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Tom Swift And His Big Tunnel

by Victor Appleton

June, 1997 [Etext #953]

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TOM SWIFT AND HIS BIG TUNNEL

or

The Hidden City of the Andes

by  
Victor Appleton

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## TOM SWIFT AND HIS BIG TUNNEL

### Chapter I

#### An Appeal for Aid

Tom Swift, seated in his laboratory engaged in trying to solve a puzzling question that had arisen over one of his inventions, was startled by a loud knock on the door. So emphatic, in fact, was the summons that the door trembled, and Tom started to his feet in some alarm.

"Hello there!" he cried. "Don't break the door, Koku!" and then he laughed. "No one but my giant would knock like that," he said to himself. "He never does seem able to do things gently. But I wonder why he is knocking. I told him to get the engine out of the airship, and Eradicate said he'd be around to answer the telephone and bell. I wonder if anything has happened?"

Tom shoved back his chair, pushed aside the mass of papers over which he had been puzzling, and strode to the door. Flinging it open he confronted a veritable giant of a man, nearly eight feet tall, and big in proportion. The giant, Koku, for that was his name, smiled in a good-natured way, reminding one of an overgrown boy.

"Master hear my knock?" the giant asked cheerfully.

"Hear you, Koku? Say, I couldn't hear anything else!" exclaimed Tom. "Did you think you had to arouse the whole neighborhood just to let me know you were at the door? Jove! I thought you'd have it off the hinges."

"If me break, me fix," said Koku, who, from his appearance and from his imperfect command of English, was evidently a foreigner.

"Yes, I know you can fix lots of things, Koku," Tom went on, kindly enough. "But you musn't forget what enormous strength you have. That's the reason I sent you to take the engine out of the airship. You can lift it without using the chain hoist, and I can't get the chain hoist fast unless I remove all the superstructure. I don't want to do that. Did you get the engine out?"

"Not quite. Almost, Master."

"Then why are you here? Has anything gone wrong?"

"No, everything all right, Master. But man come to machine shop and say he must have talk with you. I no let him come past the gate, but I say I come and call you."

"That's right, Koku. Don't let any strangers past the gate. But why didn't Eradicate come and call me. He isn't doing anything, is he? Unless, indeed, he has gone to feed his mule, Boomerang."

"Eradicate, he come to call you, but that black man no good!" and Koku chuckled so heartily that he shook the floor of the office.

"What's the matter with Eradicate?" asked Tom, somewhat anxiously. "I hope you and he haven't had another row?"

Eradicate had served Tom and his father long before Koku, the giant, had been brought back from one of the young inventor's many strange trips, and ever since then there had been a jealous rivalry between the twain as to who should best serve Tom.

"No trouble, Master," said Koku. "Eradicate he start to come and tell you strange man want to have talk, but Eradicate he no come fast enough. So I pick him up, and I set him down by gate to stand on guard, and I come to tell you. Koku come quick!"

"Oh, I knew it must be something like that!" exclaimed Tom in some vexation. "Now I'll have Eradicate complaining to me that you mauled him. Picked him up and set him down again."

"Sure. One hand!" boasted the giant. "Eradicate him not be heavy. More as a sack of flour now."

"No, poor Eradicate is getting pretty old and thin," commented Tom. "He can't move very quickly. But you should have let him come, Koku. It makes him feel badly when he thinks he can't be of service to me any more."

"Man say he in hurry." The giant spoke softly, as though he felt the gentle rebuke Tom administered. "Koku run quick tell you--bang on door."

"Yes, you banged all right, Koku. Well, it can't be helped, I reckon. Where is this strange man? Who is he? Did you ever see him before?"

"Me no can tell, Master. Not sure. But him now be at the outer gate. Eradicate watch."

"All right. I'll go and see who it is. I don't want any strangers poking around here, especially with the plans of my new gyroscope lying in plain view."

Before he left the laboratory Tom swept into a desk drawer the mass of papers and blue prints, and locked the receptacle.

"No use taking any chances," he remarked. "I've had too much trouble with people trying to get inside information about dad's and my patents. Now, Koku, I'll go and see this man."

The buildings composing the plant of Tom Swift and his father at Shopton were enclosed by a high, board fence, and at one of the entrances was a sort of gate-house, where some one was always on guard. Only those who could give a good account of themselves, workmen in the plant, or those known



to the sentinel were admitted.

It happened that the colored man, Eradicate, was on guard at the gates this day when the stranger asked to see Tom. Koku, working on the airship engine not far away, saw the stranger. Hearing the man say he was in a hurry and noting the slow progress of the aged Eradicate, who was troubled with rheumatism, the giant took matters into his own hands.

Tom Swift entered the gate-house and saw, seated in a chair, a man who was impatiently tapping the floor with his thick-soled shoe.

"Looks like a detective or a policeman in disguise," thought Tom, for, almost invariably, members of this profession wear very thick-soled shoes. Opposite the stranger sat Eradicate, a much-injured look on his honest, black face.

"Oh, Massa Tom!" exclaimed Eradicate, as soon as the young inventor entered. "Dat Koku he--he--he done gone and cotch me by de collar ob mah coat, an' den he lif' me up, an' he sot me down so hard--so hard--dat he jar loose all mah back teef!" and Eradicate opened his mouth wide to display his gleaming ivories.

"Eradicate, he no can come quick. He walk like so fashion!" and Koku, who had followed the young inventor, imitated the limping gait of the colored man with such a queer effect that Tom could not help laughing, and the stranger smiled.

"Ef I gits holt on yo'--ef I does, yo' great, big, overgrown lummo, Ah'll--Ah'll--" began the colored man, stammeringly.

"There. That will do now!" interrupted Tom. "Don't quarrel in here. Koku, get back to that engine and lift out the motor. Eradicate, didn't father tell you to whitewash the chicken coops to-day?"

"Dat's what he done, Massa Tom."

"Well, go and see about that. I'll stay here for a while, and when I leave I'll call one of you, or some one else, to be on guard. Skip now!"

Having thus disposed of the warring factions, Tom turned to the stranger and after apologizing for the little interruption, asked:

"You wished to see me?"

"If you're Tom Swift; yes."

"Well, I'm Tom Swift," and the young owner of the name smiled.

"I hope you will pardon a stranger for calling on you," resumed the man, "but I'm in a lot of trouble, and I think you are the only one who can help me out."

"What sort of trouble?" Tom inquired.

"Contracting trouble--tunnel blasting, to be exact. But if you have a few minutes to spare perhaps you will listen to my story. You will then be better able to understand my difficulty."

Tom Swift considered a moment. He was used to having appeals for help made to him, and usually they were of a begging nature. He was often asked for money to help some struggling inventor complete his machine.

In many cases the machines would have been of absolutely no use if perfected. In other cases the inventions were of the utterly hopeless class, incapable of perfection, like some perpetual motion apparatus. In these cases Tom turned a deaf ear, though if the inventor were in want our hero relieved him.

But this case did not seem to be like anything Tom had ever met with before.

"Contracting trouble--blasting," repeated the youth, as he mused over what he had heard.

"That's it," the man went on. "Permit me to introduce myself" and he held out a card, on which was the name

MR. JOB TITUS

Down in the lower left-hand corner was a line:

"Titus Brothers, Contractors."

"I am glad to meet you, Mr. Titus," Tom said warmly, offering his hand. "I don't know anything about the contracting business, but if you do blasting I suppose you use explosives, and I know a little about them."

"So I have heard, and that's why I came to you," the contractor went on. "Now if you'll give me a few minutes of your time--"

"You had better come up to the house," interrupted Tom.

"We can talk more quietly there."

Calling a young fellow who was at work near by to occupy the gate-house, Tom led Mr. Titus toward the Swift homestead, and, a little later, ushered him into the library.

"Now I'll listen to you," the youth said, "though I can't promise to aid you."

"I realize that," returned Mr. Titus. "This is a sort of last chance I'm taking. My brother and I have heard a lot about you, and when he wrote to me that he was unable to proceed with his contract of tunneling the Andes Mountains for the Peruvian government, I made up my mind you were the one who could help us if you would."

"Tunneling the Andes Mountains!" exclaimed Tom.

"Yes. The firm represented by my brother and myself have a contract to build a railroad for the Peruvian government. At a point some distance back in the district east of Lima, Peru, we are making a tunnel under the mountain. That is, we have it started, but now we can't advance any further."

"Why not?"

"Because of the peculiar character of the rock, which seems to defy the strongest explosive we can get. Now I understand you used a powder in your giant cannon that--"

Mr. Titus paused in his explanation, for at that moment there arose such a clatter out on the front piazza as effectually to drown conversation. There was a noise of the hoofs of a horse, the fall of a heavy body, a tattoo on the porch floor and then came an excited shout:

"Whoa there! Whoa! Stop! Look out where you're kicking! Bless my saddle blanket! Ouch! There I go!"

## Chapter II

### Explanations

"What in the world is that?" cried Mr. Job Titus, in alarm.

Tom Swift did not answer. Instead he jumped up from his

chair and ran toward the front door. Mr. Titus followed. They both saw a strange sight.

Standing on the front porch, which he seemed to occupy completely, was a large horse, with a saddle twisted underneath him. The animal was looking about him as calmly as though he always made it a practice to come up on the front piazza when stopping at a house.

Off to one side, with a crushed hat on the back of his head, with a coat split up the back, with a broken riding crop in one hand and a handkerchief in the other, sat a dignified, elderly gentleman.

That is, he would have been dignified had it not been for his position and condition. No gentleman can look dignified with a split coat and a crushed hat on, sitting under the nose of a horse on a front piazza, with his raiment otherwise much disheveled, while he wipes his scratched and bleeding face with a handkerchief.

"Bless my--bless my--" began the elderly gentleman, and he seemed at a loss what particular portion of his anatomy or that of the horse, to bless, or what portion of the universe to appeal to, for he ended up with: "Bless everything, Tom Swift!"

"I heartily agree with you, Mr. Damon!" cried Tom. "But what in the world happened?"

"That!" exclaimed Mr. Damon, pointing with his broken crop at the horse on the piazza. "I was riding him when he ran away--just as my motorcycle tried to climb a tree. No more horses for me! I'll stick to airships," and slamming his riding crop down on the porch floor with such force that the horse started back, Mr. Damon arose, painfully enough if the contortions on his face and his grunts of pain went for anything.

"Let me help you!" begged Tom, striding forward. "Mr. Titus, perhaps you will kindly lead the horse down off the piazza?"

"Certainly!" answered the tunnel contractor. "Whoa now!" he called soothingly, as the steed evinced a disposition to sit down on the side railing. "Steady now!"

The horse finally allowed himself to be led down the broad front steps, sadly marking them, as well as the floor of the piazza, with his sharp shoes.

"Ouch! Oh, my back!" exclaimed Mr. Damon, as Tom helped him to stand up.

"Is it hurt?" asked Tom, anxiously.

"No, I've just got what old-fashioned folks call a 'crick' in it," explained the elderly horseman. "But it feels more like a river than a 'crick.' I'll be all right presently."

"How did it happen?" asked Tom, as he led his guest toward the hall. Meanwhile Mr. Titus, wondering what it was all about, had tied the horse to a post out near the street curb, and had re-entered the library.

"I was riding over to see you, Tom, to ask you if you wouldn't go to South America with me," began Mr. Damon, rubbing his leg tenderly.

"South America?" cried Tom, with a sudden look at Mr. Titus.

"Yes, South America. Why, there isn't anything strange in that, is there? You've been to wilder countries, and farther away than that."

"Yes, I know--it's just a coincidence. Go on."

"Let me get where I can sit down," begged Mr. Damon. "I think that crick in my back is running down into my legs, Tom. I feel a bit weak. Let me sit down, and get me a glass of water. I shall be all right presently."

Between them Tom and Mr. Titus assisted the horseman into an easy chair, and there, under the influence of a cup of hot tea, which Mrs. Baggert, the housekeeper, insisted on making for him, he said he felt much better, and would explain the reason for his call which had culminated in such a sensational manner.

And while Mr. Damon is preparing his explanation I will take just a few moments to acquaint my new readers with some facts about Tom Swift, and the previous volumes of this series in which he has played such prominent parts.

Tom Swift was the son of an inventor, and not only inherited his father's talents, but had greatly added to them, so that now Tom had a wonderful reputation.

Mr. Swift was a widower, and he and Tom lived in a big house in Shopton, New York State, with Mrs. Baggert for a housekeeper. About the house, from time to time, shops and laboratories had been erected, until now there was a large and valuable establishment belonging to Tom and his father.

The first volume of this series is entitled, "Tom Swift

and His Motor Cycle." It was through a motor cycle that Tom became acquainted with Mr. Wakefield Damon, who lived in a neighboring town. Mr. Damon had bought the motor cycle for himself, but, as he said, one day in riding it the machine tried to climb a tree near the Swift house.

The young inventor (for even then he was working on several patents) ministered to Mr. Damon, who, disgusted with the motor cycle, and wishing to reward Tom, let the young fellow have the machine.

Tom's career began from that hour. For he learned to ride the motor cycle, after making some improvements in it, and from then on the youth had led a busy life. Soon afterward he secured a motor boat and from that it was but a step to an airship.

The medium of the air having been conquered, Tom again turned his attention to the water, or rather, under the water, and he and his father made a submarine. Then he built an electric runabout, the speediest car on the road.

It was when Tom Swift had occasion to send his wireless message from a lonely island where he had been shipwrecked that he was able to do Mr. and Mrs. Nestor a valuable service, and this increased the regard which Miss Mary Nestor felt for the young inventor, a regard that bid fair, some day, to ripen into something stronger.

Tom Swift might have made a fortune when he set out to discover the secret of the diamond makers. But Fate intervened, and soon after that quest he went to the caves of ice, where he and his friends met with disaster. In his sky racer Tom broke all records for speed, and when he went to Africa to rescue a missionary, had it not been for his electric rifle the tide of battle would have gone against him and his party.

Marvelous, indeed, were the adventures underground, which came to Tom when he went to look for the city of gold, but the treasure there was not more valuable than the platinum which Tom sought in dreary Siberia by means of his air glider.

Tom thought his end had come when he fell into captivity among the giants; but even that turned out well, and he brought two of the giants away with him. Koku, one of the two giants, became devotedly attached to the lad, much to the disgust of Eradicate Sampson, the old negro who had worked for the Swifts for a generation, and who, with his mule Boomerang, "eradicated" from the place as much dirt as possible.

With his wizard camera Tom did much to advance the cause of science. His great searchlight was of great help to the United States government in putting a stop to the Canadian smugglers, while his giant cannon was a distinct advance in ordnance, not excepting the great German guns used in the European war.

When Tom perfected his photo telephone the last objection to rendering telephonic conversation admissible evidence in a law court was done away with, for by this invention a person was able to see, as well as to hear, over the telephone wire. One practically stood face to face with the person, miles away, to whom one was talking.

The volume immediately preceding this present one is called: "Tom Swift and His Aerial Warship." The young inventor perfected a marvelous aircraft that was the naval terror of the seas, and many governments, recognizing what an important part aircraft were going to play in all future conflicts, were anxious to secure Tom's machine. But he was true to his own country, though his rivals were nearly successful in their plots against him.

The Mars, which was the name of Tom's latest craft, proved to be a great success, and the United States government purchased it. It was not long after the completion of this transaction that the events narrated in the first chapter of this book took place.

Mr. Damon and Tom had been firm friends ever since the episode of the motor cycle, and the eccentric gentleman (who blessed so many things) often went with Tom on his trips. Besides Mary Nestor, Tom had other friends. The one, after Miss Nestor, for whom he cared most (if we except Mr. Damon) was Ned Newton, who was employed in a Shopton bank. Ned also had often gone with Tom, though lately, having a better position, he had less time to spare.

"Well, do you feel better, Mr. Damon?" asked Tom, after a bit.

"Yes, very much, thank you. Bless my pen wiper! but I thought I was done for when I saw my horse bolt for your front stoop. He rushed up it, fell down, but, fortunately, I managed to get out of his way, though the saddle girth slipped. And all I could think of was that my wife would say: 'I told you so!' for she warned me not to ride this animal.

"But he never ran away with me before, and I was in a hurry to get over to see you, Tom. Now then, let's get down to business. Will you go to South America with me?"

"Whereabout in South America are you going, Mr. Damon, and why?" Tom asked.

"To Peru, Tom."

"What a coincidence!" exclaimed Mr. Titus.

"I beg your pardon?" said Mr. Damon, interrogatively.

"I said what a coincidence. I am going there myself."

"Excuse me," interposed Tom, "I don't believe, in the excitement of the moment, I introduced you gentlemen. Allow me--Mr. Damon--Mr. Titus."

The presentation over, Mr. Damon went on:

"You see, Tom, I have lately invested considerable money in a wholesale drug concern. We deal largely in Peruvian remedies, principally the bark of the cinchona tree, from which quinine is made. Of late there has been some trouble over our concession from the Peruvian government, and the company has decided to send me down there to investigate.

"Of course, as soon as I made up my mind to go I thought of you. So I came over to see if you would not accompany me. All went well until I reached your front gate. Then my horse became frightened by a yellow toy balloon some boy was blowing up in the street and bolted with me. I suppose if it had been a red or green balloon the effect would have been the same. However, here I am, somewhat the worse for wear. Now Tom, what do you say? Will you go to South America--to Peru--with me, and help look up this Quinine business?"

Once more Mr. Titus and Tom looked at each other.

### Chapter III

#### A Face at the Window

"What is the matter?" asked Mr. Damon, catching the glance between Tom and the contractor. "Is there anything wrong with South America--Peru? I know they have lots of revolutions in those countries, but I don't believe Peru is what they call a 'banana republic'; is it?"

"No," and Mr. Titus shook his head. "It isn't a question of revolutions."



"But it's something!" insisted Mr. Damon. "Bless my ink bottle! but it's something. As soon as I mention Peru, Tom, you and Mr. Titus eye each other as if I'd said something dreadful. Out with it! What is it?"

"It's just--just a coincidence," Tom said. "But go on, Mr. Damon. Finish what you have to say and then we'll explain."

"Well, I guess I've told you all you need to know for the present. I went into this wholesale drug concern, hoping to make some money, but now, on account of the trouble down in Peru, we stand to lose considerable unless I can get back the cinchona concession."

"What does that mean?" Tom asked.

"Well, it means that our concern secured from the Peruvian government the right to take this quinine-producing bark from the trees in a certain tropical section. But there has been a change in the government in the district where our men were working, and now the privilege, or concession, has been withdrawn. I'm going down to see if I can't get it back. And I want you to go with me."

"And I came here for very nearly the same thing," went on Mr. Titus. "That is where the coincidence comes in. It is strange that we should both appeal to Mr. Swift at the same time."

"Well, Tom's a valuable helper!" exclaimed Mr. Damon. "I know him of old, for I've been on many a trip with him."

"This is the first time I have had the pleasure of meeting him," resumed the tunnel contractor, "but I have heard of him. I did not ask him to go to South America for us. I only wanted to get some superior explosive for my brother, who is in charge of driving the railroad tunnel through a spur of the Andes. I look after matters up North here, but I may have to go to Peru myself."

"As I told Mr. Swift, I had read of his invention of the giant cannon and the special powder he used in it to send a projectile such a distance. The cannon is now mounted as one of the pieces of ordnance for the defense of the Panama Canal, is it not?" he asked Tom.

The young inventor nodded in assent.

"Having heard of you, and the wonderful explosive used in your big cannon," the contractor went on, "I wrote to my brother that I would try and get some for him."

"You see," he resumed, "this is the situation. Back in the Andes Mountains, a couple of hundred miles east of Lima, the government is building a short railroad line to connect two others. If this is done it will mean that the products of Peru--quinine bark, coffee, cocoa, sugar, rubber, incense and gold can more easily be transported. But to connect the two railroad lines a big tunnel must be constructed.

"My brother and I make a specialty of such work, and when we saw bids advertised for, our firm put in an estimate. There was some trouble with a rival firm, which also bid, but we secured the contract, and bound ourselves to have the tunnel finished within a certain time, or forfeit a large sum.

"That was over a year ago. Since then our men, aided by the native Indians of Peru, have been tunneling the mountain, until, about a month back, we struck a snag."

"What sort of snag?" Tom asked.

"A snag in the shape of extra hard rock," replied the tunnel contractor. "Briefly, Paleozoic rocks make up the eastern part of the Andean Mountains in Peru, while the western range is formed of Mesozoic beds, volcanic ashes and lava of comparatively recent date. Near the coast the lower hills are composed of crystalline rocks, syenite and granite, with, here and there, a strata of sandstone or limestone. These are, undoubtedly, relics of the lower Cretaceous age, and we, or rather, my brother, states that he has found them covered with marine Tertiary deposits.

"Now this Mesozoic band varies greatly. Porphyritic tuffs and massive limestone compose the western chain of the Andes above Lima, while in the Oroya Valley we find carbonaceous sandstones. Some of the tuffs may be of the Jurassic age, though the Cretaceous period is also largely represented.

"Now while these different masses of rock formation offer hard enough problems to the tunnel digger, still we are more or less prepared to meet them, and we figured on a certain percentage of them. Up to the present time we have met with just about what we expected, but what we did not expect was something we came upon when the tunnel had been driven three miles into the mountain."

"What did you find?" asked Tom, who knew enough about geology to understand the terms used. Mr. Damon did not, however, and when Mr. Titus rolled off some of the technical words, the drug investor softly murmured such expressions as

"Bless my thermometer! Bless my porous plaster!"

"We found," resumed Mr. Titus, "after we had bored for a considerable distance into the mountain, a mass of volcanic rock which is so hard that our best diamond drills are dulled in a short time, and the explosives we use merely shatter the face of the cutting, and give us hardly any progress at all.

"It was after several trials, and when my brother found that he was making scarcely any progress, compared to the energy of his men and the blasting, that he wrote to me, explaining matters. I at once thought of you, Tom Swift, and your powerful explosive, for I had read about it.

"Now then, will you sell us some of your powder--explosive or whatever you call it--Mr. Swift, or tell us where we can get it? We need it soon, for we are losing valuable time."

Mr. Titus paused to draw on a piece of paper a rough map of Peru, and the district where the tunnel was being constructed. He showed where the two railroad lines were, and where the new route would bring them together, the tunnel eliminating a big grade up which it would have been impossible to haul trains of any weight.

"What do you say, Mr. Swift?" the contractor concluded. "Will you let us have some of your powder? Or, better still, will you come to Peru yourself? That would suit us immensely, for you could be right on the ground. And you could carry out your plan of going with your friend here," and Mr. Titus nodded toward Mr. Damon. "That is, if you were thinking of going."

"Well, I was thinking of it," Tom admitted. "Mr. Damon and I have been on so many trips together that it seems sort of natural for us to 'team it.' I have never been to Peru, and I should like to see the country. There is only one matter though, that bothers me."

"What is it?" asked Mr. Titus quickly. "If it is a question of money dismiss it from your mind. The Peruvian government is paying a large sum for this tunnel, and we stand to make considerable, even if we were the lowest bidders. We can afford to pay you well--that is, we shall be able to if we can complete the bore on time. That is what is bothering me now--the unexpected strata of hard rock we have met with, which seems impossible to blast. But I feel sure we can do it with the explosive used in your giant cannon."

"That is just the point!" Tom exclaimed. "I am not so sure my explosive would do."

"Why not?" the tunnel contractor asked. "It's powerful enough; isn't it?"

"Yes, it is powerful enough, but whether it will have the right effect on volcanic rock is hard to say. I should like to see a rock sample."

"I can telegraph to have some sent here to you," said Mr. Titus eagerly. "Meantime, here is a description of it. I can read you that"; and, taking a letter from his pocket, he read to Tom a geological description of the hard rock.

"Hum! Yes," mused Tom, as he listened. "It seems to be of the nature of obsidian."

"Bless my watch chain!" cried Mr. Damon. "What's that?"

"Obsidian is a volcanic rock--a sort of combination of glass and flint for hardness," Tom explained. "It is brittle, black in color, and the natives of the Admiralty Islands use it for tipping their spears with which they slay victims for their cannibalistic feasts."

"Bless my--bless my ear-drums!" gasped Mr. Damon. "Cannibals!"

"Obsidian was also used by the ancient Mexicans to make knives and daggers," Tom went on. "When Cortez conquered Mexico he found the priests cutting the hearts from their living victims with knives made from this volcanic glass-like rock, known as obsidian. It may be that your brother has met with a vein of that in the tunnel," Tom said to the contractor.

"Possibly," admitted Mr. Titus.

