object of the visit was told and Tom showed the passport photograph of Dixwell Hardley.

"Is that the man who cheated you on the oil-well deal?" asked the young inventor.

"I won't admit he has yet cheated me, but he is trying to!" exclaimed Mr. Keith, with something of a return of his former spirit. "If I ever get off my back I'm going to fight him tooth and nail. But that's the same scoundrel! He got me to locate the wells, and when they panned out big--bigger than either of us dreamed--he turned me out cold. He denied he had ever offered to share with me, and said I was only working for monthly wages! Why, sometimes I didn't get even that!"

"How did he get the best of you?" asked Tom.

"By making away with or hiding the papers by which I could prove our partnership and my right to half a share in all the wells," answered Mary's uncle. "Yes, that's the same man all right. I'd know his face anywhere, and he has the same name."

"He isn't going under a false name, that's sure," agreed Tom. "He must be a bold chap."

"He is--bold and unscrupulous! That's what makes him so successful in his own way!" declared Mr. Keith. "And so you are working with him! Well, I'm sorry for you."

"I'm not exactly working with him," replied Tom. "As a matter of fact, I'm sorry I ever agreed to look for this wreck."

He told the details of the pending treasure-trove expedition, and mentioned it as his belief that Mr. Damon had been mistaken in his estimate of Mr. Hardley.

"But, so far, Mr. Damon is quite taken with him," Tom went on. "Now, Mr. Keith, if it isn't too much for you, I should like to hear all the particulars."

Thereupon Mary's uncle told his story. It was a long one. After many hardships in life, which Mr. Keith related in some detail to Tom, the oil-well prospector at last fell in with Dixwell Hardley. Then followed the combination of interests.

"We are actually partners," declared Mr. Keith. "I agreed to do the work, and he agreed to furnish the money. I must say this for him, that he kept to that end of the bargain. He supplied the money to locate and drill the wells, but I got very little of it personally. And I fulfilled my end of it. I discovered the wells. Then, when the break came, and I wanted to be rid of the man--for I caught him in some crooked transactions--he surprised me by telling me to get out. I asked for my share of the oil-well stock, and was told I was not entitled to any.

"I put up a fight, naturally, and took the matter to court. But when it came to trial Dixwell Hardley did not appear, and, though I won a technical victory over him, I never got any money."

"Where was he during the trial?" asked Tom.

"At sea, I believe."

"At sea?"

"Yes, he was mixed up in some South American revolution, I heard."

"A South American revolution!" exclaimed Tom, and a great light came to him.

"Yes," went on Mary's uncle. "He was always that kind--mixing up in anything he thought would produce money. He didn't make out very well in the revolution business, so I understood. The revolutionary party was beaten, or they lost their shipment of arms, or something like that. At any rate, Dixwell Hardley had a narrow escape with his life when a ship went down, and from then on I've been trying to get him to restore my rights to me."

"Did he have the papers that would prove you were entitled to a half share in the oil wells?" asked Tom.

"He certainly did!" said the sick man, who was obviously being weakened by this long and exhausting talk. "At first I was not sure of what happened, but now I am positive he stole the papers and took them to sea with him. What happened to them after that I don't know. But if I had Dixwell Hardley here--now--I--I'd--"

Mr. Keith fell back in a faint on the bed, and, in great alarm, Tom summoned the nurse.

CHAPTER XII

IN DEEP WATERS

Mary Nestor, as well as Tom Swift, felt great alarm over the condition of Mr. Keith. But the nurse, after reviving him, said:

"He is in no special immediate danger. Talking about his trouble overstrained him, but in the end it may do him good."

"Then will he get well?" asked Mary.

"He may," was the noncommittal answer. "His recovery would be hastened, however, if his mind could be relieved. He keeps worrying about the loss of his papers that proved his share in the Texas oil wells. Until they can be given back to him he is bound to suffer mentally, and of course that effects him physically."

"Oh, if we only could do something!" murmured Mary.

"Perhaps we can," said Tom in a low voice. "I've learned something these last few hours. I don't want to promise too much, but I think I begin to see how matters lie. There, he's rousing. Speak to him, Mary."

Mr. Keith opened his eyes, and smiled at his niece.

"Did I dream it," he asked in a low voice, "or was there some young man with you, Mary, my dear, to whom I was telling my troubles about the oil-well papers?"

"You didn't dream it, Uncle," Mary answered. "You were talking to Tom Swift. Here he is," and Tom came forward.

"Oh, yes, I remember now," said Mr. Keith passing his hand wearily over his eyes. "I thought, for a moment, that he had recovered my papers for me. But that was a dream, I'm sure."

"It may not be, Mr. Keith!" exclaimed Tom.

"May not be? What do you mean?"

"I mean," replied the young inventor, "that I am much interested in what you have told me. Now that I have proved that the Dixwell Hardley who is to sail with me is the same one who has treated you so shabbily, I think I understand the truth. I don't want to make a promise that I may not be able to carry out, but I am going to watch this man while he's on the

submarine with me."

"Then you are going on with the voyage, Tom?" asked Mary.

"I shall have to," he said. "I have entered into an agreement with this man and I'm not going to break my contract, no matter what he does. But I think I know what his game is. Mr. Keith, I'm going to ask you to keep quiet about this matter until I come back from the treasure search. I may then have some news for you."

"I hope you do, young man, I hope you do!" exclaimed the oil contractor, with more energy than he had previously shown. "It means a lot, at my age, to lose a small fortune. If I were well and strong I'd tackle this Dixwell Hardley myself, and make him give up the papers I'm sure he has hidden away. He has them, I'm positive."

"Well, he may not have them, but perhaps he knows where they are," said Tom. "And I'm going to make it my business to watch him and see if I can find out his secret. I won't let him know I've heard from you. I'll apply the old saying of giving him plenty of rope, and I'll watch what happens."

"Now, Mr. Keith, take care of yourself. Mary and I must be getting back. Try not to worry, and I'll do my best for you," Tom concluded.

Mary added a few words of comfort and encouragement to her uncle, and then she and Tom took leave of him, flying back to Shopton in the speedy Air Scout.

"What are you going to do, Tom?" asked Mary, as he left her at her home, having told Mr. and Mrs. Nestor his part in the visit to Barton Keith.

"I'm going to start on the submarine voyage tomorrow," was the answer of the young inventor.

"Do you really believe there is a treasure ship?"

"Well, I've satisfied myself that a ship named the Pandora sunk about where Hardley says it did, and she had some treasure on board. Whether it's just the kind he has told me it was I don't know. But I'm going to find out."

"Then you'll be saying goodbye for a long time," observed Mary, rather wistfully.

"Oh, it may not be for so very long," and Tom tried to speak cheerfully.

"I'll bring you back some souvenirs from the bottom of the sea," he added with a laugh.

"Bring me back--yourself!" said Mary in a low voice, and then she hurried away.

By appointment Tom met Mr. Damon and Mr. Hardley at the submarine dock the next morning. Everything had been made ready for the start, postponed from the day before. Mr. Hardley's estimated share of the expenses had been deposited in a bank, to be paid over later.

"Well, are we really going this time, or are you going to delay again?" asked the gold seeker, and his voice lacked a pleasant tone.

"Oh, were going this time!" exclaimed Tom. "And I hope everything turns out the way I want it to," he added meaningly.

"We'll find the treasure on the ship all right, if we can find the ship," said Mr. Hardley. "That part is your job, Mr. Swift."

"And I'll find her if she's where you say she went down," answered Tom. "Now then, as soon as Ned comes we'll start."

Ned Newton had been intrusted with some last-moment messages, but he arrived a little later, and hurried on board the M. N. 1 which lay at her dock, just afloat.

"All aboard!" called Tom, when he saw his financial manager coming down the pier. "We're ready to start now."

"Bless my fountain pen!" exclaimed Mr. Damon, "but we ought to do something, Tom--sing a song, make a speech or something, oughtn't we

"We'll sing a song of victory when we come back," replied Tom, with a laugh. "Everything all right at home, Ned?" he asked, for his chum had just come on from Shopton.

"Yes; your father sent his regards, but he told me to make a last appeal to you to install a gyro-scope rudder."

"It's too late for that now," said Tom. "He attaches, I think, too much importance to that device. I shan't need it with the improvements I have made to the craft. Get aboard!"

Ned climbed down the hatchway, which, however, was not closed, as it was decided to navigate the craft on the surface until it was necessary to submerge her because of too rough water, or when the vicinity of the

wreck was reached.

"Though we will go down to the bottom when we get to the Atlantic for the purpose of testing her in deep water," decided Tom. "Most of the time we'll steam on the surface, for we'll save our batteries that way, and it's more comfortable breathing natural air."

So, with part of her deck above the surface, the M. N. 1 began her voyage, sent on her way by the cheers of the small force of Tom's workmen at the submarine plant. The general public was not admitted, for the object of the quest was kept secret from all save those immediately interested.

"Rad, him be plenty mad he not come," said Koku to Tom, as the giant moved about the cabin, putting things to rights.

"Well, don't start crowing over him until we get back," warned the young inventor. "He may have the laugh on us."

"Rad no laugh," declared Koku. "Rad him too mad dat I come on trip."

"A submarine voyage is no place for old, faithful Eradicate," murmured Tom. "He's better off looking after my father."

The first part of the trip was without incident of moment. No mishap attended the voyage of the M. N. 1 down the river, out into the bay, and so on to the great Atlantic.

Fairly good time was made, as there was no particular object in speeding, and on the second day after leaving the dock Tom gave orders for the hatch to be closed, the deck cleared, and everything made tight and fast.

"What's up?" asked Ned, hearing the instructions passed around.

"We're approaching deep water," was the answer. "I'm going to submerge."

A little later, by means of her diving rudders, aided also by the tanks, the M. N. 1 began to sink. Down, down, down she went.

"Now I'll be able to show you some pretty sights, Mr. Hardley," said Tom, as he and his friends entered the forward compartment, while the steel shutters were rolled back from the heavy glass windows. "We'll be in deep waters presently."

Ten minutes later the depth gauge showed that they were down about

three hundred feet, and that is pretty deep for a submarine. But Tom's boat was capable of even greater depths than that.

At first there was nothing much to observe save the opal-tinted water illuminated by the powerful lights of the submarine. Small, and evidently frightened, fish darted to and fro, but there was nothing especially to attract the attention of Tom and his friends, who had made much more sensational trips than this under water.

Mr. Hardley, however, was fascinated, and kept close to the observation windows.

"Are there any wrecks around here?" he asked Tom.

"Possibly," was the answer. "Though they do not contain any treasure, I imagine--brick schooners or cargo boats would be about all."

The submarine went deeper, plowing her way through the Atlantic at a depth of more than three hundred and fifty feet, for Tom wanted to subject her to a good test.

Suddenly Mr. Hardley, who was now alone at the window on the port side, uttered a cry of alarm.

"Look! Look!" he fairly shouted. "We're surrounded by a school of sharks! What monsters! Are we in danger?"

CHAPTER XIII

THE SEA MONSTER

Tom Swift, who had been making readings of the various gauges, taking notes for future use, and otherwise busying himself about the navigation of his reconstructed craft, turned quickly from the instrument board at the cry from Mr. Hardley. The gold-seeker, with a look of terror on his face, had recoiled from the observation windows.

"Bless my hat band!" cried Mr. Damon. "Look, Tom!"

They all turned their attention to the glass, and through the plates could be seen a school of giant fishes that seemed to be swimming in front of the submarine, keeping pace with it as though waiting for a chance to enter.

"Are we well protected against sharks, Mr. Swift?" demanded the adventurer. "Are these sea monsters likely to break the glass and get in at us?"

"Indeed not!" laughed Tom. "There is absolutely no danger from these fish--they aren't sharks, either."

"Not sharks?" cried Mr. Hardley. "What are they, then?"

"Horse mackerel," Tom answered. "At least that is the common name for the big fish. But they are far from being sharks, and we are in no danger from them."

"Oh!" exclaimed Mr. Hardley, and he seemed a little ashamed of the exhibition of fear he had manifested. "Well, they certainly seem determined to follow us," he added.

The big fish were, indeed, following the submarine, and it required no exertion on their part to maintain their speed, since below the surface the M. N. 1 could not move very fast, as indeed no submarine can, due to the resistance of the water.

"They do look as though they'd like to take a bite or two out of us," observed Ned. "Are they dangerous, Tom?"

"Not as a rule," was the answer. "I don't doubt, though, but if a lone swimmer got in a school of horse mackerel he'd be badly bitten. In fact,

some years ago, when there was a shark scare along the New Jersey coast, some fishermen declared that it was horse mackerel that were responsible for the death and injury of several bathers. A number of horse mackerel were caught and exhibited as sharks, but, as you can easily see, their mouths lack the under-shot arrangement of the shark, and they are not built at all as are the man-eaters."

"Bless my toothbrush!" exclaimed Mr. Damon. "Still, between a horse mackerel and a shark there isn't much choice!"

Mr. Hardley, with a shudder, turned away from the glass windows, and Tom glanced significantly at Ned. It was another exhibition of the man's lack of nerve.

"We'll have trouble with him before this voyage is over," declared the young inventor to his chum, a little later.

"What makes you think so?" asked Ned.

"Because he's yellow; that's why. I thought him that once before, and then I revised my opinion. Now I'm back where I started. You watch--we'll have trouble."

"Well, I guess we can handle him," observed the financial manager.

"I'm going a little deeper," announced Tom, toward evening on the first day of the voyage on the open ocean. "I want to see how she stands the pressure at five hundred feet. I feel certain she will, and even at a greater depth. But if there's anything wrong we want to correct it before we get too far away from home. We're going down again, deeper than before."

A little later the submarine began the descent into the lower ocean depths. From three hundred and fifty feet she went to four hundred, and when the hand on the gauge showed four hundred and fifty there was a tense moment. If anything went wrong now there would be serious trouble.

But Tom Swift and his men had done their work well. The M. N. 1 stood the strain, and when the gauge showed four hundred and ninety feet Mr. Damon gave a faint cheer.

"Bless my apple dumpling, Tom!" he replied, "this is wonderful."

"Oh, we've been deeper than this," replied the young inventor, "but under different conditions. I'm glad to see how well she is standing it,

though."

Suddenly, as the needle pointer on the depth gauge showed five hundred and two feet, there came a slight jar and vibration that was felt throughout the craft.

"What's that?" suddenly and nervously cried Mr. Hardley. "Have we struck something?"

"Yes, the bottom of the ocean," answered Tom quietly. "We are now on the floor of the Atlantic, though several hundred miles, and perhaps a thousand, from the treasure ship. We bumped the bottom, that's all," and as he spoke he brought the submarine to a stop by a signal to the engine room.