"In that case," Tom stated, "I may have to use a new kind of explosive. That used for my giant cannon would merely crumble the hard rock for a short distance."

"Then will you accept the contract, and help us out?" asked Mr. Titus eagerly. "We will pay you well. Will you come to Peru and look over the ground?"

"And kill two birds with one stone, and come with me also?" put in Mr. Damon.

Tom pondered for a moment. He was about to answer when the tunnel contractor, who was looking from the library window, suddenly jumped from his chair crying:

"There he is again! Once more dogging me!"

As he rushed from the room, Tom and Mr. Damon had a glimpse of a face at one of the low library windows--a face

that had an evil look. It disappeared as Mr. Titus ran from the room.

## Chapter IV

### Tom's Experiments

"Bless my looking glass, Tom, what does that mean?" exclaimed Mr. Damon. "That face!"

"I don't know," answered the young inventor. "But the sight of some one looking in here seemed to disturb Mr. Titus. We must follow him."

"Perhaps he saw your giant Koku looking in," suggested the odd, little man who blessed everything he could think of. "The sight of his face, to any one not knowing him, Tom, would be enough to cause fright."

"It wasn't Koku who looked in the window," said Tom, decidedly. "It was some stranger. Come on."

The young inventor and Mr. Damon hurried out after the tunnel contractor, who was running down the road that led in front of the Swift homestead.

"He's chasing some one, Tom," called Mr. Damon.

"Yes, I see he is. But who?"

"I can't see any one," reported Mr. Damon, who had run down to the gate, at which his horse was still standing. Mr. Damon had washed the dirt from his hands and face, and was wearing one of Mr. Swift's coats in place of his own split one.

Tom joined the eccentric man and together they looked down the road after the running Mr. Titus. They were in half a mind to join him, when they saw him pull up short, raise his hands as though he had given over the pursuit, and turn back.

"I guess he got away, whoever he was," remarked Tom. "We'll walk down and meet Mr. Titus, and ask him what it all means."

Shortly afterward they came up to the contractor, who was breathing heavily after his run, for he was evidently not

used to such exercise.

"I beg your pardon, Tom Swift, for leaving you and Mr. Damon in such a fashion," said Mr. Titus, "but I had to act quickly or lose the chance of catching that rascal. As it was, he got away, but I think I gave him a scare, and he knows that I saw him. It will make him more cautious in the future."

"Who was it?" asked Tom.

"Well, I didn't have as close a look as I could have wished for," the contractor said, as he walked back toward the house with Tom and Mr. Damon, "but I'm pretty sure the face that peered in at us through the library window was that of Isaac Waddington."

"And who is he, if it isn't asking information that ought not be given out?" inquired Mr. Damon.

"Oh, no, certainly. I can tell you," said the contractor. "Only perhaps we had better wait until we get back to the house."

"Since one of their men was seen lurking around here there may be others," went on Mr. Titus, when the three were once more seated in the Swift library. "It is best to be on the safe side. The face I saw, I'm sure, was that of Waddington, who is a tool of Blakeson & Grinder, rival tunnel contractors. They put in a bid on this Andes tunnel, but we were lower in our figures by several thousand dollars, and the contract was awarded to us."

"Blakeson & Grinder tried, by every means in their power, to get the job away from us. They even invoked the aid of some Peruvian revolutionists and politicians, but we held our ground and began the work. Since then they have had spies and emissaries on our trail, trying their best to make us fail in our work, so the Peruvian officials might abrogate the contract and give it to them."

"But, so far, we've managed to come out ahead. This Waddington is a sort of spy, and I've found him dodging me several times of late. I suppose he wants to find out my plans so as to be ready to jump in the breach in case we fail."

"Do you think your rivals had anything to do with the difficulties you are now meeting with in digging the tunnel?" asked Mr. Damon. Mr. Titus shook his head.

"The present difficulties are all of Nature's doing," he said. "It's just the abnormally hard rock that is bothering

us. Only for that we'd be all right, though we might have petty difficulties because of the mean acts of Blakeson & Grinder. But I don't fear them."

"How do you think this Waddington, if it was he, knew you were coming here?" asked Tom.

"I can only guess. My brother and I have had some correspondence regarding you, Tom Swift. That is, I announced my intention of coming to see you, and my brother wrote me to use my discretion. I wrote back that I would consult you.

"Our main office is in New York, where we employ a large clerical and expert force. There is nothing to prevent one of our stenographers, for instance, turning traitor and giving copies of the letters of my brother and myself to our rivals.

"Mind you, I don't say this was done, and I don't suspect any of our employees, but it would be an easy matter for any one to know my plans. I never thought of making a secret of them, or of my trip here. In some way Waddington found out about the last, and he must have followed me here. Then he sneaked up under the window, and tried to hear what we said."

"Do you think he did?" asked Tom.

"I wouldn't be surprised. We took no pains to lower our voices. But, after all, he hasn't learned much that he didn't know before, if he knew I was coming here. He didn't learn the secret of the explosive that must be used, and that is the vital thing. For I defy him, or any other contractor, to blast that hard rock with any known explosive. We've tried every kind on the market and we've failed. We'll have to depend on you, Tom Swift, to help us out with some of your giant cannon powder."

"And I'm not sure that will work," said the young inventor. "I think I'll have to experiment and make a new explosive, if I conclude to go to Peru."

"Oh, you'll go all right!" declared Mr. Titus with a smile. "I can see that you are eager for the adventures I am sure you'll find there, and, besides, your friend here, Mr. Damon, needs you."

"That's what I do, Tom!" exclaimed the odd man. "Bless my excursion ticket, but you must come!"

"I'll have to invent the new powder first," Tom said.

"That's what I like to hear!" exclaimed Mr. Titus. "It shows you are thinking of coming with us."

Tom only smiled.

"I am so anxious to get the proper explosive," went on Mr. Titus, "that I would even purchase it from our rivals, Blakeson & Grinder, if I thought they had it. But I'm sure they have not, though they may think they can get it."

"That may be the reason they are following me so closely. They may want to know just when we will fail, and have to give up the contract, and they may think they can step in and finish the work. But I don't believe, without your help, Tom Swift, that they can blast that hard rock, and--"

"Well, I'll say this," interrupted Tom, "first come, first served with me, other things being equal. You have applied to me and, like a lawyer, I won't go over to the other side now. I consider myself retained by your firm, Mr. Titus, to invent some sort of explosive, and if I am successful I shall expect to be paid."

"Oh, of course!" cried the contractor eagerly.

"Very good," Tom went on. "You needn't fear that I'll help the other fellows. Now to get down to business. I must see some samples of this rock in order to know what kind of explosive force is needed to rend it."

"I have some in New York," went on the contractor. "I'll have it sent to you at once. I would have brought it, only it is too heavy to carry easily, and I was not sure I could engage you."

"Did that fellow--Waddington, I believe you called him-- get away from you?" asked Mr. Damon.

"Clean away," the contractor answered. "He was a better runner than I."

"It doesn't matter much," Tom said. "He didn't hear anything that would benefit him, and I'll give my men orders to be on the lookout for him. What sort of fellow is he, Mr. Titus?"

The contractor described the eavesdropper, and Mr. Damon exclaimed:

"Bless my turkey wish-bone! I'm sure I passed that chap when I was riding over to see you a while ago, Tom."

"You did?"



"Yes, on the highway. He inquired the way to your place. But there was nothing strange in that, since you employ a number of men, and I thought this one was coming to look for work. I can't say I liked his appearance, though."

"No, he isn't a very prepossessing individual," commented Mr. Titus. "Well, now what's the first thing to be done, Tom Swift?"

"Get me some samples of the rock, so I can begin my experiments."

"I'll do that. And now let us consider about going to Peru. For I'm sure you will be successful in your experiments, and will find for us just the powder or explosive we need."

"We can go together." said Mr. Damon. "I shall certainly feel more at home in that wild country if I know Tom Swift is with me, and I will appreciate the help of you and your friends, Mr. Titus, in straightening out the tangles of our drug business."

"I'll do all I can for you, Mr. Damon."

The three then talked at some length regarding possible plans. Tom sent out word to one of his men to keep a sharp watch around the house and grounds, against the possible return of Waddington, but nothing more was seen of him, at least for the time being.

Mr. Titus drew up a sort of tentative agreement with Tom, binding his firm to pay a large sum in case the young inventor was successful, and then the contractor left, promising to have the rock samples come on later by express.

Mr. Damon, after blessing a few dozen more or less impersonal objects, took his departure, his fractious horse having quieted down in the meanwhile, and Tom was left to himself.

"I wonder what I've let myself in for now," the youth mused, as he went back to his laboratory. "It's a new field for me--tunnel blasting. Well, perhaps something may come of it."

But of the strange adventure that was to follow his agreement to help Mr. Titus, our hero, Tom Swift, had not the least inkling.

Tom went back to his labors over the gyroscope problem, but he could arrive at no satisfactory conclusion, and,

tossing aside the papers, covered with intricate figures, he exclaimed:

"Oh, I'm going for a walk! This thing is getting on my nerves."

He strolled through the Shopton streets, and as he reached the outskirts of the town, he saw just ahead of him the figure of a girl. Tom quickened his pace, and presently was beside her.

"Where are you going, Mary?" he asked.

"Oh, Tom! How you startled me!" she exclaimed, turning around. "I was just thinking of you."

"Thanks! Something nice?"

"I shan't tell you!" and she blushed. "But where are you going?"

"Walking with you!"

Tom was nothing if not bold.

"Hadn't you better wait until you're asked?" she retorted, mischievously.

"If I did I might not get an invitation. So I'm going to invite myself, and then I'm going to invite you in here to have an ice cream soda," and he and Miss Nestor were soon seated at a table in a candy shop.

Tom had nearly finished his ice cream when he glanced toward the door, and started at the sight of a man who was entering the place.

"What's the matter?" asked Mary. "Did you drop some ice cream, Tom?"

"No, Mary. But that man--"

Mary turned in time to see an excited man hurry out of the candy shop after a hasty glance at Tom Swift.

"Who was he?" the girl asked.

"I--er--oh, some one I thought I knew, but I guess I don't," said Tom, quickly. "Have some more cream, Mary?"

"No, thank you. Not now."

Tom was glad she did not care for any, as he was anxious

to get outside, and have a look at the man, for he thought he had recognized the face as the same that had peered in his window. But when he and Miss Nestor reached the front of the shop the strange man was not in sight.

"I guess he came in to cool off after his run," mused Tom, "but when he saw me he didn't care about it. I wonder if that was Waddington? He's a persistent individual if it was he."

"Are you undertaking any new adventures, Tom?" asked Mary.

"Well, I'm thinking of going to Peru."

"Peru!" she cried. "Oh, what a long way to go! And when you get there will you write to me? I'm collecting stamps, and I haven't any from Peru."

"Is that--er--the only reason you want me to write?" asked Tom.

"No," said Mary softly, as she ran up the walk.

Tom smiled as he turned away.

Three days later he received a box from New York. It contained the samples from the Andes tunnel, and Tom at once began his experiments to discover a suitable explosive for rending the hard stone.

"It is compressed molten lava," said Mr. Swift. "You'll never get an explosive that will successfully blast that, Tom."

"We'll see," declared the young inventor.

## Chapter V

### Mary's Present

Outside a rudely-constructed shack, in the middle of a large field, about a mile away from the nearest of the buildings owned by Tom Swift and his father, were gathered a group of figures one morning. From the shack, trailing over the ground, were two insulated wires, which led to a pile of rocks and earth some distance off. Out of the temporary building came Koku, the giant, bearing in his arms a big rock, of peculiar formation.

"That's it, Koku!" exclaimed Tom Swift. "Now don't drop it on your toes."

"No, Master, me no drop," the giant said, as he strode off with the heavy load as easily as a boy might carry a stone for his sling-shot.

Koku placed the big rock on top of the pile of dirt and stones and came back to the hut, just as Eradicate, the colored man-of-all-work, emerged. Koku was not looking ahead, and ran into Eradicate with such force that the latter would have fallen had not the giant clasped his big arms about him.

"Heah now! Whut yo' all doin' t' me?" angrily demanded Eradicate. "Yo' done gone an' knocked de breff outen me, dat's whut yo' all done! I'll bash yo' wif a rock, dat's what I'll do!"

Koku, laughing, tried to explain that it was all an accident, but Eradicate would not listen. He looked about for a stone to throw at the giant, though it was doubtful, with his feeble strength, and considering the great frame of the big man, if any damage would have been done. But Eradicate saw no rocks nearer than the pile in which ended the two insulated wires, and, with mutterings, the negro set off in that direction, shuffling along on his rheumatic legs.

From the shack Tom Swift hailed:

"Hi there, Rad! Come back! Where are you going?"

"I'se gwine t' git a rock, Massa Tom, an' bash de haid ob dat big lummo ob a giant! He done knocked de breff outen me, so he did."

"You come back from that stone pile!" Tom ordered. "I'm going to blow it up in a minute, and if you get too near you'll have the breath knocked out of you worse than Koku did it. Come back, I say!"

But Eradicate was obstinate and kept on. Tom, who was adjusting a firing battery in the shack, laughed, and then in exasperation cried:

"Koku, go and get him and bring him back. Carry him if he won't come any other way. I don't want the dear old chump to get the fright of his life, and he sure will if he goes too close. Bring him back!"

"Koku bring, Master," was the giant's answer.

He ran toward Eradicate, who, seeing his tormentor approaching, redoubled his shuffling pace toward the stone pile. But he was no match for the giant, who, ignoring his struggles, picked up Eradicate, and, flinging him over his shoulder like a sack of meal, brought him to the shack.

"There him be, Master!" said the giant.

"So I see," laughed Torn. "Now you stay here, Rad."

"No, sah! No, sah, Massa Tom! I--I'se gwine t' git a rock an'--an' bash his haid--dat's what I'se gwine t' do!" and the colored man tried to struggle to his feet.

"Look out now!" cried Tom, suddenly. "If things go right there won't be a rock left for you to 'bash' anybody's head with, Rad. Look out!"

The three covered inside the shack, which, though it was rudely made, was built of heavy logs and planks, with a fronting of sod and bags of sand.

Tom turned a switch. There was a loud report, and where the stone pile had been there was a big hole in the ground, while the air was filled with fragments of rock and dirt. These came down in a shower on the roof of the shack, and Eradicate covered his ears with his trembling hands.

"Am--am de world comin' to de end, Massa Tom?" he asked. "Am dat Gabriel's trump I done heah?"

"No, you dear old goose!" laughed the young inventor. "That was just a charge of my new explosive--a small charge, too. But it seems to have done the work."

He ran from the shack to the place where the rock pile had been, and picked up several small fragments.

"Busted all to pieces!" exulted Tom Swift. "Not a piece left as big as a hickory nut. That's going some! I've got the right mixture at last. If an ounce did that, a few hundred pounds ought to knock that Andes tunnel through the mountain in no time. I'll telegraph to Mr. Titus."

Leaving Koku and Rad to collect the wires and firing apparatus, there being no danger now, as no explosive was left in the shack, Tom made his way back to the house. His father met him.

"Well, Tom," he asked, "another failure?"

"No, Dad! Success! This time I turned the trick. I seem to

have gotten just the right mixture. Look, these are some of the pieces left from the big rock--one of the samples Mr. Titus sent me. It was all cracked up as small as this," and he held out the fragments he had picked up in the field.

Mr. Swift regarded them for a few moments.

"That's better, Tom," he said. "I didn't think you could get an explosive that would successfully shatter that hard rock, but you seem to have done it. Have you the formula all worked out?"

"All worked out, Dad. I only made a small quantity, but the same proportions will hold good for the larger amounts. I'm going to start in and make it now. And then--Ho! for Peru!"

Tom struck an attitude, such as some old discoverer might have assumed, and then he hurried into the house to telephone a telegram to the Shopton office. The message was to Mr. Titus, and read:

"Explosive success. Start making it at once. Ready for Peru in month's time."

"Thirteen words," repeated Tom, as the operator called them back to him. "I hope that doesn't mean bad luck."

The experiment which Tom Swift had just brought to a successful conclusion was one of many he had conducted, extending over several wearying weeks.

As soon as Tom had received the samples of the rock he had begun to experiment. First he tried some of the explosive that was so successful in the giant cannon. As he had feared, it was not what was needed. It cracked the rock, but did not disintegrate it, and that was what was needed. The hard rock must be broken up into fragments that could be easily handled. Merely to crack it necessitated further explosions, which would only serve to split it more and perhaps wedge it fast in the tunnel.

So Tom tried different mixtures, using various chemicals, but none seemed to be just right. The trials were not without danger, either. Once, in mixing some ingredients, there was an explosion that injured one man, and blew Tom some distance away. Fortunately for him, there was an open window in the direction in which he was propelled, and he went through that, escaping with only some cuts and bruises.

Another time there was a hang-fire, and the explosive

burned instead of detonating, so that one of the shops caught, and there was no little work in subduing the flames.

But Tom would not give up, and finally, after many trials, he hit on what he felt to be the right mixture. This he took out to the big lot, and having made a miniature tunnel with some of the sample rock, and having put some of the explosive in a hole bored in the big chunk Koku carried, Tom fired the charge. The result we have seen. It was a success.

A day after receiving Tom's message Mr. Titus came on and a demonstration was given of the powerful explosive.

"Tom, that's great!" cried the tunnel contractor. "Our troubles are at an end now."

But, had he known it, new ones were only just beginning.

Tom at once began preparations for making the explosive on a large scale, as much of it would be needed in the Andes tunnel. Then, having turned the manufacturing end of it over to his men, Tom began his preparations for going to Peru.

Mr. Damon was also getting ready, and it was arranged that he, with Tom and Mr. Titus, should take a vessel from San Francisco, crossing the continent by train. The supply of explosive would follow them by special freight.

"We might have gone by Panama except for the slide in the canal," Tom said. "And I suppose I could take you across the continent in my airship, Mr. Titus, if you object to railroad travel."

"No, thank you, Tom. If it's just the same to you, I'd rather stay on the ground," the contractor said. "I'm more used to it."

A day or so before the start for San Francisco was to be made, Tom, passing a store in Shopton, saw something in the window he thought Mary Nestor would like. It was a mahogany work-box, of unique design, beautifully decorated, and Tom purchased it.

"Shall I have it sent?" asked the clerk.

"No, thank you," Tom answered.

He knew the young lady who had waited on him, and, for reasons of his own, he did not want her to know that Mary was to get the box.

Carrying the present to his laboratory, Tom prepared to wrap it up suitably to send to Mary, with a note. Just,

however, as he was looking for a box suitable to contain the gift, he received a summons to the telephone. Mr. Titus, in New York, wanted to speak to him.

"Here, Rad!" Tom called. "Just box this up for me, like a good fellow, and then take it to Miss Nestor at this address; will you?" and Tom handed his man the addressed letter he had written to Mary. "Be careful of it," Tom cautioned.

"Oh, I'll be careful, Massa Tom," was the reply. "I'll shore be careful."

And Eradicate was--all too careful.

## Chapter VI

### Mr. Nestor's Letter

"Got t' git a good strong box fo' dish yeah," murmured Eradicate, as he looked at the beautiful mahogany present Tom had turned over to him to take to Mary. "Mah Landy! Dat suttinly am nice; Ah! Um! Jest laik some ob de old mahogany furniture dat was in our fambily down Souf." Eradicate did not mean his family, exactly, but the one in which he had been a slave.

"Yassum, dat shore am nice!" he went on, talking to himself as he admired the present. "I shore got t' put dat in a good box! An' dish year note, too. Let's see what it done say on de outside."

Eradicate held the envelope carefully upside down, and read--or rather pretended to read--the name and address. Eradicate knew well enough where Mary lived, for this was not the first time he had gone there with messages from his young master.

"Massa Tom shore am a fine writer," mused the negro, as he slowly turned the envelope around. "I cain't read nobody's writin' but hisen, nohow."

Had Eradicate been strictly honest with himself, he would have confessed that he could not read any writing, or printing either. His education had been very limited, but one could show him, say, a printed sign and tell him it read "Danger" or "Five miles to Branchville," or anything like that, and the next time he saw it, Eradicate would know what



that sign said. He seemed to fix a picture of it in his mind, though the letters and figures by themselves meant nothing to him. So when Tom told him the envelope contained the name and address of Miss Nestor, Eradicate needed nothing more.

He rummaged about in some odds and ends in the corner of the laboratory, and brought out a strong, wooden box, which had a cover that screwed down.

"Dat'll be de ticket!" Eradicate exclaimed. "De mahogany present will jest fit." Eradicate took some excelsior to pad the box, and then, dropping inside it the gift, already wrapped in tissue paper, he proceeded to screw on the cover.

There was something printed in red letters on the outside box, but Eradicate could not read, so it did not trouble him.

"Dat Miss Nestor shore will laik her present," he murmured. "An' I'll be mighty keerful ob it' laik Massa Tom tole me. He wouldn't trust dat big lummo Koku wif anyt'ing laik dis."

Screwing on the cover, and putting a piece of wrapping paper outside the rough, wooden box, with the letter in his hand, Eradicate, full of his own importance, set off for Miss Nestor's house. Tom had not returned from the telephone, over which he was talking to Mr. Titus.

The message was an important one. The contractor said he had received word from his brother in Peru that his presence was urgently needed there.

"Could you arrange to get off sooner than we planned, Tom?" asked Mr. Titus. "I am afraid something has happened down there. Have you sent the first shipment of explosive?"

"Yes, that went three days ago. It ought to arrive at Lima soon after we do. Why yes, I can start to-night if we have to. I'll find out if Mr. Damon can be with us on such short notice."

"I wish you would," came from Mr. Titus. "And say, Tom, do you think you could take that giant Koku with you?"

"Why?"

"Well, I think he'd come in handy. There are some pretty rough characters in those Andes Mountains, and your big friend might be useful."

"All right. I was thinking of it, anyhow. Glad you

mentioned it. Now I'll call up Mr. Damon, and I'll let you know, in an hour or so, if he can make it."

"Bless my hair brush, yes, Tom!" exclaimed the eccentric man, when told of the change in plans. "I can leave to-night as well as not."

Word to this effect was sent on to Mr. Titus, and then began some hurrying on the part of Tom Swift. He told Koku to get ready to leave for New York at once, where he and the giant would join Mr. Titus and Mr. Damon, and start across the continent to take for steamer for Lima, Peru.

"Rad, did you send that present to Miss Nestor?" asked Tom, later, as he finished packing his grip.

"Yas, sah. I done did it. Took it mase'f!"

"That's good! I guess I'll have to say good-bye to Mary over the telephone. I won't have time to call. I'm glad I thought of the present."

Tom got the Nestor house on the wire. But Mary was not in.

"There's a package here for her," said the girl's mother. "Did you--?"

"Yes, I sent that," Tom said. "Sorry I won't be able to call and say good-bye, but I'm in a terrible rush. I'll see her as soon as I get back, and I'll write as soon as I arrive."

"Do," urged Mrs. Nestor. "We'll all be glad to hear from you," for Tom and Mary were tentatively engaged to be married.

Tom and Koku went on with their hurried preparations to leave for New York. Eradicate begged to be taken along, but Tom gently told the faithful old servant that it was out of the question.

"Besides, Rad," he said, "it's dangerous in those Andes Mountains. Why, they have birds there, as big as cows, and they can swoop down and carry off a man your size."

"Am dat shorely so, Massa Tom?"

"Of course it is! You get the dictionary and read about the condors of the Andes Mountains."

"Dat's what I'll do, Massa Tom. Birds as big as cows what kin pick up a man in dere beaks, an' carry him off! Oh, my! No, sah, Massa Tom! I don't want t' go. I'll stay right

yeah!"

Shortly before Tom and Koku departed for the railroad station, where they were to take a train for New York, Mary Nestor returned home.

"Tom called you on the telephone to say good-bye," her mother informed her, "and said he was sorry he could not see you. But he sent some sort of gift."

"Oh, how sweet of him!" Mary exclaimed. "Where is it?"

"On the dining room table. Eradicate brought it with a note."

Mary read the note first.

In it Tom begged Mary to accept the little token, and to think of him when she used it.

"Oh! I wonder what it can be," she cried in delight.

"Better open it and see," advised Mr. Nestor, who had come in at that moment.

Mary cut the string of the outside paper, and folded back the wrapper. A wooden box was exposed to view, a solid, oblong, wooden box, and on the top, in bold, red letters Mary, her father and her mother read:

**DYNAMITE! HANDLE WITH CARE!**

"Oh! Oh!" murmured Mrs. Nestor.