And there, as calmly and easily as some of the masses of seaweed growing on the ocean floor around her, rested the M. N. 1. It was a test of her powers, and well had she stood the test, though harder ones were in store for her.

And inside the submarine Tom and his party were under scarcely greater discomfort than they would have been on the surface. True, they were confined to a restricted space, and the air they breathed came from compression tanks, and not from the open sky. The lights had to be kept aglow, of course, for it was pitch dark at that depth. The sunlight cannot penetrate to more than a hundred feet. But sunlight was not needed, for the craft carried powerful electric lights that could illuminate the sea in the immediate vicinity of the submarine.

"Are you going to stay here long?" asked Mr. Hardley, when Tom had spent some time making accurate readings of the various instruments of the boat. "Of course, I realize that you are the commander, but if we don't get to the treasure ship soon some one else may loot her before we have a chance. She's been given up as a hopeless task more than once, but the lure of the millions may attract another gang."

"I want to stay here until I make sure that nothing is leaking and that everything is all right," answered the young inventor. "This is a test I have not given her since the rebuilding. But I think she is coming through it all right, and we can soon start off again. Before we do, though, I want to try the new diving outfit. Ned, are you game for it now? This is a little deeper

than you have gone out in for some time, but--"

"Oh, I'm game!" exclaimed the young financial manager. "Get out the suit, Tom, and I'll put it on. I'll go for a stroll on the bottom of the sea. Who knows? Perhaps I may pick up a pearl."

"Pearls aren't found in these northern waters, any more than are sharks," said Tom with a laugh. "However, I'll have the suits made ready. I'll send Koku with you, and I'll stay in this time. Mr. Damon, do you want to go out?"

"Not this time, Tom," answered the eccentric man. "My heart action isn't what it used to be. The doctor said I mustn't strain it. At a depth not quite so great I may take a chance."

"How about you, Mr. Hardley?" asked Tom. "Do you want to put on one of my portable diving suits and walk around on the bottom of the sea?"

"I--I don't believe I've had enough experience," was the hesitating answer. "I'll watch the others first."

Tom felt that it would be this way, but he said nothing. He ordered the diving suits made ready, a special size having been built for the giant, and soon preparations were under way for the two to step outside the craft.

Those who have read of Tom Swift's submarine boat know how his special diving outfit was operated. Instead of the diver being supplied with the air through a hose connected with a pump on the surface, there was attached to the suit a tank of compressed air, which was supplied as needed through special reducing valves.

The diving dress, too, was exceptionally strong, to withstand the awful pressure of water at more than five hundred feet below the surface. The usual rubber was supplemented by thin, reinforced sheets of steel, and this feature, together with an auxiliary air pressure, kept the wearer safe.

Thus Ned and Koku could leave the submarine, walk about on the floor of the ocean as they pleased, and return, unhampered by an air hose or life line. In dangerous waters, infested by sea monsters, weapons could be carried that were effective under water. The diving suit was also provided with a powerful electric light operated by a new form of storage current, compact and lasting.

"Well, I think we're all ready," announced Ned, as he and Koku were helped into their suits and they waited for the glass- windowed helmets to be put on. Once these were fastened in place talk would have to be carried on with the outside world by means of small telephones or by signals.

"Give me axe!" exclaimed Koku, as some of the sailors were about to put his helmet in place.

"What do you want of an axe?" Tom asked.

"Maybe so one them cow fish come along," explained the giant. "Koku whack him with axe."

"He means horse mackerel," laughed Ned. "Give him the axe, Tom. I don't like the looks of those fish, either. I'll take a weapon myself."

Two keen axes were handed to the divers, their helmets were screwed on, and they immediately began breathing the compressed air carried in a tank on their shoulders.

Slowly and laboriously they walked to the diving chamber. Their progress would be easier in the water, which would buoy them up in a measure. Now they were heavily weighted.

To leave the submarine the divers had to enter a steel chamber in the side of the craft. This craft contained double doors. Once the divers were inside the door leading to the interior of the submarine was hermetically closed. Water from outside was then admitted until the pressure was equalized. Then the outer door was opened and Ned and Koku could step forth.

They entered the chamber, the door was closed tightly and then Tom Swift turned the valve that admitted the sea water. With a hiss the Atlantic began rushing in, and in a short time the outer door would be opened.

"If you'll come around to the observation windows you can see them," said Tom, when a look at the indicators told him Ned and Koku had stepped forth.

To the front cabin he and the others betook themselves, and when the interior lights were turned out and the exterior ones turned on they waited for a sight of the two divers.

"Bless my pickle bottle!" cried Mr. Damon, "there they are, Tom."

As he spoke there came into view, moving slowly, Ned and Koku.

Their portable lights were glowing, and then, in order to see them better, Tom turned out the exterior searchlights. This made the two forms, in their rather grotesque dress, stand out in bold relief amid the swirling green waters of the Atlantic.

Ned and the giant moved slowly, for it was impossible to progress with any speed wader that terrific pressure. They looked toward the submarine and waved their hands in greeting. They had no special object on the ocean floor, except to try the new diving dress, and it seemed to operate successfully. Ned made a pretense of looking for treasure amid the sand and seaweed, and once he caught and held up by its tail a queer turtle. Koku stalked about behind Ned, looking to right and left, possibly for a sight of some monster "cow fish."

"They're coming back in, I think," remarked Tom, when he saw Ned turn and start back for the side of the craft, where, amidships, was located the diving chamber. "They're satisfied with the test."

Suddenly Koku was seen to glide to the side of Ned, and point at something which none of the observers in the M. N. 1 could see. The giant was evidently perturbed, and Ned, too, showed some agitation.

"Bless my rubber shoes! what's the matter?" cried Mr. Damon.

"I don't know," answered Tom. "Perhaps they have sighted a wreck, or something like that."

"Look! It's a sea monster!" cried Mr. Hardley. "I can see the form of some great fish, or something. Look! It's coming right at them!"

As he spoke all in the observation chamber saw a great, black form, as if of some monster, move close to the two divers.

CHAPTER XIV

IN STRANGE PERIL

"What is it, Tom? What is it?" cried Mr. Damon, not stopping in this moment of excitement to bless anything. "What is going to attack Ned and Koku?"

"I don't know," answered the young inventor. "It's some big fish evidently. I must get to the diving chamber!"

He gave a quick glance through the observation windows. Ned and the giant were moving as fast as they could toward the side of the craft where they could enter. The black, shadowy form was nearer now, but its nature could not be made out.

Calling to his force of assistants, Tom stood ready to let his chum and Koku out of the diving chamber as soon as the water should have been pumped from it.

A little later, as they all stood waiting in tense eagerness, there came a signal that the two divers had entered the side chamber. Quickly Tom turned the lever that closed the outer door.

"They're safe!" he exclaimed, as he started the pumps to working. But even as he spoke they felt a jar, and the submarine rolled partly over as if she had collided with some object. Yet this could not be, as she was stationary on the floor of the ocean.

"Bless my cake of soap, Tom!" cried Mr. Damon, "what in the world is that?"

"If it's an accident!" exclaimed Mr. Hardley, "I think it ought to be prevented. There have been too many happenings on this trip already. I thought you said your submarine was safe for underwater trips!" he fairly snapped at Tom.

The young inventor gave one look at the irate man who was coming out in his true colors. But it was no time to rebuke him. Too much yet remained to be done. Ned and Koku were still in the chamber and protected from some unknown sea monster by only a comparatively thin door. They must be inside to be perfectly safe.

Tom speeded up the pumps that were forcing the water from the chamber so the inner door could be opened. Eagerly he and his men watched the gauges to note when the last gallon should have been forced out by the compressed air. Not until then would it be safe to let Ned and Koku step into the interior of the craft.

The submarine had not ceased rolling from the force of the blow she had received when there came another, and this time on the opposite side. Once more she rolled to a dangerous angle.

"Bless my tea biscuit!" cried Mr. Damon, "what is it all about, Tom Swift?"

"I don't know," was the low-voiced answer, "unless a pair of monsters are attacking us on both sides alternately. But we'll soon learn. There goes the last of the water!"

The gauge showed that the diving chamber was empty. Quickly the inner doors were opened, and, with their suits still dripping from their immersion in the salty sea, Ned and Koku stepped forth. In another moment their helmets were loosed from the bayonet catches, and they could speak.

"What was it, Ned?" cried Tom.

"Big fish!" answered Koku.

"Two monster whales!" gasped Ned. "We barely got away from them! They're ramming the sub, Tom!"

As he spoke there came a blow on the port side, greater than either of the two preceding ones. Those in the M. N. 1 staggered about, and had to hold on to objects to preserve their footing.

"Both at the same time!" cried Ned. "The two whales are coming at us both at once!"

This was evidently the case. Tom Swift quickly hurried to the engine room.

"What are you going to do?" asked Mr. Hardley. "You ought to do something! I'm not going to be killed down here by a whale. You've got to do something, Swift! I've had enough of this!"

Tom did not deign an answer, but hurried on. Mr. Damon followed him, having seen that some of the sailors were helping Ned and Koku out of the

diving suits.

"Are we in any danger, Tom?" asked the eccentric man.

"Yes; but I think it is easily remedied," was the answer. "We'll go up to the surface. I don't believe the whales will follow us. Or, if they do, they can't do much damage when we are in motion. It's because we are stationary and they are moving that the blows seem so violent. Unless they collide head on with us, in the opposite direction to ours, we ought to be able to get clear of them. If they persist in following us--"

He paused as he pulled over the lever that would send the M. N. 1 to the surface.

"Well, what then?" asked Mr. Damon.

"Then we'll have to use some weapon, and I have several," finished the young inventor.

A few moments later the craft was in motion, not before, however, she was struck another blow, but only a glancing one.

"We're puzzling them!" cried Tom.

Having done all that was possible for the time being, Tom hurried to the observation chamber, followed by the ethers. There Tom switched on the powerful lights. For a moment nothing was to be seen but the swirling, green water. Then, suddenly, a great shape came into view of the glass windows, followed by another.

"Whales!" cried Tom Swift. "And the largest I've ever seen

It was true. Two immense specimens of the cetacean species were in front of the submarine, one on either bow, evidently much puzzled over the glaring lights. They were bow-heads, and immense creatures, and it would not take many blows from them to disable even a stouter craft than was the submarine.

But the motion of the undersea ship, the bright lights, and possibly the feel of her steel skin was evidently not to the liking of the sea monsters. One, indeed, came so close to the glass that he seemed about to try to break it, but, to the relief of all, he veered off, evidently not liking the look of what he saw.

Just once again, before the craft reached the surface, was there another blow, this time at the stern. But it was a parting tap, and none others

followed.

"They've gone!" exclaimed Mr. Damon, as the whales vanished from the sight of those in the forward cabin.

"Have you any adequate protection against these monsters of the deep?" asked Mr. Hardley in a fault-finding voice. "I should think you would have taken precautions, Swift!"

He had dropped the formal "Mr." and seemed to treat Tom as an inferior.

"We have other protection than running away," said the young inventor quietly. "There are guns we can use, and, if the whales had been far enough away, I could have sent a small torpedo at them. Close by it would be dangerous to use that, as it would operate on us just as the depth bombs operated on the German submarines. However, I fancy we have nothing more to fear."

And Tom was right. When the surface was reached and the main hatch opened, the sea was calm and there was no sight of the whales. They evidently had had enough of their encounter with a steel fish, larger even than themselves.

"But they surely were monsters," said Ned, as he told of how he and Koku had sighted the animals; for a whale is an animal, and not a fish, though often mistakenly called one.

"Koku was for attacking them with his axe," went on Ned, "but I motioned to him to beat it. We wouldn't have stood a show against such creatures. They were on us before we noticed their coming, but I presume the big submarine attracted them away from us."

"It might have been the lights you carried that drew them," suggested Tom. "I am glad you came out of it so well."

Mr. Hardley seemed to recover some of his former manners, once the peril was passed, but his conduct had been a revelation to Mr. Damon.

"Tom," said the eccentric man in private to the young inventor, "I'm disgusted with that fellow. I don't see how I was ever bamboozled into taking up his offer."

"I don't, either," replied Tom frankly. "But we're in for it now. We've agreed to do certain things, and I'll carry out my end of the bargain."

However, I won't put up with any of his nonsense. He's got to obey orders on this ship! I know more than he thinks I do!"

The next two days the M. N. 1 progressed along on the surface, and nothing of moment occurred. Then, as they neared southern waters, and Tom desired to make some observations of the character of the bottom, it was decided to submerge. Accordingly, one day the order was given.

Not until the gauge showed a hundred fathoms, or six hundred feet, did the craft cease descending, and then she came to rest on the bottom of the sea--a greater depth than she had yet attained on this voyage.

"How beautiful!" exclaimed Mr. Damon, when Tom turned on the lights and they looked out of the forward cabin windows. "How wonderful and beautiful!"

Well might he say that, for they were resting on pure white sand, and about them, growing on the bottom of this warm, tropical sea were great corals, purple and white, of wondrous shapes, waving plants like ferns and palms, and, amid it all, swam fish of queer shapes and beautiful colors.

"This is worth waiting for!" murmured Ned. "If only moving pictures of this could be taken in colors, it would create a sensation."

"Perhaps I may try that some day," said Tom with a smile. "But just now I have something else to do. Ned, are you game for another try in the diving dress? I want to see how it operates with a new air tank I've fitted on. Want to try?"

"Sure I'll go out," was the ready answer. "It's nicer walking around on this white sand than on the black mud where we saw the whales. You can see better, too."

A little later he and one of the sailors were outside the submarine, walking around in the diving dress, while Tom and the others watched through the glass windows. The new air tank seemed to be working well, for Ned, coming close to the window, signaled that he was very comfortable.

He walked around with the sailor, breaking off bits of odd-shaped coral to bring back to Tom. Suddenly, as those inside the craft looked out, they saw the sailor turn from Ned's side, and with a warning hand, point to something evidently approaching. The next instant a queer shape seemed

to envelope Ned Newton, coming out from behind a ledge of weed-draped coral. And a cry went up from those in the submarine as Ned was seen to be enveloped in long, waving arms.

"An octopus!" cried Mr. Damon. "Bless my soul, Tom, an octopus has Ned!"

"No, it isn't that!" cried the young inventor hoarsely. "It's some other monster. It has only five arms--an octopus has eight! I've got to save Ned!"

And he hurried toward the diving chamber, while the others, in fascinated horror, looked at the diver who was in such strange peril.

CHAPTER XV

TOM TO THE RESCUE

Mr. Damon came to a pause in the compartment from which the diving chamber gave access to the ocean outside. Tom, standing before the sliding steel door, had summoned to him several of his men and was rapidly giving them directions.