"Dynamite! Handle with care!" repeated Mr. Nestor, in a sort of dazed voice. "Quick! Get a pail of water! Dump it in the bathtub! Soak it good, and then telephone for the police. Dynamite! What does this mean?"

He rushed toward the kitchen, evidently with the intention of getting a pail of water, but Mary clasped him by the arm.

"Father!" she exclaimed. "Don't get so excited!"

"Excited!" he cried. "Who's excited? Dynamite! We'll all be blown up! This is some plot! I don't believe Tom sent this at all! Look out! Call the police! Excited! Who's getting excited?"

"You are, Daddy dear!" said Mary calmly. "This is some mistake. Tom did send this--I know his writing. And wasn't it Eradicate who brought this package, Mother?"

"Yes, my dear. But your father is right. Let him put it in water, then it will be safe. Oh, we'll all be blown up. Get the water!"

"No!" cried Mary. "There is some mistake. Tom wouldn't send me dynamite. There must be a present for me in there. Tom must have put it in the wrong box by mistake. I'm going to open it."

Mary's calmness had its effect on her parents. Mr. Nestor cooled down, as did his wife, and a closer examination of the outer box did not seem to show that it was an infernal machine of any kind.

"It's all a mistake, Daddy," Mary said. "I'll show you. Get me a screw driver."

After some delay one was found, and Mr. Nestor himself opened the box. When the tissue paper wrappings of the mahogany gift were revealed he gave a sigh of relief, and when Mary undid the wrappings, and saw what Tom had sent her, she cried:

"Oh, how perfectly dear! Just what I wanted! I wonder how he knew? Oh, I just love it!" and she hugged the beautiful box in her arms.

"Humph!" exclaimed Mr. Nestor, a slowly gathering light of anger showing in his eyes. "It is a nice present, but that is a very poor sort of joke to play, in my estimation."

"Joke! What joke?" asked Mary.

"Putting a present in a box labeled Dynamite, and giving us such a scare," went on her father.

"Oh, Father, I'm sure he didn't mean to do it!" Mary said, earnestly.

"Well, maybe he didn't! He may have thought it a joke, and he may not have! But, at any rate, it was a piece of gross carelessness on his part, and I don't care to consider for a son-in-law a young man as careless as that!"

"Oh, Daddy!" expostulated Mary.

"Now, now! Tut, tut!" exclaimed Mr. Nestor. "It isn't your fault, Mary, but this Tom Swift must be taught a lesson. He was careless, if nothing worse, and, for all he knew, there might have been some stray bits of dynamite in that packing box. It won't do! It won't do! I'll write him a letter, and give him a piece of my mind!"

And in spite of all his wife and his daughter could say, Mr. Nestor did write Tom a scathing letter. He accused him of either perpetrating a joke, or of being careless, or both, and he intimated that the less he saw of Tom at the Nestor home hereafter the better pleased he would be.

"There! I guess that will make him wish he hadn't done it!" exclaimed Mr. Nestor, as he called a messenger and sent the letter to Tom's house.

Mary and her mother did not know the contents of the note, but Mary tried to get Tom on the wire and explain. However, she was unable to reach him, as Tom was on the point of leaving.

The messenger, with Mr. Nestor's letter, arrived just as our hero was receiving the late afternoon mail from the postman, and just as Tom and Koku were getting in an automobile to leave for the depot.

"Good-bye, Dad!" Tom called. "Good-bye, Mrs. Baggert!" He thrust Mr. Nestor's letter, unopened, together with some other mail matter, which he took to be merely circulars, into an inner pocket, and jumped into the car.

Tom and Koku were off on the first stage of their journey.

## Chapter VII

### Off for Peru

"Well, Tom Swift, you're on time I see," was Mr. Job Titus' greeting, when our hero, and Koku, the giant, alighted from a taxicab in New York, in front of the hotel the contractor had appointed as a meeting place.

"Yes, I'm here."

"Did you have a good trip?"

"Oh, all right, yes. Nothing happened to speak of, though we were delayed by a freight wreck. Has Mr. Damon got here yet?"

"Not yet, Tom. But I had a message saying he was on his way. Come on up to the rooms I have engaged. Hello, what's all the crowd here for?" asked the contractor in some

surprise, for a throng had gathered at the hotel entrance.

"I expect it's Koku they're staring at," announced Tom, and the giant it was who had attracted the attention. He was carrying his own big valise, and a small steamer trunk belonging to Tom, as easily as though they weighed nothing, the trunk being under one arm.

"I guess they don't see men of his size outside of circuses," commented the contractor. "We can pretty nearly, though not quite match him, down in Peru though, Tom. Some of the Indians are big fellows."

"We'll get up a wrestling match between one of them and Koku," suggested Tom. "Come on!" he called to the giant, who was surrounded by a crowd.

Koku pushed his way through as easily as a bull might make his way through a throng of puppies about his heels, and as Tom, Mr. Titus and the giant were entering the hotel corridor, the chauffeur of the taxicab called out with a laugh:

"I say, boss, don't you think you ought to pay double rates on that chap," and he nodded in the direction of the giant.

"That's right!" added some one in the crowd with a laugh. "He might have broken the springs."

"All right," assented Tom, good-naturedly, tossing the chauffeur a coin. "Here you are, have a cigar on the giant."

There was more laughter, and even Koku grinned, though it is doubtful if he knew what about, for he could not understand much unless Tom spoke to him in a sort of code they had arranged between them.

"Sorry to have hastened your departure," began Mr. Titus when he and Tom sat in the comfortable hotel rooms, while Koku stood at a window, looking out at what to him were the marvelous wonders of the New York streets.

"It didn't make any difference," replied the young inventor. "I was about ready to come anyhow. I just had to hustle a little," and he thought of how he had had to send Mary's present to her instead of taking it himself. As yet he was all unaware of the commotion it had caused.

"Did you get the powder shipment off all right?"

"Yes, and it will be there almost as soon as we. Other shipments will follow as we need them. My father will see to

that."

"I'm glad you hit on the right kind of powder," went on the contractor. "I guess I didn't make any mistake in coming to you, Tom."

"Well, I hope not. Of course the explosive worked all right in experimental charges with samples of the tunnel rock. It remains to be seen what it will do under actual conditions, and in big service charges."

"Oh, I've no doubt it will work all right."

"What time do we leave here?" Tom asked.

"At two-thirty this afternoon. We have just time to get a good dinner and have our baggage transferred to the Chicago limited. In less than a week we ought to be in San Francisco and aboard the steamer. I hope Mr. Damon arrives on time."

"Oh, you can generally depend on him," said Tom. "I telephoned him, just before I started from Shopton, and he said--"

"Bless my carpet slippers!" cried a voice outside the hotel apartment. "But I can find my way all right. I know the number of the room. No! you needn't take my bag. I can carry it my self!"

"There he is!" laughed Tom, opening the door to disclose the eccentric gentleman himself, struggling to keep possession of his valise against the importunities of a bellboy.

"Ah, Tom--Mr. Titus! Glad to see you!" exclaimed Mr. Damon. "I--I am a little late, I fear--had an accident--wait until I get my breath," and he sank, panting, into a chair.

"Accident?" cried Tom. "Are you--?"

"Yes--my taxicab ran into another. Nobody hurt though."

"But you're all out of breath," said Mr. Titus. "Did you run?"

"No, but I walked upstairs."

"What! Seven flights?" exclaimed Tom. "Weren't the hotel elevators running?"

"Yes, but I don't like them. I'd rather walk. And I did--carried my valise--bellboy tried to take it away from me every step--here you are, son--it wasn't the tip I was

trying to get out of," and he tossed the waiting and grinning lad a quarter.

"There, I'm better now," went on Mr. Damon, when Tom had given him a glass of water. "Bless my paper weight! The drug concern will have to vote me an extra dividend for what I've gone through. Well, I'm here, anyhow. How is everything?"

"Fine!" cried Tom. "We'll soon be off for Peru!"

They talked over plans and made sure nothing had been forgotten. Their railroad tickets had been secured by Mr. Titus so there was nothing more to do save wait for train-time.

"I've never been to Peru," Tom remarked shortly before lunch. "What sort of country is it?"

"Quite a wonderful country," Mr. Titus answered. "I have been very much interested in it since my brother and I accepted this tunnel contract. Peru seems to have taken its name from Peru, a small river on the west coast of Colombia, where Pizarro landed. The country, geographically, may be divided into three sections longitudinally. The coast region is a sandy desert, with here and there rivers flowing through fertile valleys. The sierra region is the Andes division, about two hundred and fifty miles in width."

"Is that where we're going?" asked Tom.

"Yes. And beyond the Andes (which in Peru consist of great chains of mountains, some very high, interspersed with table lands, rich plains and valleys) there is the montana region of tropical forests, running down to the valley of the Amazon.

"That sounds interesting," commented Mr. Damon.

"It is interesting," declared Mr. Titus. "For it is from this tropical region that your quinine comes, Mr. Damon, though you may not have to go there to straighten out your affairs. I think you can do better bargaining with the officials in Lima, or near there."

"Are there any wild animals in Peru?" Tom inquired.

"Well, not many. Of course there are the llamas and alpacas, which are the beasts of burden--almost like little camels you might say, though much more gentle. Then there is the wild vicuna, the fleece of which is made into a sort of wool, after which a certain kind of cloth is named.

"Then there is the taruco, a kind of deer, the viscacha,



which is a big rat, the otoc, a sort of wild dog, or fox, and the ucumari, a black bear with a white nose. This bear is often found on lofty mountain tops, but only when driven there in search of food.

"The condors, of course, are big birds of prey in the Andes. You must have read about them; how they seem to lie in the upper regions of the air, motionless, until suddenly they catch sight of some dead animal far down below when they sweep toward it with the swiftness of the wink. There is another bird of the vulture variety, with wings of black and white feathers. The ancient Incas used to decorate their head dresses with these wing feathers."

"Well, I'm glad I'm going to Peru," said Tom. "I never knew it was such an interesting country. But I don't suppose we'll have time to see much of it."

"Oh, I think you will," commented Mr. Titus. "We don't always have to work on the tunnel. There are numerous holidays, or holy-days, which our Indian workers take off, and we can do nothing without them. I'll see that you have a chance to do some exploring if you wish."

"Good!" exclaimed Tom. "I brought my electric rifle with me, and I may get a chance to pop over one of those bears with a white nose. Are they good to eat?"

"The Indians eat them, I believe, when they can get them, but I wouldn't fancy the meat," said the contractor.

Luncheon over, the three travelers departed with their baggage for the Chicago Limited, which left from the Pennsylvania Station at Twenty-third Street. As usual, Koku attracted much attention because of his size.

The trip to San Francisco was without incident worth narrating and in due time our friends reached the Golden Gate where they were to go aboard their steamer. They had to wait a day, during which time Tom and Mr. Titus made inquiries regarding the first powder shipment. They had had unexpected good luck, for the explosive, having been sent on ahead by fast freight, was awaiting them.

"So we can take it with us on the Bellaconda," said, Tom, naming the vessel on which they were to sail.

The powder was safely stowed away, and our friends having brought their baggage aboard, putting what was wanted on the voyage in their staterooms, went out on deck to watch the lines being cast off.

A bell clanged and an officer cried:

"All ashore that's going ashore!"

There were hasty good-byes, a scramble on the part of those who had come to bid friends farewell, and preparations were made to haul in the gangplank.

Just as the tugs were slowly pushing against the Bellaconda to get her in motion to move her away from the wharf, there was a shout down the pier and a taxicab, driven at reckless speed, dashed up.

"Wait a minute! Hold that gangway. I have a passenger for you!" cried the chauffeur.

He pulled up with a screeching of brakes, and a man with a heavy black beard fairly leaped from the vehicle, running toward the plank which was all but cast off.

"My fare! My fare!" yelled the taxicab driver.

"Take it out of that! Keep the change!" cried the bearded man over his shoulder, tossing a crumpled bill to the chauffeur. And then, clutching his valise in a firm hand, the belated passenger rushed up the gangplank just in time to board the steamer which was moving away from the dock.

"Close shave--that," observed Tom.

"That's right," assented Mr. Titus.

"Well, we're off for Peru!" exclaimed Mr. Damon, as the vessel moved down the bay.

## Chapter VIII

### The Bearded Man

Travel to Tom and Mr. Damon presented no novelties. They had been on too many voyages over the sea, under the sea and even in the air above the sea to find anything unusual in merely taking a trip on a steamer.

Mr. Titus, though he admitted he had never been in a submarine or airship, had done considerable traveling about the world in his time, and had visited many countries, either for business or pleasure, so he was an old hand at it.

But to Koku, who, since he had been brought from the land where Tom Swift had been made captive, had gone about but little, everything was novel, and he did not know at what to look first.

The giant was interested in the ship, in the water, in the passengers, in the crew and in the sights to be seen as they progressed down the harbor.

And the big man himself was a source of wonder to all save his own party. Everywhere he went about the decks, or below, he was followed by a staring but respectful crowd. Koku took it all good-naturedly, however, and even consented to show his great strength by lifting heavy weights. Once when several sailors were shifting one of the smaller anchors (a sufficiently heavy one for all that) Koku pushed them aside with a sweep of his big arm, and, picking up the big "hook," turned to the second mate and asked:

"Where you want him?"

"Good land, man!" cried the astonished officer. "You'll kill yourself!"

But Koku carried the anchor where it ought to go, and from then on he was looked up to with awe and admiration by the sailors.

From San Francisco to Callao, Peru (the latter city being the seaport of Lima, which is situated inland), is approximately nine hundred miles. But as the *Bellaconda* was a coasting steamer, and would make several stops on her trip, it would be more than a week before our friends would land at Callao, then to proceed to Lima, where they expected to remain a day or so before striking into the interior to where the tunnel was being bored through the mountain.

The first day was spent in getting settled, becoming used to their new surroundings, finding their places and neighbors at table, and in making acquaintances. There were some interesting men and women aboard the *Bellaconda*, and Tom Swift, Mr. Damon and Mr. Titus soon made friends with them. This usually came about through the medium of Koku, the giant. Persons seeing him would inquire about him, and when they learned he was Tom Swift's helper it was an easy topic with which to open conversation.

Tom told, modestly enough, how he had come to get Koku in his escape from captivity, but Mr. Damon was not so simple in describing Tom's feats, so that before many days had passed our hero found himself regarded as a personage of considerable importance, which was not at all to his liking.

"But bless my fountain pen!" cried Mr. Damon, when Tom objected to so much notoriety. "You did it all; didn't you?"

"Yes, I know. But these people won't believe it."

"Oh, yes they will!" said the odd man. "I'll take good care that they believe it."

"If any one say it not so, you tell me!" broke Koku, shaking his huge fist.

"No, I guess I'd better keep still," said Tom, with a laugh.

The weather was pleasant, if we except a shower or two, and as the vessel proceeded south, tropical clothing became the order of the day, while all who could, spent most of their time on deck under the shade of awnings.

"Did you ever hear anything more of that fellow, Waddington?" asked Tom of Mr. Titus one day.

"Not a thing. He seems to have dropped out of sight."

"And are your rivals, Blakeson & Grinder, making any trouble?"

"Not that I've heard of. Though just what the situation may be down in Peru I don't know. I fancy everything isn't going just right or my brother would not be so anxious for me to come on in such a hurry."

"Do you anticipate any real trouble?"

Mr. Titus paused a moment before answering.

"Well, yes," he said, finally, "I do!"

"What sort?" asked Tom.

"That I can't say. I'll be perfectly frank with you, Tom. You know I told you at the time that we were in for difficulties. I didn't want you to go into this thing blindly."

"Oh, I'm not afraid of trouble," Tom hastened to assure his friend. "I've had more or less of it in my life, and I'm willing to meet it again. Only I like to know what kind it is."

"Well, I can't tell you--exactly," went on the tunnel contractor. "Those rivals of ours, Blakeson & Grinder, are

unscrupulous fellows. They feel very bitter about not getting the contract, I hear. And they would be only too glad to have us fail in the work. That would mean that they, as the next lowest bidders, would be given the job. And we would have to make up the difference out of our pockets, as well as lose all the work we have, so far, put on the tunnel."

"And you don't want that to happen!"

"I guess not, my boy! Well, it won't happen if we get there in time with this new explosive of yours. That will do the business I'm sure."

"I hope so," murmured Tom. "Well, we'll soon see. And now I think I'll go and write a few letters. We are going to put in at Panama, and I can mail them there."

Tom started for his stateroom, and rapidly put his hand in the inner pocket of his coat. He drew out a bundle of letters and papers, and, as he looked at them, a cry of astonishment came from his lips.

"What's the matter?" asked Mr. Titus.

"Matter!" cried Tom. "Why here's a letter from Mary--from Mr. Nestor," he went on, as he scanned the familiar handwriting. "I never opened it! Let's see--when did I get that?"

His memory went back to the day of his departure from Shopton when he had sent Mary the gift, and he recalled that the letter had arrived just as he was getting into the automobile.

"I stuck it in my pocket with some other mail," he mused, "and I never thought of it again until just now. But this is the first time I've worn this coat since that day. A letter from Mr. Nestor! Probably Mary wrote, thanking me for the box, and her father addressed the envelope for her. Well, let's see what it says."

Tom retired to the privacy of his stateroom to read the note, but he had not glanced over more than the first half of it before he cried out:

"Dynamite! Great Scott! What does this mean? 'Gross carelessness! Poor idea of a joke! No person with your idea of responsibility will ever be my son-in-law!' Box labeled 'open with care!' Why--why--what does it all mean?"

Tom read the letter over again, and his murmurs of astonishment were so loud that Mr. Damon, in the next room,

called out:

"What's the matter, Tom?" Get bad news?"

"Bad news? I should say so! Mary--her father--he forbids me to see her again. Says I tried to dynamite them all--or at least scare them into believing I was going to. I can't understand it!"

"Tell me about it, Tom," suggested Mr. Damon, coming into Tom's stateroom. "Bless my gunpowder keg! what does it mean?"

Thereupon Tom told of having purchased the gift for Mary, and of having, at the last minute, told Eradicate to put it in a box and deliver it at the Nestor home.

"Which he evidently did," Tom went on, "but when it got there Mary's present was in a box labeled 'Dynamite. Handle with care.' I never sent that."

Mr. Damon read over Mr. Nestor's letter which had lain so long in Tom's pocket unopened.

"I think I see how it happened," said the old man.

"Eradicate can't read; can he, Tom?"

"No, but he pretends he can."

"And did you have any empty boxes marked dynamite in your laboratory?"

"Why yes, I believe I did. I used dynamite as one of the ingredients of my new explosive."

"Well then, it's as clear as daylight. Eradicate, being unable to read, took one of the empty dynamite boxes in which to pack Mary's present. That's how it happened."

Tom thought for a moment. Then he burst into a laugh.

"That's it," he said, a bit ruefully. "That's the explanation. No wonder Mr. Nestor was roiled. He thought I was playing a joke. I'll have to explain. But how?"

"By letter," said Mr. Damon.

"Too slow. I'll send a wireless," decided Tom, and he began the composition of a message that cost him considerable in tolls before he had hit on the explanation that suited him.

"That ought to clear the atmosphere," he said when the

wireless had shot his message into the ether. "Whew! And to think, all this while, Mary and her folks have believed that I tried to play a miserable joke on them! My! My! I wonder if they'll ever forgive me. When I get hold of Eradicate--"

"Better teach him to read if he's going to do up love packages," interrupted Mr. Damon, dryly.

"I will," decided the young inventor.

The Bellaconda stopped at Panama and then kept on her way south. Soon after that she ran into a severe tropical storm, and for a time there was some excitement among the passengers. The more timid of them put on life preservers, though the captain and his officers assured them there was no danger.

Tom and Mr. Titus, descending from the deck, whence they had been warned by one of the mates, were on their way to their stateroom, walking with some difficulty owing to the roll of the ship.

As they approached their quarters the door of a stateroom farther up the passage opened, and a head was thrust out.

"Will you send a steward to me?" a man requested. "I am feeling very ill, and need assistance."

"Certainly," Tom answered, and at that moment he heard Mr. Titus utter an exclamation.

"What is it?" asked Tom, for the man who had appealed for help, had withdrawn his head.

"That--that man!" exclaimed the contractor. "That was Waddington, the tool of our rivals."

"Waddington!" repeated Tom, with a look at the now closed door. "Why, the bearded man has that stateroom--the bearded man who so nearly lost the steamer. He isn't Waddington!"

"And I tell you Waddington is in that room!" insisted the contractor. "I only saw the upper part of his face, but I'd know his eyes anywhere. Waddington is spying on us!"

## Chapter IV

### The Bomb

Tom Swift and Mr. Titus withdrew a little way down the corridor, around a bulkhead and out of sight of any one who might look out from the stateroom whence had come the appeal for help. But, at the same time, they could keep watch over it.

"I tell you Waddington is in there!" insisted Mr. Titus, hoarsely whispering.

"Well, perhaps he may be," admitted Tom. "But several times I have seen the bearded man going in there, and it's only a single stateroom, for it's so marked on the deck plan."

"Waddington might be disguised with a false beard, Tom."

"Yes, he might. But did the man who just now looked out have a beard?"

"I couldn't tell, as I saw only the upper part of his face. But those were Waddington's shifty eyes, I'm positive."

"If Waddington were on board don't you suppose you would have seen him before this?"

"Not positively, no. If he and the bearded man are one and the same that would account for it. But I haven't noticed the bearded man once since he came aboard in such a hurry."

"Nor have I, now that I come to think of it," Tom admitted. "However, there is an easy way to prove who is in there."

"How?"

"We'll knock on the door and go in."

"Perhaps he won't let us."

"He'll think it's the steward he called for. Come, you know Waddington better than I do. You knock and go in."

"I don't know Waddington very well," admitted the contractor. "I have only seen him a few times, but I am sure that was he. But what shall I do when he sees I'm not the steward?"

"Tell him you have sent for one. I'll go with the message, so it will be true enough. Even if you have only a momentary glance at him in close quarters you ought to be able to tell whether or not he has on a false beard, and whether or not



it is Waddington."

Mr. Titus considered for a moment, and then he said:

"Yes, I guess that is a good plan. You go for the steward, Tom, and I'll see if I can get in that stateroom. But I'm sure I'm not mistaken. I'll find Waddington in there, perhaps in the person of the bearded man, disguised. Or else they are using a single stateroom as a double one." And while Tom went off down the pitching and rolling corridor to find a steward, Mr. Titus, not without some apprehension, advanced to knock on the door of the suspect.

"If it is Waddington he'll know me at once, of course," thought the contractor, "and there may be a row. Well, I can't help it. The success of my brother and myself depends on finishing that tunnel, and we can't have Waddington, and those whose tool he is, interfering. Here goes!"

He tapped on the door, and a faint voice called:

"Come in!"

The contractor entered, and saw the bearded man lying in his berth.

"Is there anything I can do for you?" asked the contractor, bending close over the man. He wanted to see if the beard were false. Somewhat to his surprise the contractor saw that undoubtedly it was real.

"Steward, will you kindly get me--Oh, you're not the steward!" the bearded man exclaimed.

"No, my friend and I heard you call," replied the contractor. "He has gone for the steward, who will be here soon. Can I do anything for you in the meanwhile?"

"No--not a thing!" was the rather snappish answer, and the man turned his face away. "I beg your pardon," he went on, as if conscious that he had acted rudely, "but I am suffering very much. The steward knows just what I want. I have had these attacks before. I am a poor sailor. If you will send the steward to me I will be obliged to you. He can fix me up."

"Very well," assented Mr. Titus. "But if there is anything I can do--"

At that moment footsteps and voices were heard in the corridor, and as the door of the bearded man's stateroom was opened, Mr. Titus had a glimpse of Tom and one of the stewards.

"Yes, I'll look after him," the steward said "He's been this way before. Thank you, sir, for calling me."

"I guess the steward has been well tipped," thought Tom. As Mr. Titus came out and the door was shut, the young inventor asked in a whisper,

"Well, was it he?"

The contractor shook his head.

"No," he answered. "I never was more surprised in my life. I felt sure it was Waddington in there, but it wasn't. That man's beard is real, and while he has a look like Waddington about the eyes and upper part of his face, the man is a stranger to me. That is I think so, but in spite of all that, I have a queer feeling that I have met him before."

"Where?" Tom inquired.

"That I can't say," and the tunnel contractor shook his head. "Whew! That was a bad one!" he exclaimed, as the steamer pitched and tossed in an alarming manner.