"What are you going to do, Tom Swift?" asked the eccentric man.

"I'm going out there to save Ned!" was the quick answer. "He's in the grip of some strange monster of the sea. What it is I don't know, but I'm going to find out. Koku, you come with me!"

"Yes, Master, me come!" said the giant simply, as if Tom had told him to go for a pail of water instead of risking his life.

"Barnes, the electric gun!" cried the young inventor to one of his helpers, while others were getting out the diving suits.

"The electric gun!" exclaimed the man. "Do you mean the small one?"

"No, the largest. The improved one." "Right, sir! Here you are!"

"Do you mean to say you are going out there, where that monster is, and attack it with a gun?" asked Mr. Hardley.

"That's what I'm going to do!" answered Tom, as he began to put on the suit of steel and rubber, an example followed by Koku.

"But you may be attacked by the monster! You may be killed! You are risking your life!" cried the gold seeker.

"I know it." Tom spoke simply. "Ned would do the same for me!"

"But hold on!" cried Mr. Hardley. "If you are killed there will be no one to navigate this boat to the place of the wreck! You can't desert this way!"

Tom gave the man one look of contempt. "You need have, no fears," he said. "This submarine is under international maritime laws. If I die, Captain Nelson, the next in command, takes charge, and the original orders will be carried out. If it is possible to get the gold for you it will be done. Now let me alone. I've got work to do!"

"Bless my apple cart, Tom, that's the way to talk!" exclaimed Mr.

Damon, and he, too, for the first time, seemed ready to break with Hardley. "If I were a bit younger I'd go out with you myself and help save Ned."

"Koku and I can do it--if he's still alive!" murmured the young inventor. "Lively now, boys! Is that gun ready?"

"Yes, and doubly charged," was the answer. "Good! I may need it. Koku, take a gun also!"

"Me take axe, Master," replied the giant.

"Well, perhaps that will be better," Tom agreed. "If two of us get to shooting under the water we may hit one another. Quick, now! The helmets. And, Nash, you work the big searchlight!"

"Aye, aye, sir!" answered the sailor.

The helmets were now put on, and any further orders Tom had to give must come through the telephone, and it was by that same medium that he must listen to the talk of his friends. It was possible for the divers to talk and listen to one another while in the water by means of these peculiarly constructed telephones.

"All ready, Koku?" asked Tom.

"All ready, Master," answered the giant, as he grasped his keen axe.

The inner door of the diving chamber was now opened, and, the water having been pumped out of the chamber since Ned and the sailor had emerged, it was ready for Tom and Koku. They entered, the door was closed, and presently they felt the pressure of water all about them, the sea being admitted through valves in the outer door.

While this was going on Mr. Damon, the gold-seeker, and some of the crew and officers went into the forward chamber to observe the undersea fight against the monster that had attacked Ned.

Suddenly the waters glowed with a greatly increased light, and in this illumination it was seen that the monster, whatever it was, had almost completely enveloped Tom's chum with its five arms.

"What makes it possible to see better?" asked Mr. Damon.

"I've turned on the big searchlight," was the answer. "Mr. Swift had it installed at the last moment. It's the same kind he invented and gave to the government, but he retained the right to use it himself."

"It's a good thing he did!" exclaimed the eccentric man. "Now he can

see what he's doing! Poor Ned! I'm afraid he's done for!"

"Look!" exclaimed one of the crew. "Norton, the sailor who went out with Mr. Newton, is trying to kill the monster with his spear!"

This was so. Ned's companion, armed with a lone pole to which he had lashed a knife, was stabbing and jabbing at the black form which almost completely hid Ned from sight. But the efforts of the sailor seemed to produce little effect.

"What in the world can it be?" asked Mr. Damon. "Tom says it isn't an octopus, and it can't be, unless it has lost three of its arms. But what sort of monster is it?"

No one answered him. The powerful searchlight continued to glow, and in the gleam Ned could be seen trying to break away from the grip of the Atlantic beast. But his efforts were unavailing. It was as if he was enveloped in a sort of sack, made in segments, so that they opened and closed over his head. About all that could be seen of him was his feet, encased in the heavy lead-laden boots. The form of the other sailor, who had gone out of the submarine with him, could be seen moving here and there, stabbing at the huge creature.

"Here comes Tom!" suddenly exclaimed Mr. Damon, and the young inventor, followed by the giant Koku, came into view. They had emerged from the diving chamber, walked around the submarine as it rested on the ocean floor, and were now advancing to the rescue. Tom carried his electric rifle, and Koku an axe.

So desperately was Norton engaged in trying to kill the sea beast that had attacked Ned, that for the moment he was unaware of the approach of Tom and Koku. Then, as a swirl of the water apprised him of this, he turned and, seeing them, hastened toward them.

"What is it?" Tom asked through the telephone, this information being given to the watchers in the submarine later, as all they could gather then was by what they saw. "What sort of monster is it?"

"A giant starfish!" answered Norton, speaking into his mouthpiece and the water serving as a transmitting medium instead of wires. "I never knew they grew so big! This one has its five arms all around Mr. Newton!"

"A starfish!" murmured Tom. This accounted for it, and, as he looked

at the monster from closer quarters, he saw that Norton had spoken the truth.

Small starfish, or even large ones, two feet or more in diameter, may be seen at the seashore almost any time. Nearly always the specimens cast up on the beach are in extended form, either limp, or dead and dried. In almost every instance they are spread out just as their name indicates, in the conventional form of a star.

But a starfish alive, and at its business of eating oysters or other shell animals in the sea, is not at all this shape. Instead, it assumes the form of a sack, spreading its five radiating arms around the object of its meal. It then proceeds to suck the oyster out of its shell, and so powerful a suction organ has the starfish that he can pull an oyster through its shell, by forcing the bivalve to open.

And it was a gigantic starfish, a hundred times as large as any Tom had ever seen, that had Ned in its grip. The creature had doubtless taken the diver for a new kind of oyster, and was trying to open it. An octopus has suckers on the inner sides of its eight arms. A starfish has little feelers, or "fingers," arranged parallel rows on the inner side of its arms 臄 thousands of little feelers, and these exert a sort of sucking action.

The gigantic starfish had attacked Ned from above, settling down on him so that the head of the diver was at the middle of the creature's body, the five arms, dropping over Ned in a sort of living canopy. And the arms held tightly.

"Come on, Koku, and you, too, Norton!" called Tom through his headpiece telephone. "We'll all attack it at once. I'll fire, and then you begin to hack it. The electric charge ought to stun it, if it doesn't kill the beast!"

Tom's new electric gun, unlike one kind he had first invented, did not fire an electrically charged bullet. Instead it sent a powerful charge of electricity, like a flash of lightning, in a straight line toward the object aimed at. And the current was powerful enough to kill an elephant.

Bracing his feet on the white sand, which gleamed and sparkled in the glare of the searchlight, Tom aimed at the gigantic starfish which had enveloped Ned. Standing on either side of him, ready to rush in and attack

with axe and lance, were Koku and Norton.

For an instant Tom hesitated. He was wondering whether the powerful electric charge might not penetrate the body of the starfish and kill his chum.

"But the rubber suit ought to insulate and protect him," mused the young inventor. "Here goes!"

Taking quick aim, Tom pulled the switch, and the deadly charge shot out of the rifle toward the sea monster.

CHAPTER XVI

GASPING FOR AIR

For an instant after the electrical charge had been fired nothing seem to happen. The giant starfish still enveloped Ned Newton in its grip, while Tom and his two companions stood tensely waiting and those in the submarine looked anxiously out through the thick glass windows.

Then, as the powerful current made itself felt, those watching saw one of the arms slowly loosen its grip. Another floated upward, as a strand of rope idly drifts in the current. Tom saw this, and called through his telephone:

"He's feeling it! Go to him, boys! Koku, you with the axe!"

They needed no second urging.

Springing toward the monster, Koku with upraised axe and Norton with the lance, they attacked the starfish. Hacking and stabbing, they completed the work begun by Tom's electric gun. With one powerful stroke, even hampered as he was by the heavy medium in which he operated, Koku lopped off one of the legs. Norton thrust his lance deep into the body of the monster, but this was hardly needed, for the starfish was now dead, and gradually the remaining arms relaxed their hold.

Pushing with their weapons, the giant and the sailor now freed Ned from the bulk of the creature, which floated away. It was almost immediately attacked by a school of fish that seemed to have been waiting for just this chance. Ned Newton was freed, but for a moment he staggered about on the floor of the sea, hardly able to stand.

"Are you all right, Ned? Did he pierce your suit?" asked Tom, anxiously through the telephone.

"Yes, I'm all right," came back the reassuring answer. "I'm a bit cramped from the way he held me, but that's all. Guess he found this suit of rubber and steel too much for his digestion."

Slowly, for Ned was indeed a bit stiff and cramped, they made their way back to the submarine, passing through a vast horde of small fishes which had been attracted by the dismemberment of the monster that had

been killed.

"There'll be sharks along soon," said Tom to Ned through the telephone. "They're not going to miss such a gathering of food as these small fry present. And sharks will present a different emergency from starfish."

Tom spoke truly, for a little later, when they were all once more safely within the submarine, looking through the windows, they saw a school of hungry sharks feeding on the millions of small fish that gathered to eat the creature that had attacked Ned.

"What did you think was happening to you out there?" asked Tom, when the diving suits had been put away.

"I didn't know what to think," was the answer. "I was prospecting around, and I leaned over to pick up a particularly beautiful bit of coral. All at once I felt something over me, as a cloud sometimes hides the sun. I looked up, saw a big black shape settling down, and then I felt my arms pinned to my sides. At first I thought it was an octopus, but in a moment I realized what it was. Though I never thought before that starfish grew so large."

"Nor I," added Tom. "Well, you've had an experience, to say the least."

They remained a little longer in the vicinity, Tom and his officers making observations they thought would be useful to them later, and then the submarine went up to the surface.

They cruised in the open the rest of that day, recharging the storage batteries and getting ready for the search which, Tom calculated, would take them some time. As he had explained, it would not be easy to locate the Pandora in the fathomless depths of the sea.

Ned and Mr. Damon did some fishing while they were on the surface, and, as their luck was good, there was a welcome change from the usual food of the M. N. 1. Though, as Tom had installed a refrigerating plant, fresh meat could be kept for some time, and this, in addition to the tinned and preserved foods, gave them an ample larder.

"When are we going to begin the real search for the gold?" asked Mr. Hardley that evening.

"I should say in another day or two," Tom answered, after he had

consulted the charts and made calculations of their progress since leaving their dock. "We shall then be in the vicinity of the place where you say the Pandora went down, and, if you are sure of your location, we ought to be able to come approximately near to the location of the gold wreck."

"Of course I am sure of my figures," declared Mr. Hardley. "I had them directly from the first mate, who gave them to the captain."

"Well, it remains to be seen," replied Tom Swift. "We'll know in a few days."

"And I hope there will be no more taking chances," went on the gold-seeker. "I don't see any sense in you people going out in diving suits to fight starfish. We need those suits to recover the gold with, and it's foolish to take needless risks."

His tone and manner were dictatorial, but Tom said nothing. Only when he and Mr. Damon were alone a little later the eccentric man said:

"Tom will you ever forgive me for introducing you to such a pest?"

"Oh, well, you didn't know what he was," said Tom good-naturedly. "You're as badly taken in as I am. Once we get the gold and give him his share, he can get off my boat. I'll have nothing more to do with him!"

Not wishing to navigate in the darkness, for fear of not being able to keep an accurate record of the course and the distance made Tom submerged the craft when night came and let her come to rest on the bottom of the sea. He calculated that two days later they would be in the vicinity of the Pandora.

The night passed without incident, situated, as they were, on the sand about three hundred feet below the surface; and after breakfast Tom announced that they would go up and head directly for the place where the Pandora had foundered.

The ballast tanks were emptied, the rising rudder set, and the M. N. 1 began to ascend. She was still several fathoms from the surface when all on board became aware of a violent pitching and tossing motion.

"Bless my postage stamp, Tom!" exclaimed Mr. Damon, "what's the matter now?"

"Has anything gone wrong?" demanded Mr. Hardley.

"Nothing, except that we are coming up into a storm," answered the

young inventor. "The wind is blowing hard up above and the waves are high. The swell makes itself felt even down here."

Tom's explanation of the cause of the pitching and rolling of the submarine proved correct. When they reached the surface and an observation was taken from the conning tower, it was seen that a terrific storm was raging. It was out of the question to open the hatches, or the M. N. 1 would have been swamped. The waves were high, it was raining hard and the wind blowing a hurricane.

"Well, here's where we demonstrate the advantage of traveling in a submarine," announced Tom, when it was seen that journeying on the surface was out of the question. "The disturbance does not go far below the top. We'll submerge and be in quiet waters."

He gave the orders, and soon the craft was sinking again. The deeper she went the more untroubled the sea became, until, when half way to the bottom, there was no vestige of the storm.

"Are we going to lie here on the bottom all day, or make some progress toward our destination?" asked the gold-seeker, when Tom came into the main cabin after a visit to the engine room. "It seems to me," went on Mr. Hardley, "that we've wasted enough time! I'd like to get to the wreck, and begin taking out the gold."

"That is my plan," said Tom quietly. "We will proceed presently--just as soon as navigating calculations can be made and checked up. If we travel under water we want to go in the right direction."

His manner toward the gold-seeker was cool and distant. It was easy to see that relations were strained. But Tom would fulfill his part of the contract.

A little later, after having floated quietly for half an hour or so, the craft was put in motion, traveling under water by means of her electric motors. All that day she surged on through the salty sea, no more disturbed by the storm above than was some mollusk on the sandy bottom.

It was toward evening, as they could tell by the clocks and not by any change in daylight or darkness, that, as the submarine traveled on, there came a sudden violent concussion.

"What's that?" cried Mr. Damon.

"We've struck something!" replied Tom, who was with the others in the cabin, the navigation of the craft having been entrusted to one of the officers. "Keep cool, there's no danger!"

"Perhaps we have struck the wreck!" exclaimed Mr. Hardley.

"We aren't near her," answered the young inventor. "But it may be some other half-submerged derelict. I'll go to see, and--"

Tom's words were choked off by a sudden swirl of the craft. She seemed about to turn completely over, and then, twisted to an uncomfortable angle, so that those within her slid to the side walls of the cabin, the M. N. 1 came to an abrupt stop. At the same time she seemed to vibrate and tremble as if in terror of some unknown fate.

"Something has gone wrong!" exclaimed Tom, and he hurried to the engine room, walking, as best he could with the craft at that grotesque angle. The others followed him.

"What's the matter, Earle?" asked Tom of his chief assistant.

"One of the rudders has broken, sir," was the answer. "It's thrown us off our even keel. I'll start the gyroscope, and that ought to stabilize us."