"Yes, the storm seems to be getting worse instead of better," agreed Tom. "I hope none of the cargo shifts and comes banging up against my new explosive. If it does, there'll be no more tunnel digging for any of us."

"Better not mention the fact of the explosives on board," suggested Mr. Titus.

"I won't," promised Tom. "The passengers are frightened enough as it is. But I watched the powder being stored away. I guess it is safe."

The storm raged for two days before it began to die away. Meanwhile, nothing was seen, on deck or in the dining cabins, of the bearded man.

Tom and Mr. Titus made some guarded inquiries of the steward who had attended the sick man, and from him learned that he was down on the passenger list as Senor Pinto, from Rio de Janeiro, Brazil. He was traveling in the interests of a large firm of coffee importers of the United States, and was going to Lima.

"And there's no trace of Waddington?" asked Tom of Mr. Titus, as they were discussing matters in their stateroom one day.

"Not a trace. He seems to have dropped out of sight, and

I'm glad of it."

"Perhaps Blakeson & Grinder have given up the fight against you."

"I wish they had, though I don't look for any such good luck. But I'm willing to fight them, now that we have an even chance, thanks to your explosive."

The storm blew itself out. The Bellaconda "crossed the line," and there was the usual horseplay among the sailors when Father Neptune came aboard to hold court. Those who had never before been below the equator were made to undergo more or less of an initiation, being lathered and shaved, and then pushed backward into a canvas tank of water on deck.

While Tom enjoyed the voyage, with the possible exception of the storm, he was anxious, and so was Mr. Titus, for the time to come when they should get to the tunnel and try the effect of the new explosive. Mr. Damon found an elderly gentleman as fond of playing chess as was the eccentric man himself, and his days were fully occupied with castles, pawns, knights, kings, queens and so on. As for Koku he was taken in charge by the sailors and found life forward very agreeable.

Senor Pinto had recovered from his seasickness, the steward told Tom and Mr. Titus, but still he kept to his stateroom.

It was when the Bellaconda was within a day or two of Callao that a wireless message was received for Mr. Titus. It was from his brother. The message read:

"Have information from New York office that rivals are after you. Look out for explosive."

"What does that mean?" asked Tom.

"Well, I presume it means our rival contractors know we have a supply of your new powder on board, and they may try to get it away from us."

"Why?" Tom demanded.

"To prevent our using it to complete the tunnel. In that case they'll get the secret of it to use for themselves, when the contract goes to them by default. Can we do anything to protect the powder, Tom?"

"Well, I don't know that we'll need to while it's stowed

away in the cargo. They can't get at it any more than we can, until the ship unloads. I guess it's safe enough. We'll just have to keep our eyes open when it's taken out of the hold, though."

Tom and Mr. Titus, both of whom were fond of fresh air and exercise, had made it a practice to get up an hour before breakfast and take a constitutional about the steamer deck. They did this as usual the morning after the wireless warning was received, and they were standing near the port rail, talking about this, when they heard a thud on the deck behind them. Both turned quickly, and saw a round black object rolling toward them. From the object projected what seemed to be a black cord, and the end of this cord was glowing and smoking.

For a moment neither Tom nor Mr. Titus spoke. Then, as a slow motion of the ship rolled the round black thing toward Tom, he cried:

"It a bomb!"

He darted toward it, but Mr. Titus pulled him back.

"Run!" yelled the contractor.

Before either of them could do anything, a queer figure of an elderly gentleman stepped partly from behind a deck-house, and stooped over the smoking object.

"Look out!" yelled Mr. Titus, crouching low. "That's an explosive bomb! Toss it overboard!"

## Chapter X

### Professor Bumper

Fairly fascinated by the spluttering fuse, neither Tom nor Mr. Titus moved for a second, while the deadly fire crept on through the black string-like affair, nearer and nearer to the bomb itself.

Then, just as Tom, holding back his natural fear, was about to thrust the thing overboard with his foot, hardly realizing that it might be even more deadly to the ship in the water than it was on the deck, the foot of the newcomer was suddenly thrust out from behind the deck-house, and the sizzling fuse was trodden upon.

It went out in a puff of smoke, but the owner of the foot was not satisfied with that for a hand reached down, lifted the bomb, the fuse of which still showed a smouldering spark of fire, and calmly pulled out the "tail" of the explosive. It was harmless then, for the fuse, with a trail of smoke following, was tossed into the sea, and the little man came out from behind the deck-house, holding the unexploded bomb.

For a moment neither Tom nor Mr. Titus could speak. They felt an inexpressible sense of relief. Then Tom managed to gasp out:

"You--you saved our lives!"

The little man who had stepped on the fuse, and had then torn it from the bomb, looked at the object in his hand as though it were the most natural thing in the world to pick explosives up off the deck of passenger steamers, as he remarked:

"Well, perhaps I did. Yes, I think it would have gone off in another second or two. Rather curious; isn't it?"

"Curious? Curious!" asked and exclaimed Mr. Titus.

"Why, yes," went on the little man, in the most matter of fact tone. "You see, most explosive bombs are round, made that way so the force will be equal in all directions. But this one, you notice, has a bulge, or protuberance, on one side, so to speak. Very curious!"

"It might have been made that way to prevent its rolling overboard, or the bomb's walls might be weaker near that bulge to make sure that the force of the explosion would be in that direction. And the bulge was pointed toward you gentlemen, if you noticed."

"I should say I did!" cried Mr. Titus. "My dear sir, you have put us under a heavy debt to you! You saved our lives! I--I am in no frame of mind to thank you now, but--"

He strode over to the little man, holding out his hand.

"No, no, I'd better keep it," went on the person who had rendered the bomb ineffective. "You might drop it you know. You are nervous--your hand shakes."

"I want to shake hands with you!" exclaimed Mr. Titus--  
"to thank you!"

"Oh, that's it. I thought you wanted the bomb. Shake hands? Certainly!"

And while this ceremony was being gone through with, Tom had a moment to study the appearance of the man who had saved their lives. He had seen the passenger once or twice before, but had taken no special notice of him. Now he had good reason to observe him.

Tom beheld a little, thin man, little in the sense of being of the "bean pole" construction. His head was as bald as a billiard ball, as the young inventor could notice when the stranger took off his hat to bow formally in response to the greeting of some ladies who passed, while Mr. Titus was shaking hands with him.

The bald head was sunk down between two high shoulders, and when the owner wished to observe anything closely, as he was now observing the bomb, the head was thrust forward somewhat as an eagle might do. And Tom noticed that the eyes of the little man were as bright as those of an eagle. Nothing seemed to escape them.

"I want to add my thanks to those of Mr. Titus for saving our lives," said Tom, as he advanced. "We don't know what to make of it all, but you certainly stopped that bomb from going off."

"Yes, perhaps I did," admitted the little man coolly and calmly, as though preventing bomb explosions was his daily exercise before breakfast.

Tom and Mr. Titus introduced themselves by name.

"I am Professor Swyington Bumper," said the bomb-holder, with a bow, removing his hat, and again disclosing his shiny bald head. "I am very glad to have met you indeed."

"And we are more than glad," said Tom, fervently, as he glanced at the explosive.

"Now that the danger is over," went on Mr. Titus, "suppose we make an investigation, and find out how this bomb came to be here."

"Just what I was about to suggest," remarked Professor Bumper. "Bombs, such as this, do not sprout of themselves on bare decks. And I take it this one is explosive."

"Let me look at it," suggested Tom. "I know something of explosives."

It needed but a casual examination on the part of one who had done considerable experimenting with explosives to disclose the fact that it had every characteristic of a

dangerous bomb. Only the pulling out of the fuse had rendered it harmless.

"If it had gone off," said Tom, "we would both have been killed, or, at least, badly injured, Mr. Titus."

"I believe you, Tom. And we owe our lives to Professor Bumper."

"I'm glad I could be of service, gentlemen," the scientist remarked, in an easy tone. "Explosives are out of my line, but I guessed it was rather dangerous to let this go off. Have you any idea how it got here?"

"Not in the least," said Tom. "But some one must have placed it here, or dropped it behind us."

"Would any one have an object in doing such a thing?" the professor asked.

Tom and Mr. Titus looked at one another.

"Waddington!" murmured the contractor. "If he were on board I should say he might have done it to get us out of the way, though I would not go so far as to say he meant to kill us. It may be this bomb has only a light charge in it, and he only meant to cripple us."

"We'll find out about that," said Tom. "I'll open it."

"Better be careful," urged Mr. Titus.

"I will," the young inventor promised. "I beg your pardon," he went on to Professor Bumper. "We have been talking about something of which you know nothing. Briefly, there is a certain man who is trying to interfere in some work in which Mr. Titus and I are interested, and we think, if he were on board, he might have placed this bomb where it would injure us."

"Is he here?" asked the professor.

"No. And that is what makes it all the more strange," said Mr. Titus. "At one time I thought he was here, but I was mistaken."

Tom took the now harmless bomb to his stateroom, and there, after taking the infernal machine apart, he discovered that it was not as dangerous as he had at first believed.

The bomb contained no missiles, and though it held a quantity of explosive, it was of a slow burning kind. Had it

gone off it would have sent out a sheet of flame that would have severely burned him and Mr. Titus, but unless complications had set in death would not have resulted.

"They just wanted to disable us," said the contractor.

"That was their game. Tom, who did it?"

"I don't know. Did you ever see this Professor Bumper before?"

"I never did."

"And did it strike you as curious that he should happen to be so near at hand when the bomb fell behind us?"

"I hadn't thought of that," admitted the contractor. "Do you mean that he might have dropped it himself?"

"Well, I wouldn't go so far as to say that," replied Tom, slowly. "But I think it would be a good idea to find out all we can of Professor Swyington Bumper."

"I agree with you, Tom. We'll investigate him."

## Chapter XI

### In the Andes

Professor Swyington Bumper seemed to live in a region all by himself. Though he was on board the *Bellaconda*, he might just as well have been in an airship, or riding along on the back of a donkey, as far as his knowledge, or recognition, of his surroundings went. He seemed to be thinking thoughts far, far away, and he was never without a book--either a bound volume or a note-book. In the former he buried his hawk-like nose, and Tom, looking over his shoulder once, saw that the book was printed in curious characters, which, later, he learned were Sanskrit. If he had a note-book the bald-headed professor was continually jotting down memoranda in it.

"I can hardly think of him as a conspirator against us," said Tom to Mr. Titus.

"After you have been in the contracting business as long as I have you'll distrust every one," was the answer.

"Waddington isn't on board, or I'd distrust him. That Spaniard, Senor Pinto, seems to be out of consideration, and



there only remains the professor. We must watch him."

But Professor Bumper proved to be above suspicion. Carefully guarded inquiries made of the captain, the purser and other ships' officers, brought out the fact that he was well known to all of them, having traveled on the line before.

"He is making a search for something, but he won't say what it is," the captain said. "At first we thought it was gold or jewels, for he goes away off into the Andes Mountains, where both gold and jewels have been found. He never looks for treasure, though, for though some of his party have made rather rich discoveries, he takes no interest in them."

"What is he after then?" asked Mr. Titus.

"No one knows, and he won't tell. But whatever it is he has never found it yet. Always, when he comes back, unsuccessful, from a trip to the interior and goes back North with us, he will remark that he has not the right directions. That he must seek again.

"Back he comes next season, as full of hope as before, but only to be disappointed. Each time he goes to a new place in the mountains where he digs and delves, so members of the parties he hires tell me, but with no success. He carries with him something in a small iron box, and, whatever this is, he consults it from time to time. It may be directions for finding whatever he is after. But there seems to be something wrong."

"This is quite a mystery," remarked Tom.

"It certainly is. But Professor Bumper is a fine man. I have known him for years."

"This seems to dispose of the theory that he planted the bomb, and that he is one of the plotters in the pay of Blakeson & Grinder," said Mr. Titus, when he and Tom were alone.

"Yes, I guess it does. But who can have done it?"

That was a question neither could answer.

Tom had a theory, which he did not disclose to Mr. Titus, that, after all, the somewhat mysterious Senor Pinto might, in some way, be mixed up in the bomb attempt. But a close questioning of the steward on duty near the foreigner's cabin at the time disclosed the fact that Pinto had been ill in his berth all that day.

"Well, unless the bomb fell from some passing airship, I don't see how it got on deck," said Tom with a shake of his head. "And I'm sure no airship passed over us."

They had kept the matter secret, not telling even Mr. Damon, for they feared the eccentric man would make a fuss and alarm the whole vessel. So Mr. Damon, occasionally blessing his necktie or his shoe laces, played chess with his elderly gentleman friend and was perfectly happy.

That Professor Bumper not only had kept his promise about not mentioning the bomb, but that he had forgotten all about it, was evident a day or two after the happening. Tom and Mr. Titus passed him on deck, and bowed cordially. The professor returned the salutation, but looked at the two in a puzzled sort of fashion.

"I beg your pardon," he remarked, "but your faces are familiar, though I cannot recall your names. Haven't I seen you before?"

"You have," said Tom, with a smile. "You saved our lives from a bomb the other day."

"Oh, yes! So I did! So I did!" exclaimed Professor Bumper. "I felt sure I had seen you before. Are you all right?"

"Yes. There haven't been any more bombs thrown at us," the contractor said. "By the way, Professor Bumper, I understand you are quite a traveler in the Andes, in the vicinity of Lima."

"Yes, I have been there," admitted the bald-headed scientist in guarded tones.

"Well, I am digging a tunnel in that vicinity," went on Mr. Titus, "and if you ever get near Rimac, where the first cutting is made, I wish you would come and see me--Tom too, as he is associated with me."

"Rimac-Rimac," murmured the professor, looking sharply at the contractor. "Digging a tunnel there? Why are you doing that?" and he seemed to resent the idea.

"Why, the Peruvian government engaged me to do it to connect the two railroad lines," was the answer. "Do you know anything about the place?"

"Not so much as I hope to later on," was the unexpected answer. "As it happens I am going to Rimac, and I may visit your tunnel."

"I wish you would," returned Mr. Titus.

Later on, in their stateroom, the contractor remarked to the young inventor:

"Sort of queer; isn't it?"

"What?" asked Tom. "His not remembering us?"

"No, though that was odd. But I suppose he is forgetful, or pretends to be. I mean it's queer he is going to Rimac."

"What do you mean?" asked Tom.

"Well, I don't know exactly what I mean," went on the tunnel contractor, "but our tunnel happens to start at Rimac, which is a small town at the base of the mountains."

"Maybe the professor is a geologist," suggested Tom, "and he may want to get some samples of that hard rock."

"Maybe," admitted Mr. Titus. "But I shall keep my eyes on him all the same. I'm not going to have any strangers, who happen to be around when bombs drop near us, get into my tunnel."

"I think you're wrong to doubt Professor Bumper," Tom said.

A few days after this, when Tom and Mr. Titus were casually discussing the weather on deck and wondering how much longer it would be before they reached Callao, Mr. Damon, who had been playing numberless games of chess, came up for a breath of air.

"Mr. Damon," called Tom, "come over here and meet a friend of ours, Professor Bumper," and he was about to introduce them, for the two, as far as Tom knew, had not yet met. But no sooner had the professor and Mr. Damon caught sight of each other than there was a look of mutual recognition.

"Bless my fountain pen!" cried the eccentric man. "If it isn't my old friend!"

"Mr. Damon!" cried the professor. "I am delighted to see you again. I did not know you were on board!"

"Nor I you. Bless my apple dumpling! Are you still after those Peruvian antiquities?"

"I am, Mr. Damon. But I did not know you were acquainted with Mr. Swift."

"Oh, Tom and I are old friends."

"Professor Bumper saved the lives of Mr. Titus and myself," said Tom, "or at least he saved us from severe injury by a bomb."

"Pray do not mention it, my friends," put in the professor, casually. "It was nothing."

Of course he did not mean it just that way.

Then, naturally, Mr. Damon had to be told all about the bomb for the first time, and his wonder was great. He blessed everything he could think of.

"And to think it should be my old friend, Professor Bumper, who saved you," said the odd man to Tom and Mr. Titus later that day.

"Do you know him well?" asked Mr. Titus.

"Very well indeed. Our drug concern sells him many chemicals for his experiments."

"Well, if you know him I guess he can't be what I thought he was," the contractor went on. "I'm glad to know it. Why is he going to the Andes?"

"Oh, for many years he has been interested in collecting Peruvian antiquities. He has a certain theory in regard to something or other about their ancient civilization, but just what it is I have, at this moment, forgotten. Only I know you can thoroughly trust Professor Bumper, for a finer man never lived, though he is a bit absent-minded at times. But you will like him very much."

Thus the last lingering doubt of Professor Bumper was removed. Mr. Damon told something of how the scientist had been honored by degrees from many colleges and was regarded as an authority on Peruvian matters.

But who had placed the bomb on deck remained a mystery.

In due time Callao, the seaport of Lima, was reached and our friends disembarked. Tom saw to the unloading of the explosive, which was to be sent direct to the tunnel at Rimac. Mr. Titus, Tom and Mr. Damon would remain in Lima a day or so.

Professor Bumper disembarked with our friends, and stopped at the same hotel. Tom kept a lookout for Senor Pinto, but did not see him, and concluded that the Spaniard was ill, and would be carried ashore on a stretcher, perhaps.

Lima, the principal city and capital of Peru, proved an interesting place. It was about eight miles inland and was built on an arid plain about five hundred feet above sea level. Yet, though it was on what might be termed a desert, the place, by means of irrigation, had been made into a beauty spot.

Tom found the older part of the city was laid out with mathematical regularity, each street crossing the other at right angles. But in the new portions there was not this adherence to straightness.

"Bless my transfer! Why, they have electric cars here!" exclaimed Mr. Damon, catching sight of one on the line between Callao and the capital.

"What did you think they'd have?" asked Mr. Titus, "elephants or camels?"

"I--I didn't just know," was the answer.

"Oh, you'll find a deal of civilization here," the contractor said. "Of course much of the population is negro or Indian, but they are often rich and able to buy what they want. There is a population of over 150,000, and there are two steam railroads between Callao and Lima, while there is one running into the interior for 130 miles, crossing the Andes at an elevation of over three miles. It is a branch of that road, together with a branch of the one running to Ancon, that I am to connect with a tunnel."

Tom found some beautiful churches and cathedrals in Lima, and spent some time visiting them. He and Mr. Damon also visited, in the outskirts, the tobacco, cocoa and other factories.

Three days after reaching the capital, Mr. Titus having attended to some necessary business while Mr. Damon set on foot matters connected with his affairs, it was decided to strike inland to Rimac, and to try the effect of Tom Swift's explosive on the tunnel.

The journey was to be made in part by rail, though the last stages of it were over a rough mountain trail, with llamas for beasts of burden, while our friends rode mules.

As Tom, Mr. Damon, Koku, and Mr. Titus were going to the railroad station they saw Professor Bumper also leaving the hotel.

"I believe our roads lie together for a time," said the bald-headed scientist, "and, if you have no objections, I

will accompany you."

"Come, and welcome!" exclaimed Mr. Titus, all his suspicions now gone.

"And it may be that you will be able to help me," the scientist went on.

"Help you--how?" asked Tom.

"I will tell you when we reach the Andes," was the mysterious answer.

It was a day later when they left the train at a small station, and struck off into the foothills of the great Andes Mountains, where the tunnel was started, that the professor again mentioned his object.

"Friends," he said, as he gazed up at the towering cliffs and crags, "I am searching for the lost city of Pelone, located somewhere in these mountains. Will you help me to find it?"

## Chapter XII

### The Tunnel

Mr. Damon, of the three who heard Professor Bumper make this statement, showed the least sign of astonishment. It would have been more correct to say that he showed none at all. But Tom could not restrain himself.

"The lost city of Pelone!" he exclaimed.

"Is it here--in these mountains?" asked Mr. Titus.

"I have reason to hope that it is," went on the professor.

"The golden tablets are very vague, but I have tried many locations, and now I am about to try here. I hope I shall succeed. At any rate, I shall have agreeable company, which has not always been my luck on my previous expeditions seeking to find the lost city."

"Oh, Professor, are you still on that quest?" asked Mr. Damon, in a matter-of-fact tone.

"Yes, Mr. Damon, I am. And now that I look about me, and see the shape of these mountains, I feel that they conform

more to the description on the golden plates than any location I have yet tried. Somehow I feel that I shall be successful here."

"Did you know Professor Bumper was searching for a lost city of the Andes?" asked Tom, of his eccentric friend.

"Why yes," answered Mr. Damon. "He has been searching for years to locate it."

"Why didn't you tell us?" inquired Mr. Titus.

"Why, I never thought of it. Bless my memorandum book! it never occurred to me. I did not think you would be interested. Tell them your story, Professor Bumper."

"I will soon. Just now I must see to my equipment. The story will keep."

And though Tom and Mr. Titus were both anxious to hear about the lost city, they, too, had much to do to get ready for the trip into the interior.

The beginning of the tunnel under one of the smaller of the ranges of the Andes lay two days journey from the end of the railroad line. And the trip must be made on mules, with llamas as beasts of burden, transporting the powder and other supplies.

"We'll only need to take enough food with us for the two days," said Mr. Titus. "We have a regular camp at the tunnel mouth, and my brother has supplies of grub and other things constantly coming in. We also have shacks to live in; but on this trip we will use tents, as the weather at this season is fine."

It was quite a little expedition that set off up the mountain trail that afternoon, for they had arrived at the end of the railroad line shortly before dinner, and had eaten at a rather poor restaurant.

Professor Bumper had made up his own exploring party, consisting of himself and three native Indian diggers with their picks and shovels. They were to do whatever excavating he decided was necessary to locate the hidden city.

Several mules and llamas, laden with the new explosive, and burdened with camp equipment and food, and a few Indian servants made up the cavalcade of Tom, the contractor, Mr. Damon and Koku. The giant was almost as much a source of wonder to the Peruvians as he had been on board the ship. And he was a great help, too. For some of the Indians were under-sized, and could not lift the heavy boxes and packages

to the backs of the beasts of burden.

But Koku, thrusting the little men aside, grasped with one hand what two of them had tried in vain to lift, and set it on the back of mule or llama.

The way was rough but they took their time to it, for the trail was an ascending one. Above and beyond them towered the great Andes, and Tom, gazing up into the sky, which in places seemed almost pierced by the snow-covered peaks, saw some small black specks moving about.

"Condors," said Mr. Titus, when his attention was called to them. "Some of them are powerful birds, and they sometimes pick up a sheep and make off with it, though usually their food consists of carrion."

They went into camp before the sun went down, for it grew dark soon after sunset, and they wanted to be prepared. Supper was made ready by the Indian helpers, and when this was over, and they sat about a camp fire, Tom said:

"Now, Professor Bumper, perhaps you'll explain about the lost city."

"I wish I could explain about it," began the scientist.

"For years I have dreamed of finding it, but always I have been disappointed. Now, perhaps, my luck may change."

"Do you think it may be near here?" asked Mr. Titus, motioning toward the dark and frowning peaks all about them.

"It may be. The signs are most encouraging. In brief, the story of the lost city of Pelone is this. Thousands of years ago--in fact I do not know how many--there existed somewhere in Peru an ancient city that was the centre of civilization for this region. Older it was than the civilization of the Mexicans--the Montezumas--older and more cultured.

"It is many years since I became interested in Peruvian antiquities, and then I had no idea of the lost city. But some of the antiques I picked up contained in their inscriptions references to Pelone. At first I conceived this to be a sort of god, a deity, or perhaps a powerful ruler. But as I went on in my work of gathering ancient things from Peru, I saw that the name Pelone referred to a city--a seat of government, whence everything had its origin.

"Then I got on the track more closely. I examined ancient documents. I found traces of an ancient language and writings, different from anything else in the world. I managed to construct an alphabet and to read some of the documents. From them I learned that Pelone was a city



situated in some fertile valley of the Andes. It had existed for thousands of years; it was the seat of learning and culture. Much light would be thrown on the lives of the people who lived in Peru before the present races inhabited it, if I could but locate Pelone.

"Then I came across two golden tablets on which were graven the information that Pelone had utterly vanished."

"How?" asked Tom.

"The golden tablets did not say. They simply stated the fact that Pelone was lost, and one sentence read: 'He who shall find it again shall be richly rewarded.' But it is not for that that I seek. It is that I may give to the world the treasures it must contain--the treasures of an ancient civilization."

"And how do you think the city disappeared?" asked Mr. Titus.

"I do not know. Whether it was destroyed by enemies, whether it was buried under the ashes of a volcano, whether it still exists, deserted and solitary in some valley amid the mountain fastnesses of the Andes, I do not know. But I am certain the city once existed, and it may exist yet, though it may be in dust-covered ruins. That is what I seek to find. See! Here are the tablets telling about it. I got them from an old Peruvian grave."

He took from a box two thin sheets of yellow metal. They were covered with curious marks, but Tom and the others could make nothing of them. Only Professor Bumper was able to decipher them.

"And that is the story of the lost city of Pelone--as much as I know," he said. "For years I have sought it. If I can find it I shall be famous, for I shall have added to human knowledge."

"If the people of that city wrote on golden tablets, the yellow metal must have been plentiful," commented Mr. Titus. "You might strike a rich mine."

"I have no use for riches," said the professor.

"Well, I have," the contractor said, with a laugh. "That's why I'm putting through this tunnel. And if my brother and I don't do it we'll be in a bad way financially. We have struck traces of gold, but not in paying quantities. I should like to see this lost city of yours, Professor Bumper. It may contain gold."

"You may have all the gold, if I am allowed to keep the antiquities we find," stipulated the scientist. "Then you will help me in my search?"

"As much as we can spare time for from the tunnel work," promised Mr. Titus. "I'll instruct my men to keep their eyes open for any sign of ancient writings on the rocks we blast out."

"Thank you," said the professor.

The night passed uneventfully enough, if one excepts the mosquitoes which seemed to get through the nets, making life miserable for all. And once Tom thought he heard gruntings in the bush back of the tent, which noises might, he imagined, have been caused by a bear. Toward morning he heard an unearthly screech in the woods, and one of the Indians, tending the fire, grunted out a word which meant pumas.

"I can see it isn't going to be dull here," Tom mused, as he turned over and tried to sleep.

Breakfast made them all feel better, and they set off on the final stage of their journey.

"If all goes well we'll be at the tunnel entrance and camp to-night," said the contractor. "This second half of the trip is the roughest."

There was no need of saying that, for it was perfectly evident. The trail was a most precarious one, and only a mule or llama could have traveled it. The mules were most sure-footed, but, as it was, one slipped, and came near falling over a cliff.

But no real accident occurred, and finally, about an hour before sunset, the cavalcade turned down the slope and emerged on a level plain, which ended against the face of a great cliff.

As Tom rode nearer the cliff he could make out around it groups of rude buildings, covered with corrugated iron. There was quite a settlement it seemed.

Then, in the face of the cliff there showed something black--like a blot of ink, though more regular in outline.

"The mouth of the tunnel," said Mr. Titus to Tom. "Come on over to the office and I'll introduce you to my brother. I guess he will be glad we've arrived."

Tom dismounted from his mule, an example followed by the

others. Professor Bumper gazed up at the great mountains and murmured:

"I wonder if the lost city of Pelone lies among them?"

Suddenly the silence of the evening was broken by a dull, rumbling sound.

"Bless my court plaster!" cried Mr. Damon. "What's that?"

"A blast," answered Mr. Titus. "But I never knew them to set off one so late before. I hope nothing is wrong!"

And, as he spoke, panic-stricken men began running out of the mouth of the tunnel, while those outside hastened toward them, shouting and calling.

## Chapter XIII

### Tom's Explosive

"Something has happened!" cried Mr. Titus as he ran forward, followed by Tom, Mr. Damon and Koku. Professor Bumper started with them, but on the way he saw a curious bit of rock which he stopped to pick up and examine.

At the entrance of the tunnel, from which came rushing dirt-stained and powder-blackened men, Mr. Titus was met by a man who seemed to be in authority.

"Hello, Job!" he cried. "Glad you're back. We're in trouble!"

"What's the matter?" was the question. "This is my brother Walter," he said. "This is Tom Swift and Mr. Damon," thus hurriedly he introduced them. "What happened, Walter?"

"Premature blast. Third one this week. Somebody is working against us!"

"Never mind that now," cried Job Titus. "We must see to the poor fellows who are hurt." "I guess there aren't many," his brother said. "They were on their way out when the charge went off. Some more of Blakeson & Grinder's work, I'll wager!"

They were rushing in to the smoke-filled tunnel now, followed by Tom, Mr. Damon and Koku, who would follow his

young master anywhere. Tom saw that the tunnel was lighted with incandescent lamps, suspended here and there from the rocky roof or sides. The electric lights were supplied with current from a dynamo run by a gasoline engine.

"Where is it, Serato? Where was the blast?" asked Walter Titus, of a tall Indian, who seemed to be in some authority.

"Back at second turn," was the answer, in fairly good English. "I go get beds."

"He means stretchers," translated Job. "That's our Peruvian foreman. A good fellow, but easily scared."

They ran on into the tunnel, Tom and Mr. Damon noticing that a small narrow-gage railroad was laid on the floor, mules being the motive power to bring out the small dump cars loaded with rock and dirt, excavated from the big hole.

"Mind the turn!" called Job Titus, who was ahead of Tom and Mr. Damon. "It's rough here."

Tom found it so, for he slipped over some pieces of rock, and would have fallen had not Koku held him up.

"Thanks," gasped Tom, as on he ran.

A little later he came to a place where a cluster of electric lights gave better illumination, and he could see it was there that the damage had been done.

A number of men were lying on the dirt and rock floor of the tunnel, and some of them were bleeding. Others were staggering about as though shocked or stunned.

"We must get the injured ones out of here!" cried Walter Titus. "Where are the men with stretchers?"

"I sint that Spalapeen Serato for thim!" broke in a voice, rich in Irish brogue. "But he's thot stupid he might think I was after sindin' him fer wather!"

"No, Tim. Serato is after the stretchers all right," said Walter. "We passed him on the way."

"That's Tim Sullivan, our Irish foreman, though he has only a few of his own kind to boss," explained Job Titus in a whisper.

Some of the workmen (all of whom save the few Irish referred to were Peruvian Indians) had now recovered from their shock, or fright, and began to help the Titus brothers, Tom, Mr. Damon and Koku in looking after the

injured. Of these there were five, only two of whom were, seemingly, seriously hurt.

"Me take them out," said Koku, and placing one gently over his left shoulder, and the other over his right, out of the tunnel he stalked with them, not waiting for the stretchers.

And it was well he did so, for one man was in need of an immediate operation, which was performed at the rude hospital the contractors maintained at the tunnel mouth. The other man died as Koku was carrying him out, but the giant had saved one life.

Serato, the Indian foreman, with some of his men now came in, and the other injured were carried out on stretchers, being attended to by the two doctors who formed part of the tunnel force. Among a large body of men some were always falling ill or getting hurt, and in that wild country a doctor had to be kept near at hand.

When the excitement had died down, and it was found that one death would be the total toll of the accident and that the premature blast had done no damage to the tunnel, the two Titus brothers began to consider matters.

Tom, Mr. Damon and the two contractors sat in the main office and talked things over. Koku was eating supper, though the others had finished, but, naturally, it took Koku twice as long as any one else. Professor Bumper was busy transcribing material in his note-book.

"Well, I'm glad you've come back, Job," said his brother. "Things have been going at sixes and sevens here since you went to get some new kind of blasting powder. By the way, I hope you got it, for we are practically at a standstill."

"Oh, I got it all right--some of Tom Swift's best--specially made for us. And, better still, I've brought Tom back with me."

"So I see. Well, I'm glad he's here."

"Now what about this accident to-day?" went on Job.

"Well, as I said, it's the third this week. All of them seemed to be premature blasts. But I've sent for some of the fuses used. I'm going to get at the bottom of this. Here is Sullivan with them now. Come in, Tim," he called, as the Irishman knocked at the door.

"Are they the fuses used in the blasts?" Walter asked.

"They are, sor. An' they mostly burn five minutes, which

is plenty of time fer all th' min t' git out of danger. Only this time th' fuse didn't seem to burn more than a minute, an' I lit it meself."

"Let's see how long they burn now," suggested Job.

One of the longer fuses was lighted. It spluttered and smoked, while the contractors timed it with their watches.

"Four minutes!" exclaimed Job. "That's queer, and they're the regular ten minute length. I wonder what this means.

He took up another fuse, and examined it closely.

"Why!" he cried. "These aren't our fuses at all. They're another make, and much more rapid in burning. No wonder you've been having premature blasts. They go off in about half the time they should."

"I can't understand that!" said Tim, thoughtfully. "I keep all the fuses locked up, and only take them out when I need them."

"Then somebody has been at your box, Tim, and they took out our regular fuses and put in these quicker ones. It's a game to make trouble for us among our men, and to damage the tunnel."

"Bless my rubber boots!" cried Mr. Damon. "Who would do a thing like that?"

"Our rivals, perhaps, though I do not like to accuse any man on such small evidence," said Walter. "But we must adopt new measures."

"And be very careful of the fuses," said Job.

"That's what I will!" declared Tim. "I'll put th' supply in a new place. No wonder there was blasts before th' min could git out th' way! Bad cess t' th' imps that did this!" and he banged his big fist down on the table.

Since the trouble began a guard had been always posted around the tunnel entrance and surrounding buildings, and this night the patrol was doubled. Tom, Mr. Damon and the two Titus brothers sat up quite late, talking over plans and ideas.

Professor Bumper went to bed early, as he said he was going to set off before sunrise to make a search for the lost city.

"I regard him as more or less of a visionary," said Mr.

Job Titus; "but he seems a harmless gentleman, and we'll do all we can to help him."

"Surely," agreed his brother.

The night was not marked by any disturbance, and after breakfast, Tom, under the guidance of the Titus brothers, looked over the tunnel with a view to making his first experiment with the new explosive.

The tunnel was being driven straight into the face of one of the smaller ranges of the Andes Mountains. It was to be four miles in length, and when it emerged on the other side it would enable trains to make connections between the two railroads, thus tapping a rich and fertile country.

On the site of the tunnel, which was two days' mule travel east from Rimac, the Titus brothers had assembled their heavy machinery. They had brought some of their own men, including Tim Sullivan, with them, but the other labor was that of Peruvian Indians, with a native foreman, Serato, over them.

There were engines, boilers, dynamos, motors, diamond drills, steam shovels and a miniature railway, with mules as the motive power. A small village had sprung up at the tunnel mouth, and there was a general store, besides many buildings for the sleeping and eating quarters of the laborers, as well as places where the white men could live. Their quarters were some distance from the native section.

Powder, supplies, in fact everything save what game could be obtained in the forest, or what grains or fruits were brought in by natives living near by, had to be brought over the rough trail. But Titus Brothers had a large experience in engineering matters in wild and desolate countries, and they knew how to be as comfortable as possible.

Mr. Damon learned that one of the districts whence his company had been in the habit of getting quinine was distant a day's journey over the mountain, so he decided to make the trip, with a native guide, and see if he could get at the bottom of the difficulty in forwarding shipments.

This was a few days after the arrival of our friends. Meanwhile, Tom had been shown all through the tunnel by the Titus Brothers and had had his first sight of the hard cliff of rock which seemed to be a veritable stone wall in the way of progress--or at least such progress as was satisfactory to the contractors.

"Well, we'll try what some of my explosive will do," said Tom, when he had finished the examination. "I don't claim it

will be as successful as the sample blast we set off at Shopton, but we'll do our best."

Holes were drilled in the face of the rock, and several charges of the new explosive tamped in. Wires were attached to the fuses, which were of a new kind, and warning was given to clear the tunnel. The wires ran out to the mouth of the horizontal shaft and Tom, holding the switch in his hand made ready to set off the blast.

"Are they all out?" he asked Tim Sullivan, who had emerged, herding the Indian laborers before him. Tim insisted on being the last man to seek safety when an explosion was to take place.

"All ready, sor," answered the foreman.

"Here she goes!" cried Tom, as his fingers closed the circuit.

## Chapter XIV

### Mysterious Disappearances

There was a dull, muffled report, a sort of rumbling that seemed to extend away down under the earth and then echo back again until the ground near the mouth of the tunnel, where the party was standing, appeared to rock and heave. There followed a cloud of yellow, heavy smoke which made one choke and gasp, and Tom, seeing it, cried:

"Down! Down, everybody! There's a back draft, and if you breathe any of that powder vapor you'll have a fearful headache! Get down, until the smoke rises!"

The tunnel contractors and their men understood the danger, for they had handled explosives before. It is a well-known fact that the fumes of dynamite and other giant powders will often produce severe headaches, and even illness. Tom's explosive contained a certain percentage of dynamite, and he knew its ill effects. Stretched prone, or crouching on the ground, there was little danger, as the fumes, being lighter than air, rose. The yellow haze soon drifted away, and it was safe to rise.

"Well, I wonder how much rock your explosive tore loose for us, Tom," observed Job Titus, as he looked at the thin, yellowish cloud of smoke that was still lazily drifting from



the tunnel.

"Can't tell until we go in and take a look," replied the young inventor. "It won't be safe to go in for a while yet, though. That smoke will hang in there a long time. I didn't think there'd be a back draft."

"There is, for we've often had the same trouble with our shots," Walter Titus said. "I can't account for it unless there is some opening in the shaft, connecting with the outer air, which admits a wind that drives the smoke out of the mouth, instead of forward into the blast hole. It's a queer thing and we haven't been able to get at the bottom of it."

"That's right," agreed his brother. "We've looked for some opening, or natural shaft, but haven't been able to find it. Sometimes we shoot off a charge and everything goes well, the smoke disappears in a few minutes. Again it will all blow out this way and we lose half a day waiting for the air to clear. There's a hidden shaft, or natural chimney, I'm sure, but we can't find it."

"That blast didn't make much racket," commented Tim Sullivan. "I doubt that much rock come down. An' that's not sayin' anythin' ag'in yer powder, lad," he went on to Tom.

"Oh, that's all right," Tom Swift replied, with a laugh.

"My explosive doesn't work by sound. It has lots of power, but it doesn't produce much concussion."

"We've often made more noise with our blasts," confirmed Job Titus, "but I can't say much for our results."

They were all anxious, Tom included, to hurry into the tunnel to see how much rock had been loosened by the blast, but it was not safe to venture in until the fumes had been allowed to disperse. In about an hour, however, Tim Sullivan, venturing part way in, sniffed the air and called:

"It's all right, byes! Air's clear. Now come on!"

They all hurried eagerly into the shaft, Mr. Damon stumbling along at Tom's side, as anxious as the lad himself. Before they reached the face of the cliff against which the bore had been driven, and which was as a solid wall of rock to further progress, they began to tread on fragments of stone.

"Well, it blew some as far back as here," said Walter Titus. "That's a good sign."

"I hope so," Tom remarked.

There were still some fumes noticeable in the tunnel, and Mr. Damon complained of a slight feeling of illness, while Koku, who kept at Tom's side, murmured that it made his eyes smart. But the sensations soon passed.

They came to a stop as the face of the cliff loomed into view in the glare of a searchlight which Job Titus switched on. Then a murmur of wonder came from every one, save from Tom Swift. He, modestly, kept silent.

"Bless my breakfast orange!" cried Mr. Damon. "What a big hole!"

There was a great gash blown in the hard rock which had acted as a bar to the further progress of the tunnel. A great heap of rock, broken into small fragments, was on the floor of the shaft, and there was a big hole filled with debris which would have to be removed before the extent of the blast could be seen.

"That's doing the work!" cried Job Titus.

"It beats any two blasts we ever set off," declared his brother.

"Much fine!" muttered the Peruvian foreman, Serato.

"It's a lalaloosa, lad! That's what it is!" enthusiastically exclaimed Tim Sullivan. "Now the black beggars will have some rock to shove! Come on there, Serato, git yer lazy imps t' work cartin' this stuff away. We've got a man on th' job now in this new powder of Tom Swift's. Git busy!"

"Um!" grunted the Indian, and he called to his men who were soon busy with picks and shovels, loading the loosened rock and earth into the mule-hauled dump cars which took it to the mouth of the tunnel, whence it was shunted off on another small railroad to fill in a big gulch to save bridging it.

Tom's first blast was very successful, and enough rock was loosed to keep the laborers busy for a week. The contractors were more than satisfied.

"At this rate we'll finish ahead of time, and earn a premium," said Job to his brother.

"That's right. You didn't make any mistake in appealing to Tom Swift. But I wonder if Blakeson & Grinder have given up trying to get the job away from us?"

"I don't know. I'd never trust them. We must watch out for Waddington. That bomb on the vessel had a funny look, even if it was not meant to kill Tom or me. I won't relax any."

"No, I guess it wouldn't be safe."

But a week went by without any manifestation having been made by the rival tunnel contractors. During that week more of Tom's explosive arrived, and he busied himself getting ready another blast which could be set off as soon as the debris from the first should have been cleared away.

Meanwhile, Professor Bumper, with his Indian guides and helpers, had made several trips into the mountain regions about Rimac, but each time that he returned to the tunnel camp to renew his supplies, he had only a story of failure to recite.

"But I am positive that somewhere in this vicinity is the lost Peruvian city of Pelone," he said. "Every indication points to this as the region, and the more I study the plates of gold, and read their message, the more I am convinced that this is the place spoken of."

"But we have been over many mountains, and in more valleys, without finding a trace of the ancient civilization I feel sure once flourished here. There are no relics of a lost race--not so much as an arrow or spear head. But, somehow or other, I feel that I shall find the lost city. And when I do I shall be famous!"

"Mr. Damon and I will help you all we can," Tom said. "As soon as I get ready the next blast I'll have a little time to myself, and we will go with you on a trip or two."

"I shall be very glad to have you," the bald-headed scientist remarked.

Tom's second blast was even more successful than the first, and enough of the hard rock was loosed and pulverized to give the Indian laborers ten days' work in removing it from the tunnel.

Then, as the services of the young inventor would not be needed for a week or more, he decided to go on a little trip with Professor Bumper.

"I'll come too," said Mr. Damon. "One of the sub-contractors whose men are gathering the cinchona bark for our firm has his headquarters in the region where you are going, and I can go over there and see why he isn't up to the mark."

Accordingly, preparations having been made to spend a week in camp in the forests of the Andes, Tom and his party set off one morning. Professor Bumper's Indian helpers would do the hard work, and, of course, Koku, who went wherever Tom went, would be on hand in case some feat of strength were needed.

It was a blind search, this hunt for a lost city, and as much luck might be expected going in one direction as in another; so the party had no fixed point toward which to travel. Only Mr. Damon stipulated that he wanted to reach a certain village, and they planned to include that on their route.

Tom Swift took his electric rifle with him, and with it he was able to bring down a couple of deer which formed a welcome addition to the camp fare.

The rifle was a source of great wonder to the Peruvians. They were familiar with ordinary firearms, and some of them possessed old-fashioned guns. But Tom's electric weapon, which made not a sound, but killed with the swiftness of light, was awesome to them. The interpreter accompanying Professor Bumper confided privately to Tom that the other Indians regarded the young inventor as a devil who could, if he wished, slay by the mere winking of an eye.

Mr. Damon located the quinine-gathering force he was anxious to see, and, through the interpreter, told the chief that more bark must be brought in to keep up to the terms of the contract.

But something seemed to be the matter. The Indian chief was indifferent to the interpreted demands of Mr. Damon, and that gentleman, though he blessed any number of animate and inanimate objects, seemed to make no impression.

"No got men to gather bark, him say," translated the interpreter.

"Hasn't got any men!" exclaimed Mr. Damon. "Why, look at all the lazy beggars around the village."

This was true enough, for there were any number of able-bodied Indians lolling in the shade.

"Him say him no got," repeated the translator, doggedly.

At that moment screams arose back of one the grass huts, and a child ran out into the open, followed by a savage dog which was snapping at the little one's bare legs.

"Bless my rat trap!" gasped Mr. Damon. "A mad dog!"

Shouts and cries arose from among the Indians. Women screamed, and those who had children gathered them up in their arms to run to shelter. The men threw all sorts of missiles at the infuriated animal, but seemed afraid to approach it to knock it over with a club, or to go to the relief of the frightened child which was now only a few feet ahead of the animal, running in a circle.

"Me git him!" cried Koku, jumping forward.

"No, Wait!" exclaimed Tom Swift. "You can kill the dog all right, Koku," he said, "but a scratch from his tooth might be fatal. I'll fix him!"

Snatching his electric rifle from the Indian bearer who carried it, Tom took quick aim. There was no flash, no report and no puff of smoke, but the dog suddenly crumpled up in a heap, and, with a dying yelp, rolled to one side. The child was saved.

The little one, aware that something had happened, turned and saw the stretched out form of its enemy. Then, sobbing and crying, it ran toward its mother who had just heard the news.

While the mothers gathered about the child, and while the older boys and girls made a ring at a respectful distance from the dog, there was activity noticed among the men of the village. They began hurrying out along the forest paths.

"Where are they going?" asked Tom. "Is there some trouble? Was that a sacred dog, and did I get in bad by killing it?"

The interpreter and the native chief conversed rapidly for a moment and then the former, turning to Tom, said:

"Men go git cinchona bark now. Plenty get for him," and he pointed to Mr. Damon. "They no like stay in village. T'ink yo' got lightning in yo' pocket," and he pointed to the electric rifle.

"Oh, I see!" laughed Tom. "They think I'm a sort of wizard. Well, so I am. Tell them if they don't get lots of quinine bark I'll have to stay here until all the mad dogs are shot."

The interpreter translated, and when the chief had ceased replying, Tom and the others were told:

"Plenty bark git. Plenty much. Yo' go away with yo' lightning. All right now."

"Well, it's a good thing I keeled over that dog," Tom said. "It was the best object lesson I could give them."

And from then on there was no more trouble in this district about getting a supply of the medicinal bark.

A week passed and Professor Bumper was no nearer finding the lost city than he had been at first. Reluctantly, he returned to the tunnel camp to get more provisions.

"And then I'll start out again," he said.

"We'll go with you some other time," promised Tom. "But now I expect I'll have to get another blast ready."

He found the debris brought down by the second one all removed, and in a few days, preparations for exploding more of the powder were under way.

Many holes had been drilled in the face of the cliff of hard rock, and the charges tamped in. Electric wires connected them, and they were run out to the tunnel mouth where the switch was located.

This was done late one afternoon, and it was planned to set off the blast at the close of the working day, to allow all night for the fumes to be blown away by the current of air in the tunnel.

"Get the men out, Tim," said Tom, when all was ready.

"All right, sor," was the answer, and the Irish foreman went back toward the far end of the bore to tell the last shift of laborers to come out so the blast could be set off.

But in a little while Tim came running back with a queer look on his face.

"What's the matter?" asked Tom. "Why didn't you bring the men with you?"

"Because, sor, they're not there!"

"Not in the tunnel? Why, they were working there a little while ago, when I made the last connection!"

"I know they were, but they've disappeared."

"Disappeared?"

"Yis sir. There's no way out except at this end an' you didn't see thim come out: did you?"

"Then they've disappeared! That's all there is to it! Bad goin's on, that's what it is, sor! Bad!" and Tim shook his head mournfully.

## Chapter XV

### Frightened Indians

"There must be some mistake," said Tom, wondering if the Irish foreman were given to joking. Yet he did not seem that kind of man.

"Mistake? How can there be a mistake, sor? I wint in there to tell th' black imps t' come out, but they're not there to tell!"

"What's the trouble?" asked Job Titus, coming out of the office near the tunnel mouth. "What's wrong, Tom?"

"Why, I sent Tim in to tell the men to come out, as I was going to set off a blast, but he says the men aren't in there. And I'm sure the last shift hasn't come out."

By this time Koku, Mr. Damon and Walter Titus had come up to find out what the trouble was.

"The min have disappeared--that's all there is to it!" Tim said.

"Perhaps they have missed their way--the lights may have gone out, and they might have wandered into some abandoned cutting," suggested Tom.

"There aren't any abandoned cuttin's," declared Tim. "It's a straight bore, not a shaft of any kind. I've looked everywhere, and th' min aren't there I tell ye!"

"Are the lights going?" asked Job. "You might have missed them in the dark, Tim."

"The lights are going all right, Mr. Titus," said the young man in charge of the electrical arrangements. "The dynamo hasn't been stopped to-day."

"Come on, we'll have a look," proposed Walter Titus.

"There must be some mistake. Hold back the blast, Tom."

"All right," and the young inventor disconnected the

electrical detonating switch. "I'll come along and have a look too," he added. "Don't let anybody meddle with the wires, Jack," he said to the young Englishman who was in charge of the dynamo.

Into the dimly-lit tunnel advanced the party of investigators, with Tim Sullivan in the lead.

"Not a man could I find!" he said, murmuring to himself. "Not a man! An' I mind th' time in Oireland whin th' little people made vanish a whole village like this, jist becase ould Mike Maguire uprooted a bed of shamrocks."