"The gyroscope!" cried Tom. "I didn't bring it. I didn't think we'd need it!"

For a moment Earle looked at his commander. Then he said:

"Well, perhaps we can make a shift if we can repair the broken rudder. We must have struck a powerful cross current, or maybe a whirlpool, that tore the main rudder loose. We've rammed a sand bank, or stuck her nose into the bottom in some shallow place, I'm afraid. We can't go ahead or back up."

"Do you mean we're stuck, as we were in the mud bank?" asked Mr. Hardley.

"Yes," answered Tom, and Earle nodded to confirm that version of it.

"But we'll get out!" declared Tom. "This is only a slight accident. It doesn't amount to anything, though I'm sorry now I didn't take my father's advice and bring the gyroscope rudder along. It would have acted automatically to have prevented this. Now, Mr. Earle, we'll see what's to be done."

All night long they worked, but when morning came, as told by the

clocks, they were still in jeopardy.

And then a new peril confronted them!

Earle, coming from the crew's quarters, spoke to Tom quietly in the main cabin.

"We'll have to turn on one of the auxiliary air tanks," he said. "We've consumed more than the usual amount on account of the men working so hard, and we used one of the compressed air motors to aid the electrics. We'll have to open up the reserve tank."

"Very well, do so," ordered Tom.

But a grim look came to his face when Earle, returning a little later, reported with blanched cheeks:

"The extra tank hasn't an atom of air in it, sir!"

"What do you mean?" asked Tom, in fear and alarm.

"I mean that the valve has been opened in some way--broken perhaps by accident--and all the air we have is what's in the submarine now. Not an atom in reserve, sir!"

"Whew!" whistled Tom, and then he stood up and began breathing quickly.

Already the atmosphere was beginning to be tainted, as it always becomes in a closed place when no fresh oxygen can enter. Without more fresh air the lives of all in the submarine were in imminent peril. And even as Tom listened to the report of his officer, he and the others began gasping for breath.

CHAPTER XVII

WHERE IS IT?

"Down on your faces!" called Tom to those with him in the cabin. "Lie down, every one! The freshest air is near the floor; the bad air rises, being lighter with carbonic acid. Lie down!"

All obeyed, Tom following the advice he himself gave. It was a little easier to breathe, lying on the tilted cabin floor, but how long could this be kept up? That was a question each one asked himself.

"Is every bit of our reserve air used?" asked Tom, speaking to Earle.

"As far as I can learn, yes, sir. If I had known that the auxiliary tank was empty I wouldn't have ordered the compressed air motor used. But I didn't know."

"No one is to blame," said Tom in a low voice. "It is one of the accidents that could not be foreseen. If there is any blame it attaches to me for not installing the gyroscope rudder. If we had had that when we were caught in the cross current, or the whirlpool swirl, our equilibrium would have been automatically maintained. As it is--"

He did not finish, but they all knew what he meant.

"Bless my soda fountain, Tom!" murmured Mr. Damon, "but isn't there any way of getting fresh air?"

"None without rising to the top," Tom answered. "We'll have to try that. Come with me to the engine room, Mr. Earle. It may be possible we can pull her loose."

They started to crawl on their hands and knees, to take advantage of the purer air at the floor level. The situation of the M. N. 1 was exactly the same as it had been when she ran into the mud bank in the river, with the exception that now she was in graver danger, for the supply of air for breathing was almost exhausted.

Reaching the engine room, where he found the crew lying down to take advantage of the better air near the floor, Tom made a hasty examination of the apparatus. There was still plenty of power left in the storage batteries, but, so far, the motors they operated had not been able to

pull the craft loose from where her nose was stuck fast.

"Are the tanks completely emptied?" asked Tom.

"As nearly so as we could manage with the pumps not acting to their full capacity," answered Earle. "If we could turn the craft on a more level keel we might empty them further, and then her natural buoyancy would send her up."

"Then that's the thing to try to do!" exclaimed Tom, his head beginning to feel the heaviness due to the impure air. "We'll move every stationary object over to the port side, and we'll all stand there, or lie there, ourselves. That may heel her over, and help loosen the grip of the sand."

"It's worth trying," said Earle. "Get ready, men!" he called to the crew.

Tom crawled back to the main cabin and told Mr. Damon and the others what was to be attempted.

"Koku, you come and help move things," requested Tom.

"Me move anything!" boasted the giant, who, because of his great strength and reserve power did not seem as greatly affected as were the others.

Going back to the engine room with Koku, Tom assisted, as well as he could, in the shifting of pieces of apparatus, stores and other things that were movable. They all worked at a great disadvantage except Koku, and he did not seem to feel the lack of vitalizing air.

One thing after another was shifted, and still the M. N. 1 maintained the dangerous angle.

"It isn't going to work!" gasped Tom, as he noticed the indicator which told to what angle the craft was still off an even keel. "We'll have to try something else."

"Is there anything to try?" asked Earle, in a faint voice. He was on the point of fainting for lack of air.

Tom looked desperately around. There was one piece of heavy machinery that might be moved to the other side of the engine room. It was bolted to the floor, but its added weight, with that of the crew and passengers, together with what had already been shifted, might turn the trick.

"Let's try to move that!" said Tom faintly, pointing to it.

"It will take an hour to unbolt it," said one of the men.

"Koku!" gasped Tom, pointing to the heavy apparatus. "See if-- see if you--"

Tom's breath failed him, and he sank down in a heap. But he had managed to make the giant understand what was wanted.

"Koku do!" murmured the big man. Striding to the piece of machinery, the legs of which were bolted to the floor, Koku got his arms under it. Bending over, and arching his back, so as to take full advantage of his enormous muscles, the giant strained upward.

There was a cracking of bone and sinew, a rasping sound, but the machinery did not leave the floor.

"Him must come!" gasped the giant. "One more go!"

He took a hold lower down. Tom's eyes were dim now, and he could not see well. Some of the men were unconscious.

Then, suddenly, there was a loud, breaking sound, and something tinkled on the steel floor of the submarine engine room. It was the heads of the bolts which Koku had torn loose. Like hail they fell about the giant, and in another instant the big man had pulled loose the machine, weighing several hundreds of pounds. In another moment he shoved it across the floor, toward the elevated side of the craft.

For a second or two nothing happened. Then slowly, very slowly, the M. N. 1 began to heel over.

"She's turning!" some one gasped.

An instant later, freed by this turning motion from the grip of the sand bank, the submarine shot to the surface. Up and up she went, breaking out on the open sea as a great fish darts upward from the hidden depths.

It was the work of only a few seconds for the man nearest it to open the hatch, and then in rushed the life-giving air. Tom and his companions were saved, and by Koku's strength.

"Me say him machine got to come up--him come up!" said the giant, smiling in happy fashion, when, after they had all gulped down great mouthfuls of the precious oxygen, they were talking of their experience.

"Yes, you certainly did it," said Tom, and due credit was given to Koku.

"Never again will I travel without a gyroscope," declared Tom. "I'm almost ready to go back and have one installed now."

"No, don't!" exclaimed the gold-seeker. "We are almost at the place of the wreck."

"Well, I suppose we can travel more slowly and not run a risk like that again," decided Tom. "I'll put double valves on the emergency air tank, so no accident will release our supply again."

This was done, after the broken valves had been repaired, and then, when the machine Koku had torn loose was fastened down again, and the submarine restored to her former condition, a consultation was held as to what the next step should be.

They were in the neighborhood of the West Indies, and another day, or perhaps less, of travel would bring them approximately to the place where the Pandora had foundered. The latitude and longitude had been computed, and then, with air tanks filled, with batteries fully charged, and everything possible done to insure success, the craft was sent on the last leg of her journey.

For two days they made progress, sometimes on the surface, and again submerged, and, finally, on the second noon, when the sun had been "shot," Tom said:

"Well, we're here!"

"You mean at the place of the wreck?" asked Mr. Hardley.

"At the place where you say it was," corrected Tom.

"Well, if this is the place of which I gave you the longitude and latitude, then it's down below here, somewhere," and the gold-seeker pointed to the surface of the sea. It was a calm day and the ocean was the proverbial mill pond.

"Let's go down and try our luck," suggested Tom.

The orders were given, the tanks filled, the rudders set, and, with hatches closed, the M. N. 1 submerged. Then, with the powerful searchlight aglow, the search was begun. Moving along only a few feet above the floor of the ocean, those in the submarine peered from the glass windows for a sight of the sunken Pandora.

All the rest of that day they cruised about below the surface. Then they

moved in ever widening circles. Evening came, and the wreck had not been found. The search was kept up all night, since darkness and daylight were alike to those in the undersea craft.

But when three days had passed and the Pandora had not been seen, nor any signs of her, there was a feeling of something like dismay.

"Where is it?" demanded Mr. Hardley. "I don't see why we haven't found it! Where is that wreck?" and he looked sharply at Tom Swift.

CHAPTER XVIII

A SEPARATION

"Mr. Hardley," began Tom calmly, as he took a seat in the main cabin, "when we started this search I told you that hunting for something on the bottom of the sea was not like locating a building at the intersection of two streets."

"Well, what if you did?" snapped the gold-seeker. "You're supposed to do the navigating, not I! You said if I gave you the latitude and longitude, down to seconds, as well as degrees and minutes, which I have done, that you could bring your submarine to that exact point."

"I said that, and I have done it," declared Tom. "When we computed our position the other day we were at the exact location you gave me as being the spot where the Pandora foundered."

"Then why isn't she here?" demanded the unpleasant adventurer. "We went down to the bottom at the exact spot, and we've been cruising around it ever since, but there isn't a sign of the wreck. Why is it?"

"I'm trying to explain," replied Tom, endeavoring to keep his temper. "As I said, finding a place on the open sea is not like going to the intersection of two streets. There everything is in plain sight. But here our vision is limited, even with my big searchlight. And being a few feet out of the way, as one is bound to be in making nautical calculations, makes a lot of difference. We may have been close to the wreck, but may have missed it by a few yards."

"Then what's to be done?" asked Mr. Hardley.

"Keep on searching," Tom answered. "We have plenty of food and supplies. I came out equipped for a long voyage, and I'm not discouraged yet. Another thing. The ship may have moved on several fathoms, or even a mile or two, after her last position was taken before she went down. In that case she'd be all the harder to find. And even granting that she sank where you think she did, the ocean currents since then may have shifted her. Or she may be covered by sand."

"Covered by sand!" exclaimed the gold-seeker.

"Yes," replied Tom. "The bottom of the ocean is always changing and shifting. Storms produce changes in currents, and currents wash the sand on the bottom in different directions. So that a wreck which may have been exposed at one time may be covered a day or so later. We'll have to keep on searching. I'm not ready to give up."

"Maybe not. But I am!" snapped out Mr. Hardley.

"What do you mean?" asked the young inventor.

"Just what I said," was the quick answer. "I'm not going to stay down here, cruising about without knowing where I'm going. It looks to me as if you were hunting for a needle in a haystack."

"That's just about what we are doing," and Tom tried to speak good-naturedly.

"Then do you know what I think?" the gold-seeker fairly shot forth.

"Not exactly," Tom replied.

"I think that you don't understand your business, Swift!" was the instant retort. "You pretend to be a navigator, or have men who are, and yet when I give you simple and explicit directions for finding a sunken wreck you can't do it, and you cruise all around looking for it like a dog that has lost the scent! You don't know your business, in my estimation!"

"Well, you are entitled to your opinion, of course," agreed Tom, and both Mr. Damon and Ned were surprised to see him so calm. "I admit we haven't found the wreck, and may not, for some time." "Then why don't you admit you're incompetent?" cried Mr. Hardley.

"I don't see why I should," said Tom, still keeping calm. "But since you feel that way about it, I think the best thing for us to do is to separate."

"What do you mean?" stormed the other.

"I mean that I will set you ashore at the nearest place, and that all arrangements between us are at an end."

"All right then! Do it! Do it!" cried Mr. Hardley, shaking his fist, but at no one in particular. "I'm through with you! But this is your own decision. You broke the contract--I didn't, and I'll not pay a cent toward the expenses of this trip, Swift! Mark my words! I won't pay a cent! I'll claim the money I deposited in the bank, and I won't pay a cent!"

"I'm not asking you to!" returned Tom. with a smile that showed how

he had himself in command. "You put up a bond, secured by a deposit, to insure your share of the expenses--yours and Mr. Damon's. Very well, we'll consider that bond canceled. I won't charge you a cent for this trip. But, mark this, Hardley: What I find from now on, is my own! You don't share in it!"

"You mean that--"

"I mean that if I discover the wreck of the Pandora and take the gold from her, that it is all my own. I will share it with Mr. Damon, provided he remains with me--"

"Bless my silk hat, Tom, of course I'll stay with you!" broke in the eccentric man.

"But you don't share with me," went on the young inventor, looking sternly at the gold-seeker. "What I find is my own!"

"All right--have it that way!" snapped the adventurer. "Set me ashore as soon as you can--the sooner the better. I'm sick of the way you do business!"

"Nothing like being honest!" murmured Ned. But, as a matter of fact, he was glad the separation had come. There had been a strain ever since Hardley came aboard. Mr. Damon, too, looked relieved, though a trifle worried. He had considerable at stake, and he stood to lose the money he had invested with Dixwell Hardley.

"This is final," announced Tom. "If we separate we separate for good, and I'm on my own. And I warn you I'll do my best to discover that wreck, and I'll keep what I find."

"Much good may it do you!" sneered the other. "Perhaps two can play that game."

No one paid much attention to his words then, but later they were recalled with significance.

"Get ready to go up!" Tom called the order to the engine room.

"Where are you going to land me?" asked Mr. Hardley. "I have a right to know that?"

"Yes," conceded Tom, "you have. I'll tell you in a moment."

He consulted a chart, made a few calculations and then spoke.

"I shall land you at St. Thomas," answered the young inventor. "I do

not wish to bring my submarine to a place that is too public, as too many questions may be asked. From St. Thomas you can easily reach Porto Rico, and from there you can go anywhere you wish."

"Very well," murmured the malcontent. "But I don't consider that I owe you a cent, and I'm not going to pay you."

"I wouldn't take your money," Tom answered. "And don't forget what I said--that what I find is my own."

The other answered nothing. Nor from then on did he hold much conversation with Tom or any others in the party. He kept to himself, and a day later he was landed, at night, at a dock, and if he said "good-bye" or wished Tom and his friends a safe voyage, they did not hear him.

They were steaming along on the surface the next day, and at noon the submarine suddenly halted.

"What's on now, Tom?" asked Ned, as he saw his chum prepare to go up on deck with some of the craft's officers.

"We're going to 'shoot the sun' again," was the answer. "I want to make sure that we were right in our former calculations as to the position of the Pandora. The least error would throw us off."

Using the sextant and other apparatus, some of which Tom had invented himself, the exact position of the submarine was calculated. As the last figure was set down and compared with their previous location, one of the men who had been doing the computing gave an exclamation.

"What's the matter?" asked Tom.

"Look!" was the answer, and he pointed to the paper. "There's where a mistake was made before. We were at least two miles off our course

"You don't say so!" exclaimed Tom, and, taking the sheet, he went rapidly over the results.

CHAPTER XIX

THE SERPENT WEED

All waited eagerly for Tom Swift to verify the statement of the other mathematician, and the young inventor was not long in doing this, for he had what is commonly known as a "good head for figures."

"Yes, I see the mistake," said Tom. "The wrong logarithm was taken, and of course that threw out all the calculations. I should say we were nearer three miles off our supposed location than two miles."

"Does that mean," asked Mr. Damon, "that we began a search for the wreck of the Pandora three miles from the place Hardley told us she was

"That's about it," Tom said. "No wonder we couldn't find her."

"What are you going to do?" Ned wanted to know.

"Get to the right spot as soon as possible and begin the search there," Tom answered. "You see, before we submerged as nearly as possible at the place where we thought the Pandora might be on the ocean bottom. From there we began making circles under the sea, enlarging the diameter each circuit.

"That didn't bring us anywhere, as you all know. Now we will start our series of circles with a different point as the center. It will bring us over an entirely different territory of the ocean floor."

"Just a moment," said Ned, as the conference was about to break up. "Is it possible, Tom, that in our first circling that we covered any of the ground which we may cover now? I mean will the new circles we propose making coincide at any place with the previous ones

"They won't exactly coincide," answered the young inventor. "You can't make circles coincide unless you use the same center and the same radius each time. But the two series of circles will intersect at certain places."

"I guess intersect is the word I wanted," admitted Ned.

"What's the idea?" Tom wanted to know.

"I'm thinking of Hardley," answered his chum. "He might assert that we purposely went to the wrong location with him to begin the search, and

if we afterward find the wreck and the gold, he may claim a share."

"Not much he won't!" cried Tom.

"Bless my check book, I should say not!" exclaimed Mr. Damon.

"Hardley broke off relations with us of his own volition," said Tom. "He 'breached the contract,' as the lawyers say. It was his own doing.

"He has put me to considerable expense and trouble, not to say danger. He was aware of that, and yet he refused to pay his share. He accused me of incompetence. Very well. That presuggested that I must have made an error, and it was on that assumption that he said I did not know my business. Instead of giving me a chance to correct the error, which he declared I had made, he quit--cold. Now he is entitled to no further consideration.

"An error was made--there's no question of that. We are going to correct it, and we may find the gold. If we do I shall feel I have a legal and moral right to take all of it I can get. Mr. Hardley, to use a comprehensive, but perhaps not very elegant expression, may go fish for his share."

"That's right!" asserted Mr. Damon.

"I guess you're right, Tom," declared Ned. "There's only one more thing to be considered."

"What's that?" asked the young inventor.

"Why, Hardley himself may find out in some way that we were barking up the wrong tree, so to speak. That is, learn we started at the wrong nautical point. He may get up another expedition to come and search for the gold and--"

"Well, he has that right and privilege," said Tom coolly. "But I don't believe he will. Anyhow, if he does, we have the same chance, and a better one than he has. We're right here, almost on the ground, you might say, or we shall be in half an hour. Then we'll begin our search. If he beats us to it, that can't be helped, and we'll be as fair to him as he was to us. This treasure, as I understand it, is available to whoever first finds it, now that the real owners, whoever they were, have given it up."

"I guess you're right there," said Mr. Damon. "I'm no sea lawyer, but I believe that in this case finding is keeping."

"And there isn't one chance in a hundred that Hardley can get another

submarine here to start the search," went on Tom. "Of course it's possible, but not very probable."

"He might get an ordinary diving outfit and try," Ned suggested.

"Not many ordinary divers would take a chance going down in the open sea to the depth the Pandora is supposed to lie," Tom said. "But, with all that, we have the advantage of being on the ground, and I'm going to make use of that advantage right away."

He gave orders at once for the M. N. 1 to proceed, and this she did on the surface. It was decided to steam along on the open sea until the exact nautical position desired was reached. This position was the same Mr. Hardley had indicated, but that position was not before attained, owing to an error in the calculations.

As all know, to get to a certain point on the surface of the ocean, where there is no land to give location, a navigator has to depend on mathematical calculations. The earth's surface is divided by imaginary lines. The lines drawn from the north to the south poles are called meridians of longitude. They are marked in degrees, and indicate distance east or west of the meridian of, say, Greenwich, England, which is taken as one of the centers. The degrees are further divided into minutes and seconds, each minute being a sixtieth of a degree and each second, naturally, the sixtieth of a minute.

Now, if a navigator had to depend only on the meridian lines indicating distance east and west, he might be almost any distance north or south of where he wanted to go. So the earth is further divided into sections by other imaginary lines called parallels of latitude. As all know, these indicate the distance north or south of the middle line, or the equator. The equator goes around the earth at the middle, so to speak, running from east to west, or from west to east, according as it is looked at. The meridian of Greenwich may be regarded as a sort of half equator, running half way around the earth in exactly the opposite direction, or from north to south.

The place where any two of these imaginary lines, crossing at right angles, meet may be exactly determined by the science of navigation. It is a complicated and difficult science, but by calculating the distance of the

sun above the horizon, sometimes by views of stars, by knowing the speed of the ship, and by having the exact astronomical time at hand, shown on an accurate chronometer, the exact position of a ship at any hour may be determined.

By this means, if a navigator wants to get to a place where two certain lines cross, indicating an exact spot in the ocean, he is able to do so. He can tell for instance when he has reached the place where the seventy-second degree of longitude, west from Greenwich, meets and crossed the twentieth parallel of latitude. This spot is just off the northern coast of Haiti. Other positions are likewise determined.

It was after about an hour of rather slow progress on the surface of the calm sea, no excess speed being used for fear of over-running the mark, that Tom and his associates gathered on deck again to make another calculation.

Long and carefully they worked out their position, and when, at last, the figures had been checked and checked again, to obviate the chance of another error, the young inventor exclaimed:

"Well, we're here!"

"Really?" cried Ned.

"No doubt of it," said his chum.

"Bless my doormat!" cried Mr. Damon. "And do you mean to say, Tom Swift, that if we submerge now we'll be exactly where the Pandora lies, a wreck on the floor of the ocean

"I mean to say that we're at exactly the spot Where Hardley said she went down," corrected Tom, "and we weren't there before --that is not so that we actually knew it. Now we are, and we're going down. But that doesn't guarantee that we'll find the wreck. She may have shifted, or be covered with sand. All that I said before in reference to the difficulty in locating something under the surface of the sea still holds good."

Once more, to make very certain there was no error, the figures were gone over, Then, as one result checked the other, Tom put away the papers, the nautical almanac, and said:

"Let's go!"

Slowly the tanks of the M. N. 1 began to fill. It was decided to let her

sink straight down, instead of descending by means of the vertical rudders. In that way it was hoped to land her as nearly as possible on the exact spot where the Pandora was supposed to be.

"How deep will it be, Tom?" asked Ned, as he stood beside his chum in the forward observation cabin and watched the needle of the gauge move higher and higher.

"About six hundred feet, I judge, going by the character of the sea bottom around here. Certainly not more than eight hundred I should say." And Tom was right. At seven hundred and eighty-six feet the gauge stopped moving, and a slight jar told all on board that the submarine was again on the ocean floor.

"Now to look for the wreck!" exclaimed Tom. "And it will be a real search this time. We know we are starting right."

"Are you going to put on diving suits and walk around looking for her?" asked Ned.

"No, that would take too long," answered Tom. "We'll just cruise about, beginning with small circles and gradually enlarging them, spiral fashion. We'll have to go up a few feet to get off the bottom."

As Tom was about to give this order Ned looked from the glass windows. The powerful searchlight had been switched on and its gleams illuminated the ocean in the immediate vicinity of the craft.

As was generally the case, the light attracted hundreds of fish of various shapes, sizes, and, since the waters were tropical, beautiful colors. They swarmed in front of the glass windows, and Ned was glad to note that there were no large sea creatures, like horse mackerel or big sharks. Somehow or other, Ned had a horror of big fish. There were sharks in the warm waters, he well knew, but he hoped they would keep away, even though he did not have to encounter any in the diving suit.

Slowly the submarine began to move. And as she was being elevated slightly above the ocean bed, to enable her to proceed, Ned uttered an exclamation and pointed to the windows.

"Look, Tom!" he cried.

"What is it?" the young inventor asked.

"Snakes!" whispered his chum. "Millions of 'em! Out there in the

water! Look how they're writhing about!"

Tom Swift laughed.

"Those aren't snakes!" he said. "That's serpent grass--a form of very long seaweed which grows on certain bottoms. It attains a length of fifty feet sometimes, and the serpent weed looks a good deal like a nest of snakes. That's how it got its name. I didn't know there was any here. But we must have dropped down into a bed of it."

"Any danger?" asked Ned.

"Not that I know of, only it may make it more difficult for us to see the wreck of the Pandora."

As Tom turned to leave the cabin the submarine suddenly ceased moving. And she came to a gradual stop as though she had been "snubbed" by a mooring line.

"I wonder what's the matter!" exclaimed Tom. "We can't have come upon the wreck so soon."

At that moment a man entered the cabin.

"Trouble, Mr. Swift!" he reported.

"What kind?" asked Tom.

"Our propellers are tangled with a mass of serpent weed," was the answer. "They're both fouled, and we can't budge."

"Bless my anchor chain!" ejaculated Mr. Damon. "Stuck again!"

CHAPTER XX

THE DEVIL FISH

It was true. The long sinuous strands of ocean grass, known under the name of "serpent weed," had caught around the whirling propellers and there had been wound and twisted very tightly. Just as sometimes the stern line gets so tightly twisted around a motor boat propeller as to require hours of work with an axe to free it, the seaweed was twisted around the blades of the M. N. 1.

Slowly the undersea craft came to a stop, and there she remained, floating freely enough, but a few feet above the bottom of the ocean. There was a look of alarm on the faces of Ned and Mr. Damon, but Tom Swift smiled.

"This is annoying, and may cause us delay," he announced, "but there is no danger."

"How are we to get free from the weed?" asked Mr. Damon. "We can't move if it's wound around our propellers, can we?"

"Not very well," Tom answered. "But all that will have to be done will be for some of us to put on diving suits, go out and chop the strands of weed away. We can do it more easily than could an ordinary vessel, for they would have to go into dry dock for the purpose. I think I'll go out myself. I want to look around a little."

"I'll go with you," said Ned. "As long as we haven't seen any sharks I don't mind."

"Nor gigantic starfish, either," added Tom with a smile, and Ned nodded in agreement.

"We might try reversing the propellers," suggested the man from the engine room, who had come in with the information about the serpent weed. "The chief didn't like to try that. We saw the weed from our observation windows and stopped as soon as we felt we had fouled it."

"That was right," commended Tom. "Well, try reversing. It can't do any harm, and it may make it easier for us to free the propellers when we go out."

He went to the engine room himself to see that everything was properly attended to. Slowly the motors were reversed, and only a slight current was given them, as, with the resistance of the tightly wound weed, too powerful a force might burn out the insulation.

Slowly the starting lever was thrown over. There was a low humming and whining as the current jumped from the batteries, and a slight vibration of the craft. Tom looked at the movable pointer which showed the speed and direction of the propellers. The hand oscillated slightly and then stopped.

"Shut off the current!" cried Tom. "It's of no use. The propellers are held as tight as a drum! We've got to go out and cut loose the serpent weed!"

The experiment of reversing the propellers had failed. But still Tom did not believe his craft was in danger. He gave orders for the engine room force to stand by and then arranged for himself, Ned, and Koku to go outside in diving dress and cut the weed off the shafts. There were twin propellers on the submarine, each revolving independently by separate motors, and each capable of being sent in forward or reverse direction.

"Start the engines as soon as we give the signal," Tom told the machinist. "Two knocks on the hull with an axe will mean go ahead, and three will mean reverse."

"I understand," said Weyth, the machinist. "But stand away from the propellers after you give the signal. I'll give you three minutes to move clear."

"That will be enough," Tom said. "But better make it half speed in either case. My idea is that if we can partly cut the weed off, starting the propellers, either forward or in reverse, will finish the trick."

"It may," agreed Weyth.

Armed with axes and sharp steel bars, Tom, Ned, and Koku were soon ready to step outside the submarine.

They entered the diving chamber. In the usual manner water was admitted, and, when the pressure was equalized, the outer door was opened and they walked out on the floor of the ocean, the submarine having been allowed to settle down again on the bottom of the Atlantic.

The powerful searchlight had been turned so that the beams were diffused toward the stern. In addition to this Tom and his two companions carried, attached to their suits, small, but brilliant, electric torches. Of course they had their air tanks with them, and also the telephones, by means of which they could communicate with one another.

As they emerged into the warm waters surrounding the submarine they disturbed thousands of small fish which were feeding all about. Like ocean swallows, the creatures scattered in all directions, some even brushing the divers as they slowly made their way toward the stern of the craft.

"Nice place here," said Ned to Tom, as they walked along, Koku coming just behind them.

"Yes. If we could take this up above and exhibit it in some city park it would make a hit all right," answered the young inventor.

They were walking on the pure, white, sandy floor of the ocean, some seven hundred feet below the surface, protected from the awful pressure of the water by means of the specially constructed suits which Tom had invented. About them, growing as if in a garden, were great masses of coral, some so thin and sinuous that it waved as do palms and ferns in the open air. Other coral was in great rock masses.

Then, too, there was the unpleasant serpent weed. It did not grow all over, but in patches here and there, as rank grass springs up in a meadow.

And it had been the misfortune of the M. N. 1 that she poked her tail into a mass of this long, tough grass, which was now wound about her propellers.

In addition to the many wonderful vegetable forms that grew on the ocean floor, some rivalling in beauty the orchids of the tropics, and almost as delicate, there were the fishes, which darted to and fro, now swiftly swimming beneath some coral arch, and again poising around some mass of waving sea fronds.

"Well, let's get busy," called Tom to Ned through the telephone. "We want to free the propellers and find the wreck of the Pandora. She may be a hundred feet from us, or a mile away, and in that case it's going to take longer to locate her."

Together they walked to the stern of the disabled craft. One look at the

propeller shafts, the examination being made by the diffused glow from the searchlight, as well as from the electric torches carried, showed that the diagnosis of the trouble was correct.