"That's enough of your superstitions, Tim," warned Job Titus. "If some of the other Indians hear you go on this way they'll desert as they did once before."

"Did they do that?" asked Tom.

"Yes, we had trouble that way when we first began the work. The place here was a howling wilderness then, and there were lots of pumas around.

"A puma is a small sized lion, you know, not specially dangerous unless cornered. Well, some of the men had their families here with them, and a couple of children disappeared. The story got started that there was a big puma--the king of them all--carrying off the little ones, and my brother and I awoke one morning to find every laborer missing. They departed bag and baggage. Afraid of the pumas."

"What did you do?"

"Well, we organized ourselves and our white helpers into a hunting party and killed a lot of the beasts. There wasn't any big one though."

"And what had become of the children?"

"They weren't eaten at all. They had wandered off into the woods, and some natives found them and took care of them. Eventually, they got back home. But it was a long while before we could persuade the Indians to come back. Since then we haven't had any trouble, and I don't want Tim, with his superstitious fancies, to start any."

"But the min are gone!" insisted the Irish foreman, who had listened to this story as he and the others walked along.

"We'll find them," declared Mr. Titus.



But though they looked all along the big shaft, and though the place was well lighted by extra lamps that were turned on when the investigation started, no trace could be found of the workmen, who had been left in the tunnel to finish tamping the blast charges. The party reached the rocky heading, in the face of which the powerful explosive had been placed, and not an Indian was in sight. Nor, as far as could be told, was there any side niche, or blind shaft, in which they could be hiding.

Sometimes, when small blasts were set off, the men would go behind a projecting shoulder of rock to wait until the charge had been fired, but now none was in such a refuge.

"It is queer," admitted Walter Titus. "Where can the men have gone?"

"That's what I want to know!" exclaimed Tim.

"Are you sure they didn't come out the mouth of the tunnel?" asked Job Titus.

"Positive," asserted Tom. "I was there all the while, rigging up the fires."

"We'll call the roll, and check up," decided Job Titus. "Get Serato to help."

The Indian foreman had not been in the tunnel with the last shift of men, having left them to Tim Sullivan to get out in time. The Indian foreman was called from his supper in the shack where he had his headquarters, and the roll of workmen was called.

Ten men were missing, and when this fact became known there were uneasy looks among the others.

"Well," said Mr. Titus, after a pause. "The men are either in the tunnel or out of it. If they're in we don't dare set off the blast, and if they're out they'll show up, sooner or later, for supper. I never knew any of 'em to miss a meal."

"If such a thing were possible," said Walter Titus, "I would say that our rivals had a hand in this, and had induced our men to bolt in order to cripple our force. But we haven't seen any of Blakeson & Grinder's emissaries about, and, if they were, how could they get the ten men out of the tunnel without our Seeing them? It's impossible!"

"Well, what did happen then?" asked Tom.

"I'm inclined to think that the men came out and neither you, nor any one else, saw them. They ran away for reasons

of their own. We'll take another look in the morning, and then set off the blast."

And this was done. There being no trace of the men in the tunnel it was deemed safe to explode the charges. This was done, a great amount of rock being loosened.

The laborers hung back when the orders were given to go in and clean up. There were mutterings among them.

"What's the matter?" asked Job Titus.

"Them afraid," answered Serato. "Them say devil in tunnel eat um up! No go in."

"They won't go in, eh?" cried Tim Sullivan. "Well, they will tho! If there's a divil inside there's a worse one outside, an' tho't's me! Git in there now, ye black-livered spalapeens!" and catching up a big club the Irishman made a rush for the hesitating laborers. With a howl they rushed into the tunnel, and were soon loading rock into the dump cars.

## Chapter XVI

### On the Watch

The mystery of the disappearance of the ten men--for mystery it was--remained, and as no side opening or passage could be found within the tunnel, it came to be the generally accepted explanation that the laborers had come out unobserved, and, for reasons of their own, had run away.

This habit on the part of the Peruvian workers was not unusual. In fact, the Titus brothers had to maintain a sort of permanent employment agency in Lima to replace the deserters. But they were used to this. The difference was that the Indians used to vanish from camp at night, and invariably after pay-day.

"And that's the only reason I have a slight doubt that they walked out of the tunnel," said Job Titus. "There was money due em."

"They never came out of the front entrance of the tunnel," said Tom. "Of that I'm positive."

But there was no way of proving his assertion.

The third blast, while not as successful as the second in the amount of rock loosened, was better than the first, and made a big advance in the tunnel progress. Tom was beginning to understand the nature of the mountain into which the big shaft was being driven and he learned how better to apply the force of his explosive.

That was the work which he had charge of--the placing of the giant powder so it would do the most effective work. Then, when the fumes from the blast had cleared away, in would surge the workmen to clear away the debris.

Under the direction of Mr. Swift, left at Shopton to oversee the manufacture of the explosive, new shipments came on promptly to Lima, and were brought out to the tunnel on the backs of mules, or in the case of small quantities, on the llamas. But the latter brutes will not carry a heavy load, lying down and refusing to get up if they are overburdened, whereas one has yet to find a mule's limit.

After his first success in getting the natives to take a more active interest in the gathering of the cinchona bark, Mr. Damon found it rather easy, for the story of Tom's electric rifle and how it had killed the mad dog spread among the tribes, and Mr. Damon had but to announce that the "lightning shooter," as Tom was called, was a friend of the drug concern to bring about the desired results. Mr. Damon, by paying a sort of bribe, disguised under the name "tax," secured the help of Peruvian officials so he had no trouble on that score.

Koku was in his element. He liked a wild life and Peru was much more like the country of giants where Tom had found him, than any place the big man had since visited. Koku had great strength and wanted to use it, and after a week or so of idleness he persuaded Tom to let him go in the tunnel to work.

The giant was made a sort of foreman under Tim, and the two became great friends. The only trouble with Koku was that he would do a thing himself instead of letting his men do it, as, of course, all proper foremen should do. If the giant saw two or three of the Indians trying to lift a big rock into the little dump cars, and failing because of its great weight, he would good-naturedly thrust them aside, pick up the big stone in his mighty arms, and deposit it in its place.

And once when an unusually big load had been put in a car, and the mule attached found it impossible to pull it out to the tunnel mouth, Koku unhitched the creature and, slipping the harness around his waist, walked out, dragging the load

as easily as if pulling a child on a sled.

Professor Bumper kept on with his search for the lost city of Pelone. Back and forth he wandered among the wild Andes Mountains, now hopeful that he was on the right trail, and again in despair. Tom and Mr. Damon went with him once more for a week, and though they enjoyed the trip, for the professor was a delightful companion, there were no results. But the scientist would not give up.

Tom Swift was kept busy looking after the shipments of the explosive, and arranging for the blasts. He had letters from Ned Newton in which news of Shopton was given, and Mr. Swift wrote occasionally. But the mails in the wilderness of the Andes were few and far between.

Tom wrote a letter of explanation to Mr. Nestor, in addition to the wireless he had sent regarding the box labeled dynamite, but he got no answer. Nor were his letters to Mary answered.

"I wonder what's wrong?" Tom mused. "It can't be that they think I did that on purpose. And even if Mr. Nestor is angry at me for something that wasn't my fault, Mary ought to write."

But she did not, and Tom grew a bit despondent as the days went by and no word came.

"I suppose they might be offended because I left Rad to do up that package instead of attending to it myself," thought Tom. "Well, I did make a mistake there, but I didn't mean to. I never thought about Eradicate's not reading. I'll make him go to night school as soon as I get back. But maybe I'll never get another chance to send Mary anything. If I do, I'll not let Rad deliver it--that's sure."

The feeling of alarm engendered among the Indians by the disappearance of their ten fellow-workers seemed to have disappeared. There were rumors that some of the mysterious ten had been seen in distant villages and settlements, but the Titus brothers could not confirm this.

"I don't think anything serious happened to them, anyhow," said Job Titus one day. "And I should hate to think our work was responsible for harm to any one."

"Your rivals don't seem to be doing much to hamper you," observed Tom. "I guess Waddington gave up."

"I won't be too sure of that," said Mr. Titus.

"Why, what has happened?" Tom asked.

"Well, nothing down here--that is, directly--but we are meeting with trouble on the financial end. The Peruvian government is holding back payments."

"Why is that?"

"They claim we are not as far advanced as we ought to be."

"Aren't you?"

"Practically, yes. There was no set limit of work to be done for the intermediate payments. We bonded ourselves to have the tunnel done at a certain date.

"If we fail, we lose a large sum, and if we get it done ahead of time we get a big premium. There was no question as to completing a certain amount of footage before we received certain payments. But Senor Belasdo, the government representative, claims that we will not be done in time, and therefore he is holding back money due us. I'm sure the rival contractors have set him up to this, because he was always decent to us before.

"Another matter, too, makes me suspicious. We have tried to raise money in New York to tide us over while the government is holding up our funds here. But our New York office is meeting with difficulties. They report there is a story current to the effect that we are going to fail, and while that isn't so, you know how hard it is to borrow money in the face of such rumors. We are doing all we can to fight them, of course, and maybe we'll beat out our rivals yet.

"But that isn't all. I'm sure some one is on the ground here trying to make trouble among our workers. I never knew so many men to leave, one after another. It's keeping the employment agency in Lima busy supplying us with new workers. And so many of them are unskilled. They aren't able to do half the work of the old men, and poor Tim Sullivan is in despair."

"You think some one here is causing dissensions and desertions among your men?"

"I'm sure of it! I've tried to ferret out who it is, but the spy, for such he must be, keeps his identity well hidden."

Tom thought for a moment. Then he said:

"Mr. Titus, with your permission, I'll see if I can find out about this for you."

"Find out what, Tom?"

"What is causing the men to leave. I don't believe it's the scare about the ten missing ones."

"Nor do I. That's past and gone. But how are you going to get at the bottom of it?"

"By keeping watch. I've got nothing to do now for the next week. We've just set off a big blast, and I've got the powder for the following one all ready. The men will be busy for some time getting out the broken rock. Now what I propose to do is to go in the tunnel and work among them until I can learn something.

"I can understand the language pretty well now, though I can't speak much of it. I'll go in the tunnel every day and find out what's going on."

"But you'll be known, and if one of our men, or one who we suppose is one, turns out to be a spy, he'll be very cautious while you're in there."

"He won't know me," Tom said. "This is how I'll work it. I'll go off with Professor Bumper the next time he starts on one of his weekly expeditions into the woods. But I won't go far until I turn around and come back. I'll adopt some sort of disguise, and I'll apply to you for work. You can tell Tim to put me on. You might let him into the secret, but no one else."

A few days later Tom was seen departing with Professor Bumper into the interior, presumably to help look for the lost city. Mr. Damon was away from camp on business connected with the drug concern, and Koku, to his delight, had been given charge of a stationary hoisting engine outside the tunnel, so he would not come in contact with Tom. It was not thought wise to take the giant into the secret.

Then one day, shortly after Professor Bumper and Tom had disappeared into the forest, a ragged and unkempt white man applied at the tunnel camp for work. There was just the barest wink as he accosted Mr. Titus, who winked in turn, and then the new man was handed over to Tim Sullivan, as a sort of helper.

And so Tom Swift began his watch.

## Chapter XVII

### The Condor

Left to himself, with only the rather silent gang of Peruvian Indians as company, Tom Swift looked about him. There was not much active work to be done, only to see that the Indians filled the dump cars evenly full, so none of the broken rock would spill over the side and litter the tramway. Then, too, he had to keep the Indians up to the mark working, for these men were no different from any other, and they were just as inclined to "loaf on the job" when the eye of the "boss" was turned away.

They did not talk much, murmuring among themselves now and then, and little of what they said was intelligible to Tom. But he knew enough of the language to give them orders, the main one of which was:

"Hurry up!"

Now, having seen to it that the gang of which he was in temporary charge was busily engaged, Tom had a chance to look about him. The tunnel was not new to him. Much of his time in the past month had been spent in its black depths, illuminated, more or less, by the string of incandescent lights.

"What I want to find," mused Tom, as he walked to and fro, "is the place where those Indians disappeared. For I'm positive they got away through some hole in this tunnel. They never came out the main entrance."

Tom held to this view in spite of the fact that nearly every one else believed the contrary--that the men had left by the tunnel mouth, near which Tom happened to be alone at the time.

Now, left to himself, with merely nominal duties, and so disguised that none of the workmen would know him for the trim young inventor who oversaw the preparing of the blast charges, Tom Swift walked to and fro, looking for some carefully hidden passage or shaft by means of which the men had got away.

"For it must be well hidden to have escaped observation so long," Tom decided. "And it must be a natural shaft, or hole, for we are boring into native rock, and it isn't likely that these Indians ever tried to make a tunnel here. There must be some natural fissure communicating with the outside of the mountain, in a place where no one would see

the men coming out."

But though Tom believed this it was another matter to demonstrate his belief. In the intervals of seeing that the natives properly loaded the dump cars, and removed as much of the debris as possible, Tom looked carefully along the walls and roof of the tunnel thus far excavated.

There were cracks and fissures, it is true, but they were all superficial ones, as Tom ascertained by poking a long pole up into them.

"No getting out that way," he said, as he met with failure after failure.

Once, while thus engaged, he saw Serato, the Indian foreman looking narrowly at him, and Serato said something in his own language which Tom could not understand. But just then along came Tim Sullivan, who, grasping the situation, exclaimed:

"That's all roight, now, Serri, me lad!" for thus he contracted the Indian's name. "That's a new helper I have, a broth of a bye, an' yez kin kape yer hands off him. He's takin' orders from me!"

"Um!" grunted the Indian. "Wha for he fish in tunnel roof?" for Tom's pole was one like those the Indians used when, on off days, they emulated Izaak Walton.

"Fishin' is it!" exclaimed Tim. "Begorra 'tis flyin' fish he's after I'm thinkin'. Lave him alone though, Serri! I'm his boss!"

"Um!" grunted the Indian again, as he moved off into the farther darkness.

"Be careful, Tom," whispered the Irishman, when the native had gone. "These black imps is mighty suspicious. Maybe that fellah had a hand in th' disappearances hisself."

"Maybe," admitted Tom. "He may get a percentage on all new hands that are hired."

Tom kept on with his search, always hoping he might find some hidden means of getting out of the tunnel. But as the days went by, and he discovered nothing, he began to despair.

"The queer thing about it," mused Tom, "is what has become of the ten men. Even if they did find some secret means of leaving, what has become of them? They couldn't completely



disappear, and they have families and relatives that would make some sort of fuss if they were out of sight completely this long. I wonder if any inquiries have been made about them?"

When Tom came off duty he asked the Titus brothers whether or not any of the relatives of the missing men had come to seek news about them. None had.

"Then," said Tom, "you can depend on it the men are all right, and their relatives know it. I wonder how it would do to make inquiries at that end? Question some of the relatives."

"Bless my hat hand!" exclaimed Mr. Damon, who was at the conference. "I never thought of that. I'll do it for you."

The odd man had gotten his quinine gathering business well under way now, and he had some spare time. So, with an interpreter who could be trusted, he went to the native village whence had come nearly all of the ten missing men. But though Mr. Damon found some of their relatives, the latter, with shrugs of their shoulders, declared they had seen nothing of the ones sought.

"And they didn't seem to worry much, either," reported Mr. Damon.

"Then we can depend on it," remarked Tom, "that the men are all right and their relatives know it. There's some conspiracy here."

So it seemed. But who was at the bottom of it?

"I can't figure out where Blakeson & Grinder come in," said Job Titus. "They would have an object in crippling us, but they seem to be working from the financial end, trying to make us fail there. I haven't seen any of their sneaking agents around here lately, and as for Waddington he seems to have stayed up North."

Tom resumed his vigil in the tunnel, poking here and there, but with little success. His week was about up, and he would soon have to resume his character as powder expert, for the debris was nearly all cleaned up, and another blast would have to be fired shortly.

"Well, I'm stumped!" Tom admitted, the day when he was to come on duty for the last time as a pretended foreman. "I've hunted all over, and I can't find any secret passage."

It was warm in the tunnel, and Tom, having seen one train of the dump cars loaded, sat down to rest on an elevated

ledge of rock, where he had made a sort of easy chair for himself, with empty cement bags for cushions.

The heat, his weariness and the monotonous clank-clank of a water pump near by, and the equally monotonous thump of the lumps of rocks in the cars made Tom drowsy. Almost before he knew it he was asleep.

What suddenly awakened him he could not tell. Perhaps it was some influence on the brain cells, as when a vivid dream causes us to start up from slumber, or it may have been a voice. For certainly Tom heard a voice, he declared afterward.

As he roused up he found himself staring at the rocky wall of the tunnel. And yet the wall seemed to have an opening in it and in the opening, as if it were in the frame of a picture, appeared the face Tom had seen at his library the day Job Titus called on him--the face of Waddington!

Tom sat up so quickly that he hit his head sharply on a projecting rock spur, and, for the moment he "saw stars." And with the appearance of these twinkling points of light the face of Waddington seemed to fade away, as might a vision in a dream.

"Bless my salt mackerel, as Mr. Damon would say!" cried Tom. "What have I discovered?"

He rubbed his head where he had struck it, and then passed his hand before his eyes, to make sure he was awake. But the vision, if vision it was, had vanished, and he saw only the bare rock wall. However, the echo of the voice remained in his ears, and, looking down toward the tunnel floor Tom saw Serato, the Indian foreman.

"Were you speaking to me?" asked Tom, for the man understood and spoke English fairly well.

"No, sar. I not know you there!" and the fore man seemed startled at seeing Tom. Clearly he was in a fright.

"You were speaking!" insisted Tom.

"No, sar!" The man shook his head.

"To some one up there!" went on the young inventor, waving his hand toward the spot where he had seen the face in the rock.

"Me speak to roof? No, sar!" Serato laughed.

Tom did not know what to believe.

"You hear me tell um lazy man to much hurry," the Indian went on. "Me not know you sleep there, sar!"

"Oh, all right," Tom said, recollecting that he must keep up his disguise. "Maybe I was dreaming."

"Yes, sar," and the foreman hurried on, with a backward glance over his shoulder.

"Now was I dreaming or not?" thought Tom. "I'm going to have a look at that place though, where I saw Waddington's face. Or did I imagine it?"

He got a long pole and a powerful flash lamp, and when he had a chance, unobserved, he poked around in the vicinity where he had seen the face.

But there was only solid rock.

"It must have been a dream," Tom concluded. "I've been thinking too much about this business. I'll have to give up. I can't solve the mystery of the missing men."

The next day, much disappointed, he resumed his own character as explosive expert, and prepared for another blast. The net result of his watch was that he became suspicious of Serato, and so informed the Titus Brothers.

"Oh, but you're mistaken," said Job "We have had him for years, on other contracts in Peru, and we trust him."

"Well, I don't," Tom said, but he had to let it go at that.

Another blast was set off, but it was not very successful.

"The rock seems to be getting harder the farther in we go," commented Walter Titus. "We're not up to where we ought to be."

"I'll have to look into it," answered Tom. "I may have to change the powder mixture. Guess I'll go up the mountain a way, and see if there are any outcroppings of rock there that would give me an idea of what lies underneath."

Accordingly, while the men in the tunnel were clearing away the rock loosened by the blast, Tom, one day, taking his electric rifle with him, went up the mountain under which the big bore ran.

He located, by computation, the spot beneath which the end of the tunnel then was, and began collecting samples of the

outcropping ledge. He wanted to analyze these pieces of stone later. Koku was with him, and, giving the giant a bag of stones to carry, Tom walked on rather idly.

It was a wild and desolate region in which he found himself on the side of the mountain. Beyond him stretched towering and snow-clad peaks, and high in the air were small specks, which he knew to be condors, watching with their eager eyes for their offal food.

As Tom and Koku made their way along the mountain trail they came unexpectedly upon an Indian workman who was gathering herbs and bark, an industry by which many of the natives added to their scanty livelihood. The woman was familiar with the appearance of the white men, and nodded in friendly fashion.

Tom passed on, thinking of many things, when he was suddenly startled by a scream from the woman. It was a scream of such terror and agony that, for the moment, Tom was stunned into inactivity. Then, as he turned, he saw a great condor sweeping down out of the air, the wind fairly whistling through the big, outstretched wings.

"Jove!" ejaculated Tom. "Can the bird be going to attack the woman?"

But this was not the object of the condor. It was aiming to strike, with its fierce talons, at a point some paces distant from where the woman stood, and in the intervals between her screams Tom heard her cry, in her native tongue:

"My baby! My baby! The beast-bird will carry off my baby!"

Then Tom understood. The woman herb-gatherer had brought her infant with her on her quest, and had laid it down on a bed of soft grass while she worked. And it was this infant, wrapped as Tom afterward saw in a piece of deer-skin, at which the condor was aiming.

"Master shoot!" cried Koku, pointing to the down-sweeping bird.

"You bet I'll shoot!" cried Tom.

Throwing his electric rifle to his shoulder, Tom pressed the switch trigger. The unseen but powerful force shot straight at the condor.

The outstretched wings fell limp, the great body seemed to shrivel up, and, with a crash, the bird fell into the underbrush, breaking the twigs and branches with its weight. The electric rifle, a full account of which was given in the

volume entitled "Tom Swift and His Electric Rifle," had done its work well.

With a scream, in which was mingled a cry of thanks, the woman threw herself on the sleeping child. The condor had fallen dead not three paces from it.

Tom Swift had shot just in time.

## Chapter XVIII

### The Indian Strike

Snatching up in her arms the now awakened child, the woman gazed for a moment into its face, which she covered with kisses. Then the herb-gatherer looked over to the dead, limp body of the great condor, and from thence to Tom.

In another moment the woman had rushed forward, and knelt at the feet of the young inventor. Holding the baby in one arm, in her other hand the woman seized Tom and kissed it fervently, at the same time pouring forth a torrent of impassioned language, of which Tom could only make out a word now and then. But he gathered that the woman was thanking him for having saved the child.

"Oh, that's all right," Tom said, rather embarrassed by the hand-kissing. "It was an easy shot."

An Indian came bursting through the bushes, evidently the woman's husband by the manner in which she greeted him, and Tom recognized the newcomer as one of the tunnel workers. There was some quick conversation between the husband and wife, in which the latter made all sorts of motions, including in their scope Tom, his rifle, the dead condor and the now smiling baby.

The man took off his hat and approached Tom, genuflecting as he might have done in church.

"She say you save baby from condor," the man said in his halting English. "She t'ank you--me, I t'ank you. Bird see babe in deer skin--t'ink um dead animal. Maybe so bird carry baby off, drop um on sharp stone, baby smile no more. You have our lives, senor! We do anyt'ing we can for you."

"Thanks," said Tom, easily. "I'm glad I happened to be around. I supposed condors only went for things dead, but I

reckon, as you say, it mistook the baby in the deer skin for a dead animal. And I guess it might have carried your little one off, or at least lifted it up, and then it might have dropped it far enough to have killed it. It sure is a big bird," and Tom strolled over to look at what he had bagged.

The condor of the Andes is the largest bird of prey in existence. One in the Bronx Zoo, in New York, with his wings spread out, measured a little short of ten feet from tip to tip. Measure ten feet out on the ground and then imagine a bird with that wing stretch.

This same condor in the park was made angry by a boy throwing a feather boa up into the air outside the cage. The condor raised himself from the ground, and hurled himself against the heavy wire netting so that the whole, big cage shook. And the breeze caused by the flapping wings blew off the hats of several spectators. So powerful was the air force from the condor's wings that it reminded one of the current caused when standing behind the propellers of an aeroplane in motion. The condor rarely attacks living persons or animals, though it has been known to carry off big sheep when driven by hunger.

It was one of these animals Tom Swift had shot with his electric rifle.

"We do anyt'ing you want," the man gratefully repeated.

"Well, I've got about all I want," Tom said. "But if you could tell me where those ten missing men are, and how they got out of the tunnel, I'd be obliged to you."

The woman did not seem to comprehend Tom's talk, but the man did. He started, and fear seemed to come over him.

"Me--I--I can not tell," he murmured.

"No, I don't suppose you can," said Tom, musingly. "Well, it doesn't matter, I guess I'll have to cross it off my books. I'll never find out."

Again the Indian and his wife expressed their gratitude, and Tom, after letting the little brown baby cling to his finger, and patting its chubby cheek, went on his way with Koku.

"Well, that was some excitement," mused Tom, who made little of the shot itself, for the condor was such a mark that he would have had to aim very badly indeed to miss it. And perhaps only the electric rifle could have killed quickly enough to prevent the baby's being injured in some way by the big bird, even though it was dying.