Wound around both propellers was a mass of the serpent weed, tightly bound because the machinery had whirled it around and around after the grass had once been caught. It was almost as bad as though manila cable had been thus accidentally fastened.

"Well, might as well begin to cut it loose," said Tom to his companions. "Koku, you take the port propeller, and Ned and I will work on the other. You ought to be able to beat us at this game."

"Me do," said the giant, as he got his axe ready for work.

Blows struck in water lose much of their force. This can easily be proved by filling a bathtub full of water, rolling up the sleeves, and then taking a hammer in the hand, immersing it fully, and trying to strike some object held in the other hand. The water hampers the blows.

It was this way with Tom and his friends. Nearly half of Koku's great strength was wasted. But they knew they could take their time, though they did not want to waste many hours.

The streamers of weed were like strands of tightly wound rope, and this, under certain circumstances, acquires almost the density of wood. Tom and Ned, working together, had managed to chop a little off their propeller shaft, and Koku had done somewhat better with his task, when Ned became aware of a shadow passing above him.

Instinctively he looked up, and as he did so he could not repress a start of horror. Tom, too, as well as Koku, saw the menacing shadow. Ned grasped more tightly his sharp, steel bar and spoke through the telephone to his companions.

"Devil fish!" he said. "The devil fish are after us."

CHAPTER XXI

A WAR REMINDER

To a large number of people the name devil fish brings to mind a conception of an octopus, squid, cuttle fish, or a member of that species. This is, however, a mistake.

The true devil fish of the tropics is a member of the sting ray family, and the common name it bears is given to it because of two prongs, or horns, which project just in front of its mouth. His Satanic Majesty is popularly supposed to have horns, together with a tail, hoofs and other appendages, and the horns of this sting ray fish are what give it the name it bears.

The devil fish, some specimens of which grow to the weight of a ton and measure fifteen feet from wing tip to wing tip, are armed with a long tail, terminating in a tough, horny substance, like many of the ray family members. This horn-tipped tail, lashing about in the water, becomes a terrible weapon of defense. Possibly it is used for offense, as the devil fish feeds on small sea animals, sweeping them into its mouth by movements of the horns mentioned. These horns, swirled about in the water, create a sort of suction current, and on that the food fishes are borne into the maw of the gigantic creature.

A whale rushes through a school of small sea animals with open mouth, takes in a great quantity of water, and the fringe of whalebone acts as a strainer, letting out the water and retaining the food. In like manner the devil fish feeds, except that it has no whalebone. Its "horns" help it to get a meal.

The "wing tips" of the devil fish have been spoken of. They are not really wings, though when one of these fish breaks water and shoots through the air, it appears to be flying. The wings are merely fins, enormously enlarged, and these give the fish its great size, rather than does the body itself. It is the whipping spike-armed tail of the devil fish that is to be feared, aside from the fact that the rush of a monster might swamp a small boat.

It was two or three of these devil fish that were now floating in the water above Tom and his companions, who were grouped about the stern of the disabled submarine.

"They won't attack us unless we disturb them," said Tom through his telephone, speaking to Ned and Koku. "Keep still and they'll swim away. I guess they're trying to find out what new kind of fish our boat is."

All might have gone well had not Koku acted precipitately. One of the devil fish, the smallest of the trio, measuring about ten feet across, swam down near the giant. It was an uncanny looking creature, with its horns swirling about in the water and its bone-tipped tail lashing to and fro like a venomous serpent.

"Look out!" cried Tom. But he was too late. Koku raised his axe and struck with all his force at the sea beast. He hit it a glancing blow, not enough to kill it, but to wound it, and immediately the sea was crimsoned with blood.

The devil fish was able to observe under water better than its human enemies, and it was in no doubt as to its assailant. In an instant it attacked the giant, seeking to pierce him with the deadly tail.

These tails are not only armed with a tip of horn-like hardness, they are also poisonous, and their penetrating power is great. Fishermen have sometimes caught small sting rays, which are a sort of devil fish. Lashing about in the bottom of a boat a sting ray can send its tail tip through the sole of a heavy boot and inflict a painful wound which may cause serious results.

The beast Koku had wounded was trying to sting the giant, and the latter, aware of his peril, was striking out with the axe.

"Look out, Tom!" called Ned through his telephone, as he saw one of the two unwounded devil fish swirl down toward the young inventor. Tom looked up, saw the big, horrible shape above him, and jabbed it with the sharp, steel bar. He inflicted a wound which added further to the crimson tinge in the sea, and that fish now attacked Tom Swift.

In another instant all three divers were fighting the terrible creatures, that, knowing by instinct they were in danger, were using the weapon with which nature had provided them. They lashed about with their sharp-

pointed tails, and more than one blow fell on the suits of the divers.

Had there been the least penetration, of course almost instant death would have followed. For the sea, at that depth and pressure, entering the suits would have ended life suddenly. But Tom had seen to it that the suits were well made and strong, with a lining of steel. And however great a thickness of leather the devil fish could send his sting through, it could not overcome steel.

There was danger, though, that the slender tip might slip through the steel bars across the windows in the helmets and shatter the glass. And that would be as great a danger as if the suits themselves were penetrated.

"We've got to fight 'em!" gasped Tom through his instrument, and, seeing his chance, he gave another jab to the devil fish attacking him. Koku, too, was standing up well under the attack of the monster he had first wounded. Ned, watching his chance, got in several blows, first at one and then at the other of the huge creatures. The third devil fish, which had not been wounded, had disappeared. Finally Koku, with a desperate blow, succeeded in severing the tail from the beast attacking him, and that battle was over.

As if realizing that it had lost its power to harm, the devil fish at once swam off, grievously wounded. Then Koku turned his attention to Tom's enemy. Ned, too, lent his aid, and they succeeded in wounding the creature in several places, so that it sank to the bottom of the sea and lay there gasping.

Slowly the red waters cleared and the three divers, exhausted by the fight, could view the remaining creature--the one wounded to death. It was the largest of the three, and truly it was a monster. But it was past the power to harm, and in a few minutes an under sea current carried it slowly away. Later it would float, doubtless, or be devoured by sharks or other ocean pirates before reaching the surface.

"Thank goodness that's over!" said Ned to Tom. "I don't want to see any more of them."

"There may be more about," Tom said. "We'd better keep watch. Ned, you lay off and Koku and I will work on the propellers. Then you can take your turn."

This plan was followed. Koku, not being tired, did not need to stop working, and he was the first to free his shaft partially of the entangling weeds. Tom rapped a signal, the blades were slowly revolved and then came free. A little later the second was in like condition.

"Now we can move!" said Tom, as they started back toward the diving chamber. "I hope we don't run into another patch of that serpent grass."

"Nor see any more devil fish," added Ned.

"Same here!" echoed the young inventor.

Luck seemed to be with the gold-seekers after that, for as the submarine was sent ahead, no more of the long, entangling grass was encountered.

The search for the sunken Pandora was now begun in earnest, since they were positive that they were at the right spot.

No immediate sign of her was found. But Tom and his friends hardly expected to be as lucky as that. They were willing to make a search. For, as Tom had said, a current might have shifted the position of the wreck.

They followed the plan of moving about in ever-widening circles. Only in this way could they successfully cover the ground. It was the third day after the encounter with the devil fish that Tom, Ned and Mr. Damon were in the forward observation cabin. The eccentric man suddenly pointed to something visible from the starboard window.

"There's a wreck, Tom!" he cried. "Maybe it's the Pandora!"

Tom and the others hurried to Mr. Damon's side and peered out into the sea, illuminated by the great searchlight.

"That isn't the Pandora!" said the young inventor.

"But it's a wreck, isn't it?" asked Ned.

"Yes, it's a sunken vessel, all right," Tom assented. "But it's a reminder of the Great War. Look! She has been blown up by a torpedo!"

CHAPTER XXII

STUDYING CURRENTS

There was no question about Tom's statement. They had approached close to the side of a small, sunken and wrecked steamer, and in her side was torn a great hole. In the light from the submarine it could be seen that the plates bent inward, indicating that the explosion was from outside.

"What are you going to do, Tom?" asked Ned, as he saw his chum move the engine room telegraph signal to the stop position.

"Going to investigate," was the answer. "We might as well take the time. We may learn something of value."

"Do you think there is any treasure in her?" asked Mr. Damon.

"There might be," answered Tom. "We'll put on the diving suits and go outside."

"I hope there aren't any devil fish," remarked Ned.

"Same here," Tom agreed. "But I don't believe we'll meet with any. Will you take a chance, Ned?"

"I surely will! I'd like to find out what sort of ship that is --or rather, was, for there isn't much left of her."

He spoke truly, for indeed the torpedo had created fearful havoc. The full extent of it was not observed until Tom, Ned, Koku and two of the crew had put on diving suits and approached the hulk. She lay on her side on the sandy bottom, heeled over somewhat, and when the investigators had walked around her, as they were able to do, they saw a second, and even larger hole in the opposite side.

"Two submarines must have attacked her," said Ned, speaking through his telephone to Tom.

"Either that, or else one sent a torpedo into her, dived, came up on the other side and sent another."

"Well, let's see if she has any treasure aboard," Ned proposed. "Wouldn't it be queer if we should discover two treasure ships?"

"More queer than likely," Tom answered. "We've got to be careful going inside her."

"Why?" asked Ned. "Do you think we'll set off a hidden mine?"

"No, but part of the wreckage might be loosened if we climbed over it, and we might fall and be pinned down. I've read of divers being caught that way. We must be careful."

"Do you suppose a German sub did this?" Ned asked.

"I think very likely," Tom answered. "Maybe we can tell if we can discover the nationality of this craft."

They made their way to a position just outside the gaping hole in the starboard side of the craft. Evidently; it was, or had been, a tramp steamer, and the torpedo hole on her starboard side was about amidships. She must have filled and sunk quickly with two such great holes torn in her.

Standing near the wound in the steel skin, Tom and his companions tried to see what was inside. Their portable torches did not give light enough to make out clearly the character of the cargo carried, and it was too risky to venture into the mass of wreckage that must be the result of the explosion of the torpedo.

"Let's try the other side," suggested Tom, and they moved around the stern of the craft. When they reached the place where the name was visible Tom raised his electric torch and, in the glow of it, they all read the painted inscription, Blakesly, New York.

"That's the vessel that disappeared so mysteriously!" exclaimed Ned, speaking through his instrument. "I remember reading about her. She sailed from New York for Brest, but was never heard of. At last we have solved the mystery!"

"Yes," agreed Tom, "but without much avail. We are too late to do any good."

"Not one of her crew or passengers was ever heard of," went on Ned. "It was surmised that a German sub attacked her, and that she was either sunk 'without a trace' or else her survivors were taken aboard the submarine and carried to Germany."

"Perhaps we may learn something to that end," said Tom, as they got around to the other side. The hole there was not quite so big, and as it seemed safe to enter Tom and Ned prepared to do so, the others remaining outside to give them aid in case of necessity.

It was comparatively easy to enter by this wound in the side of the *Blakesly*, and, proceeding cautiously, Tom and Ned made the attempt. They found they could not penetrate far, however, because of the mass of wreckage scattered about by the explosion. They could see through into the engine room, and there the machinery was in every stage of destruction, while below the boilers were disrupted.

"She must have gone down in a hurry," remarked Tom.

"Yes, and with part of her crew," added Ned, as he pointed to where a heap of white bones lay--grim reminders of the Great War. The engine room forces had been trapped and carried down to death.

"I wonder if, by any chance, she did carry gold," suggested Ned.

"It wouldn't be down here if she did," asserted Tom. "And if she was a treasure ship, and the huns knew it, they wouldn't leave any on board."

"That's just it," went on his chum. "They may not have known it, and have ripped a couple of torpedoes at her without any warning. It would be just like them."

"Granted," assented the young inventor. "Well, we can take another look around outside. Maybe there's a way of getting on deck, and so going below from there. I wouldn't chance it from here."

"Me, either," Ned answered.

They looked around a little more, a further view showing how dangerous it would be to attempt to enter the shattered engine room, where a misstep or a sudden change of equilibrium might cause disaster.

"Nothing there," Tom reported to Koku and the others waiting for him outside.

"Rope by up go him stern," said Koku, motioning toward the after part of the wreck.

"What does he mean?" Tom asked one of his crew.

"Oh, he went walking around outside while you were inside, sir," was the answer, "and he seems to have found a rope ladder or a chain, or something hanging from the stern."

"Let's go and see it," proposed Tom. "I've been wondering if we could get on deck."

"Are we going to spend much time here?" Ned wanted to know.

"Not much longer," Tom replied. "Why?"

"Well, I was thinking we'd better keep on looking for the Pandora. I don't want that fellow Hardley to get the bulge on us."

"Oh," laughed Tom, "he isn't likely to. But we won't take any chances. As soon as I see if we can learn anything that may be useful from this hulk, we'll go back and start on our way again."

The party of divers, led by Koku, who wanted to point out his discovery, walked slowly along on the bottom of the sea, around to the stern of the Blakesly.

"See!" said the giant through his telephone, and, as the instruments were interchanging, all heard him.

Koku pointed to several ropes and chains that were dangling from the stern of the sunken craft. Evidently they had been used by those who sought to escape from the sinking ship after she had been torpedoed.

"Wait a minute!" Tom telephoned, as he saw Koku grasp a chain, evidently with the object of hoisting himself up on deck by the simple method of going up hand over hand. He could easily do this by adjusting the air pressure inside his diving suit to make himself more buoyant.

"Koku go up!" said the giant.

"Better make sure that chain will hold you," cautioned Tom. The giant proved it by several powerful tugs, and then began to raise himself from the sandy bed of the ocean.

"Well, if it will hold him it will hold us," asserted Tom. "Ned, we'll go up. You two stay here," he said to the members of his crew. "We can't take any chances of all getting in the same accident if there should be one."

A little later Tom, Ned, and Koku stood on the deck of the sunken craft. Much of what she had carried had been swept off, either in the explosions or by reason of currents generated by storms since the fatality. But what seemed to be the cabin of the captain, or of some of the officers, was in plain view and easy of access from this level.

"Let's take a look!" said Tom.

Ned followed him to the door. It had been torn off, and inside was a table made fast to the floor. From the appearance of the room it was evidently the compartment where the charts were kept, and where the

captain or his officers worked out the reckoning. But it was tenantless now, and if any maps or papers had been out they were dissolved in sea water some time since.

"Let's see if we can find the log book," proposed Ned.

"Good idea," assented Tom.

Using the iron bars they carried, they forced open some of the lockers, but aside from pulp, which might have been charts or almost anything in the way of documents, nothing was come upon that would tell anything.

Unless the log book was kept in a water-tight case the ink would all run, once it was wet," Tom said, when they were about ready to give up their search.