"Master heap good shot!" exclaimed Koku, admiringly.

The tunnel work went on, though not so well as when Tom's explosive was first used. The rock was indeed getting harder and was not so easily shattered. Tom made tests of the pieces he had obtained from the outcropping ledge on the mountain where he had shot the condor, and decided to make a change in the powder.

Shipments were regularly received from Shopton, Mr. Swift keeping things in progress there. Mr. Damon's business was going on satisfactorily, and he lent what aid he could to Tom. As for Professor Bumper he kept on with his search for the lost city of Pelone, but with no success.

The scientist wanted Tom and Mr. Damon to go on another trip with him, this time to a distant sierra, or fertile valley, where it was reported a race of Indians lived, different from others in that region.

"It may be that they are descendants from the Pelonians," suggested the professor. Tom was too busy to go, but Mr. Damon went. The expedition had all sorts of trouble, losing its way and getting into a swamp from which escape was not easy. Then, too, the strange Indians proved hostile, and the professor and his party could not get nearer than the boundaries of the valley.

"But the difficulties and the hostile attitude of these natives only makes me surer that I am on the right track," said Mr. Bumper. "I shall try again."

Tom was busy over a problem in explosives one day when he saw Tim Sullivan hurrying into the office of the two brothers. The Irishman seemed excited.

"I hope there hasn't been another premature blast," mused Tom. "But if there had been I think I'd have heard it."

He hastened out to see Job and Walter Titus in excited conversation with Tim.

"They didn't come out, an' thot's all there is to it," the foreman was saying. "I sint thim in mesilf, and they worked until it was time t' set off th' blast. I wint t' get th' fuse, an' I was goin' t' send th' black imps out of danger, whin--whist--they was gone whin I got back--fifteen of 'em this time!"

"Do you mean that fifteen more of our men have vanished as the first ten did?" asked Job Titus.

"That's what I mean," asserted the Irishman.

"It can't be!" declared Walter.

"Look for yersilf!" returned Tim. "They're not in th' tunnel!"

"And they didn't come out?"

"Ask th' time-keeper," and Tim motioned to a young Englishman who, since the other disappearance, had been stationed at the mouth of the tunnel to keep a record of who went in and came out.

"No, sir! Nobody kime hout, sir!" the Englishman declared.

"Hi 'aven't been away frim 'ere, sir, not since hi wint on duty, sir. An' no one kime out, no, sir!"

"We've got to stop this!" declared Job Titus.

"I should say so!" agreed his brother.

With Tom and Tim the Titus brothers went into the tunnel. It was deserted, and not a trace of the men could be found. Their tools were where they had been dropped, but of the men not a sign.

"There must be some secret way out," declared Tom.

"Then we'll find it," asserted the brothers.

Work on the tunnel was stopped for a day, and, keeping out all natives, the contractors, with Tom and such white men as they had in their employ, went over every foot of roof, sides and floor in the big shaft. But not a crack or fissure, large enough to permit the passage of a child, much less a man, could be found.

"Well, I give up!" cried Walter Titus in despair. "There must be witchcraft at work here!"

"Nonsense!" exclaimed his brother. "It's more likely the craft of Blakeson & Grinder, with Waddington helping them."

"Well, if a human agency made these twenty-five men disappear, prove it!" insisted Walter.

His brother did not know what to say.

"Well, go on with the work," was Job's final conclusion.

"We'll have one of the white men constantly in the tunnel after this whenever a gang is working. We won't leave the natives alone even long enough to go to get a fuse. They'll



be under constant supervision."

The tunnel was opened for work, but there were no workers. The morning after the investigation, when the starting whistle blew there was no line of Indians ready to file into the big, black hole. The huts where they slept were deserted. A strange silence brooded over the tunnel camp.

"Where are the men, Serato?" asked Tom of the Indian foreman.

"Men um gone. No work any more. What you call a hit."

"You mean a strike?" asked Tom.

"Sure--strike--hit--all um same. No more work--um 'fraid!"

## Chapter XIX

### A Woman Tells

"Well, if this isn't the limit!" cried Torn Swift. "As if we didn't have trouble enough without a strike on our hands!"

"I should say yes!" chimed in Job Titus.

"Do you mean that the men won't work any more?" asked his brother of the native foreman.

"Sure, no more work--um much 'fraid big devil in tunnel carry um off an' eat um."

"Well, I don't know that I blame 'em for being a bit frightened," commented Job. "It is a queer proceeding how twenty-five men can disappear like that. Where have the men gone, Serato?"

"Gone home. No more work. Go on hit--strike--same like white men."

"They waited until pay day to go on strike," commented the bookkeeper, a youth about Tom's age.

This was true. The men had been paid off the day before, and usually on such occasions many of them remained away, celebrating in the nearest village. But this time all had left, and evidently did not intend to come back.

"We'll have to get a new gang," said Job. "And it's going to delay us just at the wrong time. Well, there's no help for it. Get busy, Serato. You and Tim go and see how many men you can gather. Tell them we'll give them a sol a week more if they do good work. (A sol is the standard silver coin of Peru, and is worth in United States gold about fifty cents.)

"Half a dollar a day more will look mighty big to them," went on the contractor. "Get the men, Serato, and we'll raise your wages two sols a week."

The eyes of the Indian gleamed, and he went off, saying.

"Um try, but men much 'fraid."

Whether Serato used his best arguments could not, of course, be learned, but he came back at the close of the day, unaccompanied by any workers, and he shook his head despondently.

"Indians no come for one sol, mebbly not for two," he said. "I no can git."

"Then I'll try!" cried Job. "I'll get the workers. I'll make our old ones come back, for they'll be the best."

Accompanied by his brother and Tom he went to the various Indian villages, including the one whence most of the men now on strike had come. The fifteen missing ones were not found, though, as before, their relatives, and, in some cases, their families, did not seem alarmed. But the men who had gone on strike were found lolling about their cabins and huts, smoking and taking their ease, and no amount of persuasion could induce them to return.

Some of them said they had worked long enough and were tired, needing a rest. Others declared they had money enough and did not want more. Even two more sols a week would not induce them to return.

And many were frankly afraid. They said so, declaring that if they went back to the tunnel some unknown devil might carry them off under the earth.

Job Titus and his brother, who could speak the language fairly well, tried to argue against this. They declared the tunnel was perfectly safe. But one native worker, who had been the best in the gang, asked:

"Where um men go?"

The contractors could not answer.

"It's a trick," declared Walter. "Our rivals have induced the men to go on strike in order to hamper us with the work so they'll get the job."

But the closest inquiry failed to prove this statement. If Blakeson & Grinder, or any of their agents, had a hand in the strike they covered their operations well. Though diligent inquiry was made, no trace of Waddington, or any other tool, could be found.

Tom, who had some sort of suspicion of the bearded man on the steamer, tried to find him, even taking a trip in to Lima, but without avail.

The tunnel work was at a standstill, for there was little use in setting off blasts if there were no men to remove the resulting piles of debris. So, though Tom was ready with some specially powerful explosive, he could not use it.

Efforts were made to get laborers from another section of the country, but without effect. The contractors heard of a big force of Italians who had finished work on a railroad about a hundred miles away, and they were offered places in the tunnel. But they would not come.

"Well, we may as well give up," said Walter, despondently, to his brother one day. "We'll never get the tunnel done on time now."

"We still have a margin of safety," declared Job. "If we could get the men inside of a couple of weeks, and if Tom's new powder rips out more rock, we'll finish in time."

"Yes, but there are too many ifs. We may as well admit we've failed."

"I'll never do that!"

"What will you do?"

But Job did not know.

"If we could git a gang of min from the ould sod--th' kind I used t' work wit in N'Yark," said Tim Sullivan, "I'd show yez whot could be done! We'd make th' rock fly!"

But that efficient labor was out of the question now. The tunnel camp was a deserted place.

"Come on, Koku, we'll go hunting," said Tom one day.

"There's no use hanging around here, and some venison wouldn't go bad on the table."

"I'll come, too," said Mr. Damon. "I haven't anything to do."

The Titus brothers had gone to a distant village, on the forlorn hope of getting laborers, so Tom was left to his own devices, and he decided to go hunting with his electric rifle.

The taruco, or native deer, had been plentiful in the vicinity of the tunnel until the presence of so many men and the frequent blasts had driven them farther off, and it was not until after a tramp of several miles that Tom saw one. Then, after stalking it a little way, he managed to kill it with the electric rifle.

Koku hoisted the animal to his big shoulders, and, as this would provide meat enough for some time, Tom started back for camp.

As he and Mr. Damon, with Koku in the rear, passed through a little clearing, they saw, on the far side, a native hut. And from it rushed a woman, who approached Tom, casting herself on her knees, while she pressed his free hand to her head.

"Bless my scarf pin!" exclaimed Mr. Damon. "What does this mean, Tom?"

"Oh, this is the mother of the child I saved from the condor," said Tom. "Every time she sees me she thanks me all over again. How is the baby?" he asked in the Indian tongue, for he was a fair master of it by now.

"The baby is well. Will the mighty hunter permit himself to enter my miserable hovel and partake of some milk and cakes?"

"What do you say, Mr. Damon?" Tom asked. "She's clean and neat, and she makes a drink of goat's milk that isn't bad. She bakes some kind of meal cakes that are good, too. I'm hungry."

"All right, Tom, I'll do as you say."

A little later they were partaking of a rude, but none the less welcome, lunch in the woman's hut, while the baby whose life Tom had saved cooed in the rough log cradle.

"Say, Masni," asked Tom, addressing the woman by name, "don't you know where we can get some men to work the

tunnel?" Of course Tom spoke the Indian language, and he had to adapt himself to the comprehension of Masni.

"Men no work tunnel?" she inquired.

"No, they've all skipped out--vamoosed. Afraid of some spirit."

The woman looked around, as though in fear. Then she approached Tom closely and whispered:

"No spirit in tunnel--bad man!"

"What!" cried Tom, almost jumping off his stool. "What do you mean, Masni?"

"Me tell mighty hunter," she went on, lowering her voice still more. "My man he no want to tell, he 'fraid, but I tell. Mighty hunter save Vashni," and she looked toward the baby. "Me help friends of mighty hunter. Bad man in tunnel--no spirit!"

"Men go. Spirit no take um--bad man take um."

"Where are they now?" asked Tom. "Jove, if I could find them the secret would be solved!"

The woman looked fearfully around the hut and then whispered:

"You come--me show!"

"Bless my toothbrush!" cried Mr. Damon. "What is going to happen, Tom Swift?"

"I don't know," was the answer, "but something sure is in the wind. I guess I shot better than I knew when I killed that condor."

## Chapter XX

### Despair

Calling to a girl of about thirteen years to look after her baby, Masni slipped along up a rough mountain trail, motioning to Tom, Mr. Damon and Koku to follow. Or rather, the woman gave the sign to Tom, ignoring the others, who, naturally, would not be left behind. Masni seemed to have

eyes for no one but the young inventor, and the manner in which she looked at him showed the deep gratitude she felt toward him for having saved her baby from the great condor.

"Come," she said, in her strange Indian tongue, which Tom could interpret well enough for himself now.

"But where are we going, Masni?" he asked. "This isn't the way to the tunnel."

"Me know. Not go to tunnel now," was her answer. "Me show you men."

"But which men do you mean, Masni?" inquired Tom. "The lost men, or the bad ones, who are making trouble for us? Which men do you mean?"

Masni only shook her head, and murmured: "Me show."

Probably Tom's attempt to talk her language was not sufficiently clear to her.

"My man--he good man," she said, coming to a pause on the rough trail after a climb which was not easy.

"Yes, I know he is," Tom said. "But he went on a strike with the others, Masni. He no work. He go on a 'hit,' as Serato calls it," and Tom laughed.

"My man he good man--but he 'fraid," said the wife. "He want to tell you of bad mans, but he 'fraid. You save my baby, I no 'fraid. I tell."

"Oh, I see," said Tom. "Your husband would have given away the secret, only he's afraid of the bad men. He likes me, too?"

"Sure!" Masni exclaimed. "He want tell, but 'fraid. He go 'way, I tell."

Tom was not quite sure what it all meant, but it seemed that after his slaying of the condor both parents were so filled with gratitude that they wanted to reveal some secret about the tunnel, only Masni's husband was afraid. She, however, had been braver.

"Something is going to happen," said Tom Swift. "I feel it in my bones!"

"Bless my porous plaster!" cried Mr. Damon. "I hope it isn't anything serious."

"We'll see," Tom went on.

They resumed their journey up the mountain trail. It wound in and out in a region none of them had before visited. Though it could not be far from the tunnel, it was almost a strange country to Tom.

Suddenly Masni stopped in a narrow gorge where the walls of rock rose high on either hand. She seemed looking for something. Her sharp, black eyes scanned the cliff and then with an exclamation of satisfaction she approached a certain place. With a quick motion she pulled aside a mass of tangled vines, and disclosed a path leading down through a V shaped crack in the cliff.

"Mans down there," she said. "You go look."

For a moment Tom hesitated. Was this a trap? If he and his friends entered this narrow and dark opening might not the Indian woman roll down some rock back of them, cutting off forever the way of escape?

Tom turned and looked at Masni. Then he was ashamed of his suspicion, for the honest black face, smiling at him, showed no trace of guile.

"You go--you see lost men," the woman urged.

"Come on!" cried Tom. "I believe we're on the track of the mystery!"

He led the way, followed by Mr. Damon, while Koku came next and then Masni. It could be no trap since she entered it herself.

The path widened, but not much. There was only room for one to walk at a time. The trail twisted and turned, and Tom was wondering how far it led, when, from behind him, came the cry of the woman:

"Watch now--no fall down."

Tom halted around a sharp turn, and stood transfixed at the sight which met his gaze. He found himself looking out through a crack in the face of a sheer stone cliff that went straight down for a hundred feet or more to a green-carpeted valley.

Tom was standing in a narrow cleft of rock--the same rock through which they had made their way. And at the foot of the cliff was a little encampment of Indians. There were a dozen huts, and wandering about them, or sitting in the shade, were a score or more of Indians.

"There men from tunnel," said Masni, and, as he looked, wondering, Tom saw some of the workers he knew. One especially, was a laborer who walked with a peculiar limp.

"The missing men!" gasped the young inventor.

"Bless my almanac!" cried Mr. Damon. "Where?"

"Here," answered Tom. "If you squeeze past me you can see them."

Mr. Damon did so.

"How did they get here?" asked the odd man, as he looked down in the little valley where the missing ones were sequestered.

"That's what we've got to find out," Tom said. "At any rate here they are, and they seem to be enjoying life while we've been worrying as to what had become of them. How did they get here, Masni?"

"Me show you. Come."

"Wait until I take another look," said Tom.

"Be careful they don't see you," cautioned Mr. Damon.

"They can't very well. The cleft is screened by bushes."

Tom looked down once more on the group of men who had so mysteriously disappeared. The little valley stretched out away from the face of the cliff, through which, by means of the crack, or cleft in it, Tom and the others had come. Tom looked down the wall of rock. It was as smooth as the side of a building, and offered no means of getting down or up. Doubtless there was an easier entrance to the valley on the other side. It was like looking down into some vast hall through an upper window or from a balcony.

"And those men have been in hiding, or been hidden here, ever since they disappeared from the tunnel," said Mr. Damon.

"It doesn't look as though they were detained by force," Tom remarked. "I think they are being paid to stay away. How did they get here, Masni?"

"Me show you. Come!"

They went back along the trail that led through the split in the rock, until they had come to the place where the natural curtain of vines concealed the entrance. Tom took



particular notice of this place so he would know it again.

Then Masni led them over the mountain, and this time Tom saw that they were approaching the tunnel. He recognized some places where he had taken samples of rock from the outcropping to test the strength of his explosive.

Reaching a certain wild and desolate place, Masni made a signal of caution. She seemed to be listening intently. Then, as if satisfied there was no danger, she parted some bushes and glided in, motioning the others to follow.

"Now I wonder what's up," Tom mused.

He and the others were soon informed.

Masni stopped in front of a pile of brush. With a few vigorous motions of her arms she swept it aside and revealed a smooth slab of rock. In the centre was what seemed to be a block of metal Masni placed her foot on this and pressed heavily.

And those watching saw a strange thing.

The slab of rock tilted to one side, as if on a pivot, revealing a square opening which seemed to lead through solid stone. And at the far end of the opening Tom Swift saw a glimmer of light.

Stooping down, he looked through the hole thus strangely opened and what he saw caused him to cry out in wonder.

"It's the tunnel!" he cried. "I can look right down into the tunnel. It's the incandescent lights I see. I can look right at the ledge of rock where I kept watch that day, and where I saw--where I saw the face of Waddington!" he cried. "It wasn't a dream after all. This is a shaft connecting with the tunnel. We didn't discover it because this rock fits right in the opening in the roof. It must have been there all the while, and some blast brought it to light. Is this how the men got out, or were taken out of the tunnel, Masni?" Tom asked.

"This how," said the Indian woman. "See, here rope!"

She pawed aside a mound of earth, and disclosed a rope buried there, a rope knotted at intervals. This, let down through the hole in the roof of the tunnel, provided a means of escape, and in such a manner that the disappearance of the men was most mysterious.

"I see how it is!" cried Tom. "Some one interested, Waddington probably, who knew about this old secret shaft

going down into the earth, used it as soon as our blasting was opened that far. They got the men out this way, and hid them in the secret valley."

"But what for?" cried Mr. Damon.

"To cripple us! To cause the strike by making our other workers afraid of some evil spirit! The men were taken away secretly, and, doubtless, have been kept in idleness ever since--paid to stay away so the mystery would be all the deeper. Our rivals finding they couldn't stop us in any other way have taken our laborers away from us."

"Bless my meal ticket! It does look like that!" cried Mr. Damon.

"Of course that's the secret!" cried Tom. "Blakeson & Grinder, or some of their tools--probably the bearded man or Waddington--found out about this shaft which led down into our tunnel. They induced the first ten men to quit, and when Tim went to get the fuse the rope was let down, and the men climbed up here, one after the other. Those Indians can climb like cats. Once the ten were out the shaft was closed with the rock, and the ten men taken off to the valley to be secreted there.

"The same was done with the next fifteen, and, I suppose, if the strike hadn't come, more of our workers would have been induced to leave in this way. They're probably being better paid than when earning their wages; and their relatives must know where they are, and also be given a bonus to keep still. No wonder they didn't make a fuss.

"And no wonder we couldn't find any opening in the tunnel roof. This rock must fit in as smoothly as a secret drawer in the kind of old desk where missing wills are found in stories."

"You say you saw Waddington, or the bearded man?" asked Mr. Damon.

"At the time," replied Tom, "I thought it was a dream. Now I know it wasn't. He must have opened the shaft just as I awakened from a doze. He saw me and closed it again. He may have been getting ready then to take off more of our men, so as to scare the others. Well, we've found out the trick."

"And what are you going to do next?" asked Mr. Damon.

"Get those missing men back. That will break the hoodoo, and the others will come back to work. Then we'll get on the trail of Waddington, or Blakeson & Grinder, and put a stop to this business. We know their secret now."

"You mean to get the men out of the secret valley, Tom?"

"Yes. There must be some other way into it than down the rock where we were. How about it, Masni?" and he inquired as to the valley. The Indian woman gave Tom to understand that there was another entrance.

"Well, close up this shaft now before some one sees us at it--the bearded man, for example," Tom suggested. He took another look down into the tunnel, which was now deserted on account of the strike, and then Masni pressed on the mechanism that worked the stone. She showed Tom how to do it.

"Just a counter-balanced rock operating on the same principle as does a window," Tom explained, after a brief examination. "Probably some of the old Indian tribes made this shaft for ceremonial purposes. They never dreamed we would drive a tunnel along at the bottom of it. The shaft probably opened into a cave, and one of our blasts made it part of the tunnel. Well, this is part of the secret, anyhow. Much obliged to you, Masni!"

The Indian woman had indeed revealed valuable information. They covered the secret rock with brush, as it had been, hid the rope and came away. But Tom knew how to find the place again.

Events moved rapidly from then on. The Titus brothers were more than astonished when Tom told them what he had learned. Masni had told him how to get into the secret valley by a round about, but easy trail, and thither Tom, the contractors, Mr. Damon and some of the white tunnel workers went the next day.

The sequestered men, taken completely by surprise, tried to bolt when they saw that they were discovered, and then, shamefacedly enough, admitted their part in the trick.

They would not, however, reveal who had helped them escape from the tunnel. Threats and promises of rewards were alike unavailing, but Tom and his employers knew well enough who it was. The tunnel workers seemed rather tired of living in comparative luxury and idleness, and agreed to come back to their labors.

They packed up their few belongings, mostly cooking pots and pans, and marched out of the valley to the village at Rimac.

And so the strike was broken.

The reappearance of the missing men, in better health and spirits than when they went away, acted like magic. The other men, who had missed their wages, crowded back into the shaft, and the sounds of picks and shovels were heard again in the tunnel.

Whether the missing ones told the real story, or whether they made up some tale to account for their absence, Tom and his friends could not learn. Nor did the bearded man (if he it were who had helped in the plot), nor any representative of Blakeson & Grinder appear. The work on the tunnel was resumed as if nothing had happened. But Tom arranged a bright light so it would reflect on the spot in the roof where the moving rock was, so that if the evil face of the bearded man, or of Waddington, appeared there again, it would quickly be seen. A search of the neighborhood, and diligent inquiries, failed to disclose the presence of any of the plotters.

And then, as if Fate was not making it hard enough for the tunnel contractors, they encountered more trouble. It was after Tom had set off a big blast that Tim Sullivan, after inspecting what had happened, came out to ask.

"I soy, Mr. Swift, why didn't yez use more powder?"

"More powder!" cried Tom. "Why, this is the most I have ever set off."

"Then somethin's wrong, sor. Fer there's only a little rock down. Come an' see fer yersilf."

Tom hastened in. As the foreman had said, the effect of the blast was small indeed. Only a little rock had been shaled off. Tom picked up some of this and took it outside for examination.

"Why, it's harder than the hardest flint we've found yet," he said. "The powder didn't make any impression on it at all. I'll have to use terrific charges."

This was done, but with little better effect. The explosive, powerful as it was, ate only a little way into the rock. Blast after blast had the same poor effect.

"This won't do," said Job Titus, despairingly, one day. "We aren't making any progress at all. There's a half mile of this rock, according to my calculations, and at this rate we'll be six months getting through it. By that time our limit will be up, and we'll be forced to give up the contract. What can we do, Tom Swift?"

## Chapter XXI

### A New Explosive

The young inventor was idly handling some pieces of the very hard rock that had cropped out in the tunnel cut Tom had tested it, he had pulverized it (as well as he was able), he had examined it under the microscope, and he had taken great slabs of it and set off under it, or on top of it, charges of explosive of various power to note the effect. But the results had not been at all what he had hoped for.

"What's to be done, Tom?" repeated the contractor.

"Well, Mr. Titus," was the answer, "the only thing I see to do is to make a new explosive."

"Can you do it, Tom?"

The reply was characteristic.

"I can try."

And in the days that followed, Tom began work on a new line. He had brought from Shopton with him much of the needful apparatus, and he found he could obtain in Lima what he lacked.

A message to his father brought the reply that the new ingredients Tom needed would be shipped.

"The kind of explosive we need to rend that very hard rock," the young inventor explained to the Titus brothers, "is one that works slowly."

"I thought all explosions had to be as quick as a flash," said Walter.

"Well, in a sense, they do. Yet we have quick burning and slow-burning powders, the same as we have fuses. A quick-burning explosive is all right in soft rock, or in soil with rock and earth mingled. But in rock that is harder than flint if you use a quick explosive, only the outer surface of the rock will be scaled off.

"If you take a hammer and bring it down with all your force on a hard rock you may chip off a lot of little pieces, or you may crack the rock, but you won't, under

ordinary circumstances, pulverize it as we want to do in the tunnel.

"On the other hand, if you take a smaller hammer, and keep tapping the rock with comparatively gentle blows, you will set up a series of vibrations, that, in time, will cause the hard rock to break up into any number of small pieces.

"Now that is the kind of explosive I want one that will deal a succession of constant blows at the hard rock instead of one great big blast."

"Can you make it, Tom?"

"Well, I don't know. I'll do the best I can."

From then on Tom was busy with his experiments.