"I suppose so," agreed Ned. "But I would like to know whether she carried treasure."

However, it was impossible to discover this, and dangerous to look too far into the interior. So Tom and his party were forced to leave without discovering the secret of the Blakesly, if she possessed one.

Later, however, when they had returned home, Tom and Ned made a report of what they had seen, and so cleared up the fate of the vessel. They learned that she carried no treasure, and they were glad they had not risked their lives looking for it. What had happened to her crew was never learned.

They returned to the submarine and told what they had viewed. And then, with a last look at the wreck, they passed on in their search for the Pandora.

Several fruitless days followed, and though a careful search was made in the vicinity of the true location given by Mr. Hardley, nothing was discovered.

"How long will you keep at it before you give up?" asked Ned one evening, as they went aloft to replenish the air tanks and charge the batteries.

"Oh, another week, anyhow. I have a new theory, Ned."

"What's that?"

"Ocean currents. I believe there are powerful currents in these waters, and that they may have shifted the position of the Pandora considerably.

I'm going to study the currents."

"Good idea!" cried his chum.

And the next day they began observations which were destined to have surprising results.

CHAPTER XXIII

AN UNDERSEA COLLISION

Under the warm, tropical sun the submarine floated idly on the surface of the calm sea. She had risen from the depths, her hatches had been opened, and now the crew, the owner, and his guests were breathing free air. The men were taking advantage of the period above water to wash out some of their garments, hanging them on improvised lines stretched along the deck. For Tom Swift had said he would remain above the surface all day.

Some slight repairs were necessary to the electric motors, and they could be made only when the craft was on the open sea. This, too, would afford a chance to recharge the batteries and repair one of them.

For the time being the search under the sea for the treasure ship Pandora had been abandoned. But it was not given up entirely. As Tom had announced to Ned, a new theory would be worked out. So far, cruising about in the place where the fillibuster ship was supposed to have gone down had resulted in nothing.

Mr. Damon, who had been below, shaving, came up on deck to see Tom and Ned tossing into the water large pieces of cork taken from spare life preservers. Tom tossed his in from one side of the deck, and Ned from the other. Then, as the eccentric man listened, he heard Tom say:

"I think mine is going to beat yours, Ned!"

"Then you've got another guess coming," declared the young financial man. "Mine's going twice as fast as yours is now, though yours did start off better."

"Bless my beefsteak!" exclaimed Mr. Damon, "what's this, Tom Swift? I thought we came on a treasure-hunting expedition, and here I find you and Ned playing some childish game! I hope you aren't laying any wagers on it!" Mr. Damon did not approve of gambling in any form.

"No, we aren't doing that," laughed Tom, as he dropped another bit of cork into the ocean.

"We are trying to arrive at some valuable scientific facts, Mr. Damon."

"Scientific facts--that childish play?"

"It isn't play," said Tom, turning to remark to Ned: "I think we've settled it. The current has a decided twist to the north."

"Yes," agreed his chum. "You were right, Tom."

"If you don't mind explaining," began Mr. Damon, "I should like to know--"

"We're trying to determine the drift of the ocean currents in this locality," Tom said.

"So we'll know better where to look for the Pandora," added Ned.

"Oh, so you haven't given up the hunt, then?" asked the eccentric man.

"By no means!" exclaimed Tom. "It's this way, Mr. Damon. We went down at as nearly the exact spot where the treasure-ship was sunk as we could determine by means of calculations. She wasn't there, nor could we find her by going around in circles. Then it occurred to me, and to some of the others also, including Ned, that the ocean currents might have shifted the position of the craft after she had sunk. There are powerful currents in the ocean, as you know, the Gulf Stream being one and the Japan Current another. Now there may be smaller ones in these waters that would produce a local effect.

"So Ned and I have been dropping bits of cork of different shapes into the water and watching which way they drifted. Our conclusion is that the currents here have a decided set toward the north."

"And what does that indicate?" asked Mr. Damon.

"That we should have begun our search some distance north of the point where we actually did begin," answered Tom.

"How far north?" the eccentric man wanted to know.

"That's just what we have yet to ascertain," the young inventor replied. "So far our conclusions have been arrived at merely from surface data. Now we've got to go below."

"And play with bits of cork there?" asked Mr. Damon.

"No, we'll have to use something heavier than cork," Tom said. "We'll probably use weights, and see how far they move along the bottom in a given time. But we have established one thing, and I begin to have hopes now that we may locate the Pandora."

The remainder of the day was spent in various ways aboard the submarine, which continued to float idly on the waves.

It was toward evening, when the red, setting sun gave promise of a fair day on the morrow that the submarine's deck lookout approached Tom, and, waiting until he had the attention of the young inventor, reported:

"There is a smudge of smoke dead astern, sir."

"Is there?" exclaimed Tom. "Let me have the glasses."

He took them from the lookout and made a long and careful study of the slight, black smudge which was low down on the horizon.

"A steamer," decided Tom, "and coming on fast. We'll go below!" he added. "Please make ready," he said to the officer in charge.

"What's up, Tom?" asked Ned, as his chum gathered up the papers on which he had been figuring on an improvised table set under an awning on deck.

"Some craft is coming, and I'd just as soon she wouldn't sight us," was the answer.

"You mean she might interfere with our search for the treasure- ship?"

"Not exactly. But she might want to start a search on her own account, and there's no use of giving our presence away, or letting them guess at what might be right conclusions as to the location of the Pandora."

"But, Tom, no one knows of the wreck! At least, no one is supposed to but our party and--"

"Hardley. Exactly!" exclaimed Tom, as he saw his chum about to utter the name.

"And you think he is coming?"

"I shouldn't be a bit surprised. Anyhow, it's just as easy for us to submerge and let them do their own guessing. I was going down soon, anyhow, and another hour won't make any difference. Here, take a look, if you like."

Ned peered through the glasses, but his eyes not being trained in sea interpretation, as were Tom's, he could make out nothing but a black smudge, now larger and darker.

"It might be a cloud for all I can tell," he said, as he handed the binoculars back to Tom.

"Well, it's a steamer all right, and she's under forced draft, too, if I'm any judge. We'll go below before she sights us."

"Perhaps she has already," suggested Ned, as the crew began clearing the submarine's deck.

"No, we lie too low in the water for that. Well, now we can start our underwater observations of current trends."

It did not take long, once she started, for the M. N. 1 to go down. Just as the sun sank below the horizon, and while the smudge of smoke was becoming more distinct, the waves closed over the steel deck of the submarine. Half an hour later she was nearly a quarter of a mile below the surface, resting on the bottom of the sea again.

On this trip Tom did not go to any such depths as he did on his former voyage in the Advance. Not that the reconstructed submarine was not capable of it, for she was even stronger than when first built. But the wreck they were seeking did not lie in so great a depth of water, and there was no need of running useless risks.

"Well," remarked Ned, when they came to a stop, "I don't believe any one will find us here."

"Not an ordinary diver, at any rate," Tom agreed. "And after supper I'm going to have another go at the currents."

The meal was served as usual, and a very good one it was, considering the fact that not as many supplies could be carried in the rather limited space of a submarine as may be transported in an ocean liner. Then, as it was still early, Tom and Ned, with the help of some of the officers, got ready for a new series of experiments.

The big searchlight was set aglow, and, going out on the ocean bed in diving suits, Tom and his friends dropped on the sand various weighted objects.

These were made in the shape of the hull of a steamer, and in proportion. Once they were on the sand, an iron rod was thrust into the ocean bed near each object.

"Now," remarked Tom, as they all went into the submarine again, "we'll let them drift until morning. Then we'll make new calculations. I think we'll arrive at some results, too."

"Just what are you aiming to do?" asked Mr. Damon.

"See how far each one of those weighted objects drifts," Tom replied. "We have planted them in different spots on the ocean bed. Some will drift farther than others. Some are large and some are small. By striking an average we may be able to tell about how far from the supposed location of the Pandora we ought to look for her."

The night passed without incident and as calmly and peacefully as though they were all in some deep cave beneath a great mountain. In the morning after breakfast Tom and his friends went outside the submarine again and noted the weighted objects. Some had drifted farther than others. Measurements were carefully taken, and then began a series of intricate calculations.

The distance each object had drifted from the iron bar marker was considered in reference to its size and shape. Also the elapsed time was computed. The results were then compared, an average struck, and then the size and weight of the Pandora, as nearly as they could be ascertained, were figured. The resultant figures were compared, and Tom announced:

"If we are anywhere near right in our conclusions we ought to begin to search for the treasure-ship about four miles from here, in a general northerly direction."

"Do you think she has drifted that far?" asked Ned.

"Fully that," Tom answered. "That is only our starting point-- the center of a new series of circles."

A moment later Tom gave the order to rise to the surface.

"Going up?" exclaimed Ned.

"Yes, I want to make some observations to determine our exact nautical position."

"But suppose that other steam--"

"We'll have to take a chance. We can submerge quickly if we have to, and I don't believe she's able to do that."

An observation was taken through the conning tower, however, before the M. N. 1 went all the way up, and there was not a sail nor a smudge of smoke on the horizon.

"So far so good," murmured Tom. "Now we'll 'shoot the sun,' and after

we submerge we'll begin our search in earnest. I think we are on the right track now."

The observation was made at noon, and then, as nearly as possible, the submarine was moved to a position approximately four miles north of the place where the Pandora was supposed to have foundered.

"Down we go!" exclaimed Tom, and down they went.

The depth gauge showed more than a thousand feet below the surface when the M. N. 1 came to rest. This was deeper than Tom had thought to find the wreck, but his craft was able to withstand the pressure. A brief wait, to make sure that everything was in readiness, was followed by the beginning of the new search. In gradually widening circles the craft moved about under water.

If the voyagers had expected to locate at once the treasure-ship, they would have been disappointed. For the first day gave no signs. But Tom had not promised immediate results, and no one gave up hope.

It was shortly after noon on the second day of the search at the new location that, as they were proceeding at rather greater speed than usual, something happened.

Ned had just suggested that he and Tom might go out and try the current-setting experiments again, when suddenly they were both thrown off their feet by a terrific jar and concussion. The M. N. 1 seemed to reel back, as if from a great blow.

"Bless my safety razor!" cried Mr. Damon, "what's the matter, Tom?"

"I think we've had a collision!" was the answer. "I must see how badly we are damaged!"

CHAPTER XXIV

THE TREASURE-SHIP

Sudden and forceful had been the underwater collision in which the M. N. 1 had participated. Either the lookout, aided though he was by the focused rays of the great searchlight, had failed to notice some obstruction in time to signal to avoid it, or there was an error somewhere else. At any rate the submarine had rammed something--what it was remained to be discovered.

"Bless my shotgun," cried Mr. Damon, "perhaps it was one of those big whales, Ned!"

"It didn't feel like a whale," answered the young financial man.

"And it wasn't!" declared Tom, who was hastening to the engine room. "It was too solid for that."

Following the collision there had been considerable confusion aboard the vessel. But discipline prevailed, and now it was necessary to determine the extent of the damage. This, Tom and his officers and crew proceeded to do.

There were automatic devices in the various control cabins, as well as in the main engine room, which told instantly if a leak had been sprung in any part of the craft. In that serious difficulty automatic pumps, controlled by an electrical device, at once began forcing out the water. Other apparatus rushed a supply of compressed air to the flooded compartment in order to hold out the water if possible. For further security the submarine was divided into different compartments, as are most ships in these days. The puncturing or flooding of one did not necessarily mean the foundering of the craft, or, in the case of a submarine, prevent her rising.

But Tom had sensed that the collision was almost a head-on one, and in that case it was likely that the plates might have started in several sections at once. This he wanted to discover, and take means of safety accordingly.

"How do you make it, Mr. Nelson?" cried the young inventor to the captain in the engine room.

"Only a slight leak in compartment B 2," he answered, as Tom's eyes rapidly scanned the tell-tale gauges. "The pumps and air are taking care of that."

"Good!" cried Tom. "It doesn't seem possible that there isn't more than that, though. We struck a terrible blow."

"Yes, but a glancing one, I think, sir."

"Send for the lookout," ordered Tom. "I can't understand why he didn't see whatever we've hit in time to avoid it."

The lookout came in, very much frightened, it must be admitted. Only by a narrow margin had all escaped death.

"It was impossible to see it, Mr. Swift," he said. "We had a clear course, not a thing in sight. The bottom was white sand, and I could almost count the fishes. All at once there was a big swirl of water that threw our nose around, and before I could signal to slow down or reverse we were right into her."

"Into what?" asked Tom.

"Some sort of wreck, I took it to be. I shoved the wheel hard over as quickly as I could, and we struck only a glancing blow."

"That's good," murmured Tom. "I thought that must have been the explanation. But what's that about a sudden swirl of water?"

"It seemed to me like a change in the current," the lookout answered. "It threw us right over against the wreck."

"I can very easily imagine something like that happening," admitted Tom. "Well, as long as we're not badly damaged I think we'll go outside and take a look. If we hit a wreck--"

"Bless my looking glass!" cried Mr. Damon, "it may be the Pandora, Tom."

"That's too good to be true!" cried Ned. "Anyhow, let's get out and take a look."

Tom first made sure that the slight leak was not likely to increase, and then arrangements were made for himself, Ned, Koku, and some of the others to go outside in the diving suits. Mr. Damon wanted to be of the party, but Tom was afraid to permit him in that depth of water. Mr. Damon, in spite of his jollity, was not as young as he had been.

Shortly after the collision, which had missed being a disaster by a narrow margin, Tom and his companions were outside the submarine, walking on the white, sandy bottom of the sea. Around them was a myriad of fishes, some of large size, but seemingly harmless, as they scudded rapidly away after a glance at the strange creatures who appeared to have come to dispute with them for possession of Father Neptune's element.

Moving more slowly than usual, because of the greater pressure of water at that depth, Tom and the others made their way around the nose of the submarine. And then, in the glow of the big searchlight, they saw the dim outlines of a steamer, partly imbedded in the sand. Her stern was toward the undersea craft that had rammed her, and the name was not so obliterated but what the young inventor could read it.

"The Pandora!" exclaimed Tom, speaking into his helmet telephone transmitter, the others all hearing him. "We've found the treasure-ship at last!"

And so they had. An accident had brought them to the end of their quest, though it is probable they would have found the Pandora anyhow, since they were making careful circles in her vicinity.

"Yes, that's the Pandora," said Ned. "And now the thing to do is to find out if she really has any treasure on board."

"That's what I'm going to do," declared Tom. "But first I want to investigate this queer current. We can't feel it here, but we may if we get out beyond the wreck. We don't want to be swept off our feet."

"Yes, we had better be careful," said one of the officers.

Accordingly they proceeded with caution along the length of the sunken Pandora. And as they neared her bow they all began to feel some powerful force in the current.

"This is far enough!" said Tom. "Don't get out beyond the protection of the hull. I see what it is. The steamer has drifted here from where she was originally sunk. And here two currents meet, forming a very strong one. It was that which threw us off our course. As long as we remain behind the wreck we'll be safe. But beyond her we may be in danger. She's firmly held in the sand, or, at best, is drifting only slightly. She'll be a sort of undersea breakwater for us. And now to see if we can get on board!"

This proved comparatively easy. Several lengths of chain and one iron ladder were over the stern, evidently having been used when the crew abandoned the ship in the storm that destroyed her. By means of these Tom and his companions gained the main deck near the stern.

The Pandora was a typical tramp steamer. She was high in the bows and stern and low amidships, and it was evident that the quarters of the officers and passengers, if any of the latter were carried, were in the stern. Tom was glad to find the vessel thus comparatively easy of access.

She lay on an almost even keel, and all he and his companions had to do was to walk along the deck and enter the cabins. As they did not have to look out for life lines or air hose they could enter, and even go below decks, in comparative safety.

"Well, here's for it," said Tom to the others. "Let's go in.

"Where would the treasure be, if she had any?" asked Ned.

"Captain's cabin or the purser's strong room, I imagine," Tom answered. "Hardley didn't actually see it, but he said those two places were constantly guarded. I'm inclined to think the purser would have charge of the gold. But we'll try both places."

It was easy to learn which had been the commander's cabin. It had the name "Captain" on a brass plate over the door. Tom and Ned entered. The place was in confusion, and confusion not all caused by the ocean currents. A small safe in the room stood with rusted door open, and the contents of the strong box were gone. Drawers and lockers, too, were opened and empty.

"I guess the captain took as much with him as he could when he got into his boat," commented Tom.

"And the gold, too," added Ned, pointing to the empty safe.

"That wouldn't have held two million dollars in gold," Tom retorted. "I believe the purser's cabin is the place to look."

Making sure they were not missing anything in the captain's room, they came out, to find Koku and the others waiting for them on deck.

"Nothing there," Tom reported. "Did any of you locate the purser's strong room?" One of the men pointed to an open door to the left.

"That's it!" exclaimed Tom. "Yes, and there's a safe here big enough to

hold gold for all the revolutions in South America," he added. "I guess we're on the right track at last."

It needed but a look to show them that they had at last reached the place of the treasure. The great safe stood open, and piled inside were a number of small boxes, such as are generally used to ship gold in. Ned, from his bank experience, recognized them at once.

"There's the gold!" he exclaimed. "We've found the treasure!"

"They tried to take some of it with them," said one of the submarine officers, pointing to some opened boxes which were floating near the cabin ceiling. They were caught on some projections which had prevented them from being washed out.

"Maybe they looted the whole safe," suggested Tom. "We'd better have a look."

He tried to pull out one of the many boxes set in tiers in the safe, but it was beyond his strength.

"Me do!" murmured Koku.

It was easy for the giant to pry out one of the boxes with his iron bar, and with another blow from his bar he opened the cover.

"Gold!" cried Ned, as he saw a gleam of yellow showing in the glow from his torch. "There's the gold!"

There was a table in the purser's cabin, made fast to the floor so it had not floated away. At a sign from Tom, the giant turned the box bottom side up on this table.

And then a murmur of wonder came from all who saw the result. For aside from the top layer of gold pieces, the box was filled with iron disks cut to the size of twenty-dollar gold pieces. In an instant it was borne to all what this meant.

"A fake!" exclaimed Tom Swift. "If all the boxes are like this there isn't enough gold on the treasure ship to pay the expenses of this trip! Somebody has been fooled! Open another box, Koku!"

CHAPTER XXV

THE STEEL BOX

Perhaps the least of all affected by what had taken place was the giant. Gold meant nothing to him. To serve Tom Swift was his whole aim in life. Born in a savage country, he had not acquired an overwhelming desire for wealth.

Consequently he was cool enough as he tore another box from the many that were fitted into the safe. The water had swelled the wood, and it was not easy to get them out.

A pressure of the giant's iron bar broke the sealed lid. On top was the same layer of gold pieces, but when the box was emptied the same trick was discovered. Iron disks made up the remainder of the contents.

"Bilked! That's what I call it! Regularly bilked!" exclaimed one of the divers, an Englishman who had been in Tom's service several years. "Somebody's got the cream of this pudding before we did!"

"I'm inclined to agree with you," said Tom. "Unless it transpires that not all the boxes have been thus camouflaged. We must take time to examine."

Then began a period of hard work. Laboring in relays of divers, every box that had been locked in the purser's safe was brought out on the submerged cabin table, broken open, and the contents examined. The hoax was even worse than indicated at first. For after the front section of boxes had been taken out none of the others remaining contained any gold at all. There were only iron disks.

"Well, Tom, what do you think of it?" asked Ned of his chum, when they had returned to the cabin of the submarine, leaving some members of the crew to complete the examination. For this the diving bell was used, as well as the suits.

"I don't think very much," was the answer. "It looks as though we had been sold."

"Do you think Hardley knew that the gold had been changed to iron--that is, all but a small part of it?"

"No, I don't believe he did," Tom answered. "If he were here I'd warrant he would be as much surprised as we are. He certainly believed the Pandora was a regular treasure-ship."

"Just how much did she really have in gold?" asked Mr. Damon, looking at the double eagles on the table of the M. N. 1.

"Well, at a rough guess I'd say ten thousand dollars," Tom answered. "We haven't brought it all out yet, and it's possible they may find a full box in the safe. But, unless there is one, I guess ten or fifteen thousand dollars will cover it."

"And Hardley said two millions!" exclaimed Ned. "Whew, what a difference!"

"Do you think he was in on the change?" asked one of the officers.

"No," replied Tom. "I guess it was like a good many of these filibustering plots. Somebody put up good money to be used to gain control of a country--perhaps for the country's good. But somebody else made the substitution, and the patriots were left. I don't believe Hardley knew this."

"Well, you'll get a little out of it, Tom," Ned remarked.

"Nothing worth while," was the answer. "But I'm not disappointed; that is, very much. Of course I could use the money, but I don't really need it. The trip has been a wonderful experience, and I have learned something I didn't know before. I'm sorry for you, though, Mr. Damon. You invested considerable with Hardley, didn't you?"

"About twenty thousand dollars, Tom. It will be hard to lose it, but I guess I can stand it."

Tom privately made up his mind to see that his old friend did not suffer financially, for the gold discovered on the Pandora, while it was far from the amount hoped for, would almost reimburse Mr. Damon. But the young inventor did not say anything about that just then.

They were looking at the recovered gold and getting ready to store it in some of the boxes that had been brought from the wreck when the divers that had remained on the Pandora to bring the last of the treasure returned through the chamber. Two of them carried a small steel box.

"What's that?" asked Tom, when they had their helmets off.

"Don't know," was the answer. "It was in the purser's safe. Stuck away in the far corner."

"Maybe it has jewels in it!" exclaimed Ned. "If it has--"

At that moment the lookout who had maintained his position in the conning tower called for Tom on the telephone.

"What is it?" asked the young inventor.

"There's some sort of grappling iron, or cable with a hook on it, being lowered from the surface, and it's near the wreck," was the answer. "If it isn't any of your apparatus it may be some other ship having a try for the gold."

"It must be Hardley!" cried Tom. "He's come back with another ship, as he half threatened to do, and, instead of diving for the wreck, which he can't get ordinary men to do in this depth, he's trying to grapple for it. Come on, we'll have a look!"

Ned and Mr. Damon followed Tom to the conning tower. Looking out through the heavy glass windows, while the searchlight illuminated the waters, the young inventor and his friends saw a great grappling iron swaying this way and that through the sea not far from the wreck, and once, indeed, uncomfortably close to their own craft.

"He's struck it uncommonly near," remarked Tom. "I guess it's time for us to be leaving."

"Suppose it's Hardley up above there?" suggested Ned.

"I don't doubt but it is."

"Well, are we going off and leave the wreck--and possibly other gold that may be hidden on her?"

"I wouldn't give ten dollars for the chance of searching for any more gold!" Tom exclaimed. "We'll take this steel box--it may contain something of value. The rest we'll leave to Hardley."

Preparations for rising to the surface were quickly made. Up and up went the M. N. 1, leaving the ill-starred Pandora to whatever else fate had in store for her.

Tom's craft broke water with gentle undulations of the waves. The top of the hatch was thrown back, admitting the bright sunshine on those who had been long in the shadow of the underseas. And, as the young inventor

and his friends went out on deck, they saw a small steamer riding on the ocean not far away.

One look was enough to tell them it was from this craft that the grappling iron had been let down, and as the submarine drifted nearer the form of Hardley was seen on deck. He was directing operations.

Some one must have called his attention to the M. N. 1, for he hurried to the rail of the craft which he had evidently chartered to seek the Pandora, and he exclaimed:

"What are you doing here, Swift?"

"The same thing you are, I believe," coolly answered Tom. "Cleaning up the treasure ship. You might as well save your money though, for we have all the gold there is!"

"Impossible!" cried the now irate man. "You cannot have found the Pandora!"

"That's just what we did, though," answered Tom. "And, for your information, I'll say that we took all the gold we found, though it was considerably less than you stated."

"How dare you?" stormed the adventurer. "I'll have the law on you for this!"

"I guess you forget," replied Tom, "that we parted company at your request and that I told you I was on my own. Finding is keeping. I didn't find what I expected to, and, on the other hand, I got something I didn't look for."

"What do you mean

"The Pandora was rightly named," went on Tom. "If you recall the old story, Pandora had a box of treasures. They all flew out except Hope, which remained in the bottom. Well, most of the gold seems to have flown away, but we found a box on the Pandora. What's in it I don't know yet, as I haven't opened it. Still, if it doesn't contain more than Hope I shall be disappointed."

The face of Hardley showed the rage felt.

"Give me that box! Give me that box!" he cried, shaking his fist at Tom.

"Not today," was the cool answer of the young inventor. "I may let you

know what I find in it if you leave your address. Goodbye!"

Tom waved his hand, gave orders to close the hatches and submerge the M. N. 1, and a few moments later the sea closed over her, leaving the other vessel to grapple uselessly for the treasure-ship.

"What are you going to do, Tom?" asked Ned of his chum, as they were all gathered in the main cabin half an hour later.

"Head for home as soon as we can. I've had enough of this, and I want to get at something else I have in mind. But first I'm going to see what's in this box."

It required the strength of Koku to open the small steel box, but when it was torn apart, for the combination was impossible to guess at, all that was seen were bundles of papers. The case having been hermetically closed, no water had penetrated it, though it had been submerged a long time.

"What are they?" asked Ned of his chum.

Tom did not answer for a moment. Then having quickly examined the papers, he cried:

"We've struck it!"

"What?" they all wanted to know.

"The very thing Hardley was after. These are the missing papers in the oil-well deal--the papers that prove Barton Keith has a half share in property worth many millions of dollars. It was these papers that Hardley was after. He may have thought he could get the gold, too, but he wanted most these oil shares. Boys, we've found the fortune anyhow, in spite of the fellows who looted the gold boxes!"

There was no doubt about it. There were all the papers--the certificates of shares, the partnership agreement and other documents--to show that Mary's uncle was a rich man. The wreck of the Pandora held a fortune after all.

"How do you account for Hardleys acts?" asked Ned of his chum.

"Well, there are several explanations. I think we may be certain that he knew these papers were aboard the Pandora, for he must have intrusted them to the purser himself when he made a trip on the ship. When she sank he had not time to get them to take with him."

"He either knew then, or found out later, that the vessel carried, or was supposed to carry, a large amount of gold. He may have been honestly mistaken in thinking it was two millions. In any case he was playing safe, for he only promised me half if the treasure was found. He could have claimed this box as his property, and that is probably what he was after from the beginning. He was using me as a cat's paw, so to speak."

"Well, you beat him to it," observed Ned.

"Bless my necktie, I should say so!" agreed Mr. Damon. "Do you think he really expected to find the gold?"

"Either that or the papers," was Tom's answer. "He must have engaged the vessel and the grappling apparatus, and, possibly, a diver, after we set him ashore at St. Thomas. Well, we'll leave him to his own fun."

The M. N. 1 made good time back to her home port, nothing except a terrific storm occurring to mark the voyage. And as she submerged when that was on she did not feel it. After greeting his father, Tom lost little time in going to Mary's house with the box of securities and other papers.

"I want you to hand these to your uncle with my compliments," he said. "I've got the Air Scout out in the meadow. We'll go over in that. How is Mr. Keith?"

"Not very well," Mary answered, after she had got over her surprise at seeing Tom. "But this good news will restore him, I think."

And it certainly was a great tonic. Mr. Keith could hardly believe the story that Mary and Tom jointly told him. But at length he grasped the idea that he was a wealthy man again, and he exclaimed:

"Tom Swift, I'm going to share half with you!"

"Oh, no," retorted the young inventor. "I couldn't think of that. If you want to pay part of the expenses of the trip I shan't object to that, as I intend giving the gold I recovered to Mr. Damon. But as for taking any of the oil shares--"

"Then, Mary, you shall take half!" exclaimed Mr. Keith. "I have more money now than I'll ever spend. Mary, half of it is yours, and if you don't let Tom Swift have a say in the spending of it-- Say, Mary, have you thanked him yet?" he asked with a twinkle of his eyes. "Well, Uncle Barton, I--I don't know--"

"Then do it now!" cried her uncle. "Tom, if you could have any reward you wanted, what would it be?"

Tom took Mary in his arms and--But I refuse to betray any secrets. Anyhow, some time later when Ned asked his chum if he felt entirely satisfied with the result of his undersea search, the young inventor replied: "I certainly do!"

Tom admitted to his father that a mistake had been made in not installing the gyroscope rudder. There was no excuse for not taking it. Tom declared, as it was small and took up little room, and it might have saved them from what was a close call at one time.

"I'll take it on my next submarine trip," the young inventor promised.

Ned wanted to bring suit against Hardley to recover half the expenses of the trip, but Tom would not consent to it. After all, the value of the oil well property was more than the gold the Pandora was reputed to have carried. No attempt was made to take from Tom the comparatively small amount he had salvaged. Perhaps whoever had put it on board did not want to admit the trick that had been played in filling the boxes with iron disks.

Dixwell Hardley made no further trouble. He could not, for he was so entirely in the wrong. He sold out his shares in the oil property, and a company took possession which gave fair treatment to Mary's uncle.

And this is the end of the story. But the future holds further adventures for Tom Swift which, let it be hoped, he will see fit to order recorded.