Work on the tunnel did not cease while he was searching for a new explosive. There was plenty of the old explosive left and charges of this were set off as fast as holes could be drilled to receive it. But comparatively little was accomplished. Sometimes more rock would be loosed than at others, and the native laborers, now seemingly perfectly contented, would be kept busy. Again, when a heavy blast would be set off hardly a dozen dump cars could be filled.

But the work must go on. Already the time limit was getting perilously close, and the contractors did not doubt that their rivals were only waiting for a chance to step in and take their places.

Nothing more had been seen or heard of the bearded man, Waddington, or Blakeson & Grinder. But that the rival firm had not given up was evidenced by the efforts made in New York to cripple, financially, the firm in which Tom was interested. In fact, at one time the Titus brothers were so tied up that they could not get money enough to pay their men. But Tom cabled his father, who was quite wealthy, and Mr. Swift loaned the contractors enough to proceed with until they could dispose of some securities.

It might be mentioned that Tom was to get a large sum if the tunnel were completed on time, so it was to his interest and his father's, to bring this about if he could.

Tom kept on with his powder experiments. Mr. Damon helped him, for that gentleman had succeeded in putting the affairs of the wholesale drug business on a firm foundation, and there was no more trouble about getting the supplies of cinchona bark to market. The natives seemed to have taken kindly to the eccentric man, or perhaps it was the reputation of Tom Swift and his electric rifle that induced

them to work hard.

It must not be supposed that Professor Bumper was idle all this while.

He came and went at odd times, accompanied by his little retinue of Indians, a guide and a native cook. He would come back to the tunnel camp, where he made his headquarters, travel stained, worn and weary, with disappointment showing on his face.

"No luck," he would report. "The hidden city of Pelone is still lost."

Then he would retire to his tent, to pour over his note-books, and make a new translation of the inscription on the golden plates. In a day or so, refreshed and rested, he would prepare for another start.

"I'll find it this time, surely!" he would exclaim, as he marched off up the mountain trail. "I have heard of a new valley, never before visited by a white man, in which there are some old ruins. I'm sure they must be those of Pelone."

But in a week or so he would come back, worn out and discouraged again.

"The ruins were only those of a native village," he would say. "No trace of an ancient civilization there."

The professor took little or no interest in the tunnel, though he expressed the hope that Tom and his friends would be successful. But industrial pursuits had no charm for the scientist. He only lived to find the hidden city which was to make him famous.

He heard the story of the queer shaft leading down into the bore under the mountain, and, for a time, hoped that might be some clue to the lost Pelone. But, after an examination, he decided it was but the shaft to some ancient mine which had not panned out, and so had been abandoned after having been fitted with a balanced rocky door, perhaps for some heathen religious rite.

There seemed to be no further trouble among the Indian tunnel workers. Those who had disappeared--who had, seemingly, gone willingly up the knotted rope to hide themselves in the valley--kept on with their work. If they told their fellows why and where they had gone, the others gave no sign. The evil spirits of the tunnel had been exorcised, and there was now peace, save for the blasts that were set off every so often.

Tom tried combination after combination, testing them inside and outside the tunnel, always seeking for an explosive that would give a slow, rending effect instead of a quick blow, the power of which was soon lost. And at last he announced:

"I think I have it!"

"Have you? Good!" cried Job Titus.

"Yes," Tom went on, "I've got a mixture here that seems to give just the effect I want. I tried it on some small pieces of rock, and now I want to test it on some large chunks. Have you brought any down lately?"

"Yes, we have some big slabs in there."

Some large pieces of the hard rock, which had been brought down in a recent blast, were taken outside the tunnel, and in them one afternoon Tom placed, in holes drilled to receive it, some of his new explosive. The rocks were set some distance away from the tunnel camp, and Tom attached the electric wires that were to detonate the charge.

"Well, I guess we're ready," announced the young inventor, as he looked about him.

The tunnel workers had been allowed to go for the day, and in a log shack, where they would be safe from flying pieces of rock, were Tom, Mr. Damon and the two Titus brothers.

Tom held the electric switch in his hand, and was about to press it.

"This explosive works differently from any other," he explained. "When the charge is fired there is not instantly a detonation and a bursting. The powder burns slowly and generates an immense amount of gas. It is this gas, accumulating in the cracks and crevices of the rock, that I hope will burst and disintegrate it. Of course, an explosion eventually follows, as you will see. Here she goes!"

Tom pressed the switch and, as he did so, there was a cry of alarm from Mr. Damon.

"Bless my safety match, Tom!" cried the old man. "Look! Koku!"

For, as the charge was fired, the giant emerged from the woods and calmly took a seat on the rock that was about to be broken up into fragments by Tom's new explosive.



## Chapter XXII

### The Fight

"Get off there, Koku!"

"Stand up!"

"Run!"

"Get out of the way! That's going up!"

Thus cried Tom and his friends to the big, good-natured, but somewhat stupid, giant who had sat down in the dangerous spot. Koku looked toward the hut, in front of which the young inventor and the others stood, waving their hands to him and shouting.

"Get up! Get up!" cried Tom, frantically. The powder is going off, Koku!"

"Can't you stop it?" asked Job Titus.

"No!" answered Tom. "The electric current has already ignited the charge. Only that it's slow-burning it would have been fired long ago. Get up, Koku!"

But the giant did not seem to understand. He waved his hand in friendly greeting to Tom and the others, who dared not approach closer to warn him, for the explosion would occur any second now.

Then Mr. Damon had an inspiration.

"Call him to come to you, Tom!" shouted the odd man. "He always comes to you in a hurry, you know. Call him!"

Tom acted on the suggestion at once.

"Here, Koku!" he cried. "Come here, I want you! Kelos!"

This last was a word in the giant's own language, meaning "hurry." And Koku knew when Tom used that word that there was need of haste. So, though he had sat down, evidently to take his ease after a long tramp through the woods, Koku sprang up to obey his master's bidding.

And, as he did so, something happened. The first spark from the fuse, ignited by the electric current, had reached

the slow-burning powder. There was a crackle of flame, and a dull rumble. Koku sprang up from the big stone as though shot. What he saw and heard must have alarmed him, for he gave a mighty jump and started to run, at the same time shouting:

"Me come, Master!"

"You'd better!" cried the young inventor.

Koku got away only just in time, for when he was half way between the group of his friends and the big rock, the utmost force of the explosion was felt. It was not so very loud, but the power of it made the earth tremble.

The rock seemed to heave itself into the air, and when it settled back it was seen to be broken up into many pieces. Koku looked back over his shoulder and gave another tremendous leap, which carried him out of the way of the flying fragments, some of which rattled on the roof of the log hut.

"There!" cried Tom. "I guess something happened that time! The rock is broken up finer than any like it we tried to shatter before. I think I've got the mixture just right!"

"Bless my handkerchief!" cried Mr. Damon. "Think of what might have happened to Koku if he had been sitting there."

"Well," said Tom, "he might not have been killed, for he would probably have been tossed well out of the way at the first slow explosion, but afterward--well, he might have been pretty well shaken up. He got away just in time."

The giant looked thoughtfully back toward the place of the experimental blast.

"Master, him do that?" he asked.

"I did," Tom replied. "But I didn't think you'd walk out of the woods, just at the wrong time, and sit down on that rock."

"Um," murmured the giant. "Koku--he--he--Oh, by golly!" he yelled. And then, as if realizing what he had escaped, and being incapable of expressing it, the giant with a yell ran into the tunnel and stayed there for some time.

The experiment was pronounced a great success and, now that Tom had discovered the right kind of explosive to rend the very hard rock, he proceeded to have it made in sufficiently large quantities to be used in the tunnel.

"We'll have to hustle," said Job Titus. "We haven't much of our contract time left, and I have reason to believe the Peruvian government will not give any extension. It is to their interest to have us fail, for they will profit by all the work we have done, even if they have to pay our rivals a higher price than we contracted for. It is our firm that will pocket the loss."

"Well, we'll try not to have that happen," said Tom, with a smile.

"If you're going to use bigger charges of this new explosive, Tom, won't more rock be brought down?" asked Walter Titus.

"That's what I hope."

"Then we'll need more laborers to bring it out of the tunnel."

"Yes, we could use more I guess. The faster the blasted rock is removed, the quicker I can put in new charges."

"I'll get more men," decided the contractor. "There won't be any trouble now that the hoodoo of the missing workers is solved. I'll tell Serato to scare up all his dusky brethren he can find, and we'll offer a bonus for good work."

The Indian foreman readily agreed to get more laborers.

"And get some big ones, Serato," urged Job Titus. "Get some fellows like Koku," for the giant did the work of three men in the tunnel, not because he was obliged to, but because his enormous strength must find an outlet in action.

"Um want mans like him?" asked the Indian, nodding toward the giant. He and Koku were not on good terms, for once, when Koku was a hurry, he had picked up the Indian (no mean sized man himself) and had calmly set him to one side. Serato never forgave that.

"Sure, get all the giants you can," Tom said. "But I guess there aren't any in Peru."

Where Serato found his man, no one knew, and the foreman would not tell; but a day or so later he appeared at the tunnel camp with an Indian so large in size that he made the others look like pygmies, and many of them were above the average in height, too.

"Say, he's a whopper all right!" exclaimed Tom. "But he isn't as big or as strong as Koku."

"He comes pretty near it," said Job Titus. "With a dozen like him we'd finish the tunnel on time, thanks to your explosive."

Lamos, the Indian giant, was not quite as large as Koku. That is, he was not as tall, but he was broader of shoulder. And as to the strength of the two, well, it was destined to be tried out in a startling fashion.

In about a week Tom was ready with his first charges of the new explosive. The extra Indians were on hand, including Lamos, and great hopes of fast progress were held by the contractors.

The charge was fired and a great mass of broken rock brought down inside the tunnel.

"That's tearing it up!" cried Job Titus, when the fumes had blown away, the secret shaft having been opened to facilitate this. "A few more shots like that and we'll be through the strata of hard rock."

The Indians, Koku and Lamos doing their share of the work, were rushed in to clear away the debris, so another charge might be fired as soon as possible. This would be in a day or so. The contract time was getting uncomfortably close.

Blast after blast was set off, and good progress was made. But instead of half a mile of the extra hard rock the contractors found it would be nearer three quarters.

"It's going to be touch and go, whether or not we finish on time," said Mr. Job Titus one afternoon, when a clearance had been made and the men had filed out to give the drillers a chance to make holes for a new blast.

Tom was about to make a remark when Tim Sullivan came running out of the tunnel, his face showing fright and wonder.

"What's up now, I wonder," said Mr. Titus. "More men missing?"

"Quick! Come quick!" cried the Irishman. "Thim two giants is fightin' in there, an' they'll tear th' tunnel apart if we don't stop 'em. It's an awful fight! Awful!"

Chapter XXIII

A Great Blast

Hardly comprehending what the Irish foreman had said, Tom Swift, the Titus brothers and Mr. Damon followed Tim Sullivan back into the tunnel. They had not gone far before they heard the murmur of many voices, and mingled with that were roarings like those of wild beasts.

"That's thim!" cried Tim. "They're chawin' each other up!"

"Koku and that Indian giant fighting!" cried Tom. "What's it all about?"

"Don't ask me!" shouted Tim. "They've been on bad terms iver since they met." This was true enough, for one giant was jealous of the other's power, and they were continually trying feats of strength against one another. Probably this had culminated in a fight, Tom concluded.

"And it will be some fight!" mused the young inventor.

Hurrying on, Tom and his companions came upon a strange and not altogether pleasant sight. In an open place in the tunnel, where the lights were brightest, and in front of the rocky wall which offered a bar to further progress and which was soon to be blasted away, struggled the two giants.

With their arms locked about one another, they swayed this way and that--a struggle between two Titans. Of nearly the same height and bigness, it was a wrestling match such as had never been seen before. Had it been merely a friendly test of strength it would have been good to look upon. But it needed only a glance into the faces of either giant to show that it was a struggle in deadly earnest.

Back and forth they reeled over the rocky floor of the tunnel, bones and sinews cracking. One sought to throw the other, and first, as Koku would gain a slight advantage, his friends would call encouragement, while, when Lamos seemed about to triumph, the Indians favoring him would let out a yell of triumph.

For a few minutes Tom and his friends watched, fascinated. Then they saw Koku slip, while Lamos bent him farther toward the earth. The Indian giant raised his big fist, and Tom saw in it a rock, which the big man was about to bring down on Koku's head.

"Look out, Koku!" yelled Tom.

Tom's giant slid to one side only just in time, for the blow descended, catching him on his muscular shoulder where

it only raised a bruise. And then Koku gathered himself for a mighty effort. His face flamed with rage at the unfair trick.

"Bless my bath sponge!" cried Mr. Damon. "This is awful!"

"They must stop!" said Job Titus. "We can't have them fighting like this. It is bad for the others. If it were in fun it would be all right, but they are in deadly earnest. They must stop!"

"Koku, stop!" called Tom. "You must not fight any more!"

"No fight more!" gasped the giant, through his clenched teeth. "This end fight!"

With a mighty effort he broke the hold of Lamos' arms. Then stooping suddenly he seized his rival about the middle, and with a tremendous heave, in which his muscles stood out in great bunches while his very bones seemed to crack, Koku raised Lamos high in the air. Up over his head he raised that mass of muscle, bone and flesh, squirming and wriggling, trying in vain to save itself.

Up and up Koku raised Lamos as the murmur of those watching grew to a shout of amazement and terror. Never had the like been seen in that land for generations. Up and up one giant raised the other. Then calling out something in his native tongue Koku hurled the other from him, clear across the tunnel and up against the opposite rocky wall. The murmuring died to frightened whispers as Lamos fell in a shapeless heap on the floor.

"Ah!" breathed Koku, stretching himself, and extending his brawny arms. "Fight all over, Master."

"Yes, so it seems, Koku," said Tom, solemnly, "but you have killed him. Shame on you!" and he spoke bitterly.

Job Titus had hurried over to the fallen giant.

"He isn't dead," he called, "but I guess he won't wrestle or fight any more. He's badly crippled."

"And him no more try to blow up tunnel, either," said Koku in his hoarse voice. "Me fix: him! No more him take powder, and make tunnel all bust."

"What do you mean, Koku?" asked Tom. "Is that why you fought him? Did he try to wreck the tunnel?"

"So him done, Master. But Koku see--Koku stop. Then um fight."

"Be jabbers an' I wouldn't wonder but what he was right!" cried Tim Sullivan, excitedly. "I did see that beggar." and he pointed to Lamos, who was slowly crawling away, "at the chist where I kape th' powder, but I thought nothin' of it at th' time. What did he try t' do, Koku?"

Then the giant explained in his own language, Tom Swift translating, for Koku spoke English but indifferently well.

"Koku says," rendered Torn, "that he saw Lamos trying to put a big charge of powder up in the place where the balanced rock fits in the secret opening of the tunnel roof. The charge was all ready to fire, and if the giant had set it off he might have brought down the roof of the tunnel and so choked it up that we'd have been months cleaning it out. Koku saw him and stopped him, and then the fight began. We only saw the end."

"Bless my shoe string!" gasped Mr. Damon. "And a terrible end it was. Will Lamos die?"

"I don't think so," answered Job Titus. "But he will be a cripple for life. Not only would he have wrecked the tunnel, but he would have killed many of our men had he set off that blast. Koku saved them, though it seems too bad he had to fight to do it."

An investigation showed that Koku spoke truly. The charge, all ready to set off, was found where he had knocked it from the hand of Lamos. And so Tom's giant saved the day. Lamos was sent back to his own village, a broken and humbled giant. And to this day, in that part of Peru, the great struggle between Koku and Lamos is spoken of with awe where Indians gather about their council fires, and they tell their children of the Titanic fight.

"It was part of the plot," said Job Titus when the usual blast had been set off that day, with not very good results. "This giant was sent to us by our rivals. They wanted him to hamper our work, for they see we have a chance to finish on time. I think that foreman, Serato, is in the plot. He brought Lamos here. We'll fire him!"

This was done, though the Indian protested his innocence. But he could not be trusted.

"We can't take any chances," said Job Titus. "Our time is too nearly up. In fact I'm afraid we won't finish on time as it is. There is too much of that hard rock to cut through."

"There's only one thing to do," said Tom, after an investigation. "As you say, there is more of that hard rock

than we calculated on. To try to blast and take it out in the ordinary way will be useless. We must try desperate means."

"What is that?" asked Walter Titus.

"We must set off the biggest blast we can with safety. We'll bore a lot of extra holes, and put in double charges of the explosive. I'll add some ingredients to it that will make it stronger. It's our last chance. Either we'll blow the tunnel all to pieces, or we'll loosen enough rock to make sufficient progress so we can finish on time. What do you say? Shall we take the chance?"

The Titus brothers looked at one another. Failure stared them in the face. Unless they completed the tunnel very soon they would lose all the money they had sunk in it.

"Take the chance!" exclaimed Job. "It's sink or swim anyhow. Set off the big blast, Tom."

"All right. We'll get ready for it as soon as we can."

That day preparations were made for setting off a great charge of the powerful explosive. The work was hurried as fast as was consistent with safety, but even then progress was rather slow. Precautions had to be taken, and the guards about the tunnel were doubled. For it was feared that some word of what was about to be done would reach the rival firm, who might try desperate means to prevent the completion of the work.

There was plenty of the explosive on hand, for Mr. Swift had sent Tom a large shipment. All this while no word had come from Mr. Nestor, and Tom was beginning to think that his prospective father-in-law was very angry with him. Nor had Mary written.

Professor Bumper came and went as he pleased, but his quest was regarded as hopeless now. Tom and his friends had little time for the bald-headed scientist, for they were too much interested in the success of the big blast.

"Well, we'll set her off to-morrow," Tom said one night, after a hard day's work. "The rocky wall is honeycombed with explosive. If all goes well we ought to bring down enough rock to keep the gangs busy night and day."

Everything was in readiness. What would the morrow bring-- success or failure?



## Chapter XXIV

### The Hidden City

Gathered beyond the mouth of the tunnel, far enough away so that the wind of the great blast would not bowl them over like ten pins, stood Tom Swift and his friends. In his hand Tom held the battery box, the setting of the switch in which would complete the electrical circuit and set off the hundreds of pounds of explosive buried deep in the hard rock.

"Are all the men out?" asked the young inventor of Tim Sullivan, who had charge of this important matter. Tim was in sole charge as foreman now, having picked up enough of the Indian language to get along without an interpreter.

"All out, sor," Tim responded. "Yez kin fire whin ready, Mr. Swift."

It was a portentous moment. No wonder Tom Swift hesitated. In a sense he and his friends, the contractors, had staked their all on a single throw. If this blast failed it was not likely that another would succeed, even if there should be time to prepare one.

The time limit had almost expired, and there was still a half mile of hard rock between the last heading and the farther end of the big tunnel. If the blast succeeded enough rock might be brought down to enable the work to go on, by using a night and day shift of men. Then, too, there was the chance that the hard strata of rock would come to an end and softer stone, or easily-dug dirt, be encountered.

"Well, we may as well have it over with," said Tom in a low voice. Every one was very quiet--tensely quiet.

The young inventor looked up to see Professor Bumper observing him.

"Why, Professor!" Tom exclaimed, "I thought you had gone off to the mountains again, looking for the lost city."

"I am going, Tom, very soon. I thought I would stop and see the effect of your big blast. This is my last trip. If I do not find the hidden city of Pelone this time, I am going to give up."

"Give up!" cried Mr. Damon. "Bless my fountain pen!"

"Oh, not altogether," went on the bald-headed scientist.

"I mean I will give up searching in this part of Peru, and go elsewhere. But I will never completely give up the search, for I am sure the hidden city exists somewhere under these mountains," and he looked off toward the snow-covered peaks of the Andes.

Tom looked at the battery box. He drew a long breath, and said:

"Here she goes!"

There was a contraction of his hand as he pressed the switch over, and then, for perhaps a half second, nothing happened. Just for an instant Tom feared something had gone wrong that the electric current had failed, or that the wires had become disconnected--perhaps through some action of the plotting rivals.

And then, gently at first, but with increasing intensity, the solid ground on which they were all standing seemed to rock and sway, to heave itself up, and then sink down.

"Bless my--" began Mr. Damon, but he got no further, for a mighty gust of wind swept out of the tunnel, and blew off his hat. That gust was but a gentle breeze, though, compared to what followed. For there came such a rush of air that it almost blew over those standing near the opening of the great shaft driven under the mountain. There was a roar as of Niagara, a howling as in the Cave of the Winds, and they all bent to the blast.

Then followed a dull, rumbling roar, not as loud as might have been expected, but awful in its intensity. Deep down under the very foundations of the earth it seemed to rumble.

"Run! Run back!" cried Tom Swift. "There's a back-draft and the powder gas is poisonous. Stoop down and run back!"

They understood what he meant. The vapor from the powder was deadly if breathed in a confined space. Even in the open it gave one a terrible headache. And Tom could see floating out of the tunnel the first wisps of smoke from the fired explosive. It was lighter than air, and would rise. Hence the necessity, as in a smoke-filled room, of keeping low down where the air is purer.

They all rushed back, stooping low. Mr. Damon stumbled and fell, but Koku picked him up and, tucking him under one arm, as he might have done a child, the giant followed Tom to a place of safety.

"Well, Tom, it went off all right," said Mr. Job Titus, as

they stood among the shacks of the workmen and watched the smoke pouring out of the tunnel mouth.

"Yes, it went off. But did it do the work? That's what we've got to find out."

They waited impatiently for the deadly vapor to clear out of the tunnel. It was more than an hour before they dared venture in, and then it was with smarting eyes and puckered throats. But the atmosphere was quickly clearing.

"Switch on the lights," cried Tom to Tim, for the illuminating current had been cut off when the blast was fired. "Let's see what we've brought down."

Following the eager young inventor came the contractors, some of the white workers, Mr. Damon and Professor Bumper. The little scientist said he would like to see the effect of the big blast.

Along they stumbled over pieces of rock, large and small.

"Some force to it," observed Job Titus, as he observed pieces of rock close to the mouth of the tunnel. "If it only exerted the force the other way, against the face of the rock, as well as back this way, we'll be all right."

"The greater force was in the opposite direction," Tom said.

A big search-light had been got ready to flash on the place where the blast had been set off. This was to enable them to see how much rock had been torn away. And, as they reached the place where the flint-like wall had been, they saw a strange sight.

"Bless my strawberry short-cake!" gasped Mr. Damon. "What a hole!"

"It is a hole," admitted Tom, in a low voice. "A bigger hole than I dared hope for."

For a great cave, seemingly, had been blown in the face of the rock wall that had hindered the progress of the tunnel. A great black void confronted them.

"Shift the light over this way," called Tom to Walter Titus, who was operating it. "I can't see anything."

The great beam of light flashed into the void, and then a murmur of awe came from every throat.

For there, revealed in the powerful electrical rays, was

what seemed to be a long tunnel, high and wide, as smooth as a paved street. And on either side of it were what appeared to be buildings, some low, others taller. And, branching off from the main tunnel, or street, were other passages, also lined with buildings, some of which had crumbled to ruins.

"Bless my dictionary!" cried Mr. Damon. "What is it?"

Professor Bumper had crawled forward over the mass of broken rock. He gazed as if fascinated at what the searchlight showed, and then he cried:

"I have found it! I have found it! The hidden city of Pelone!"

## Chapter XXV

### Success

Had it not been for Tom Swift, the excited professor would have rushed pellmell over the jagged pile of rocks into the great cave which had been opened by the blast, the cave in which the scientist declared was the lost city for which he had been searching. But the young inventor grasped Mr. Bumper by the arm.

"Better wait a bit," Tom suggested. "There may be powder gas in there. Some of it must have blown forward."

"I don't care!" excitedly cried the professor. "That is the hidden city! I'm sure of it! I have found it at last! I must go in and examine it!"

"There'll be plenty of time," said Tom. "It isn't going to run away. Wait until I make a test Tim, hand me one of those torches."

Some torches of a very inflammable wood were used to test for the presence of the deadly smoke-gas. Lighting one of these, Tom tossed it into the big excavation.

It fell to the stone floor--to the stone street to be more exact--and, flaring up brightly, further revealed the rows of houses as they stood, silent and uninhabited.

"It's all right," Tom announced. "There's no danger so long as the torch burns. You can go on, Professor."

And Professor Bumper rushed forward, scrambling over the

pile of blasted rock, followed by Tom and the others. Some of the debris from the explosion had fallen into the cave, and was scattered for some distance along the main street of what had been Pelone. But beyond that the way was clear.

"Yes, it is Pelone," cried Professor Bumper. "See!"

He pointed to inscriptions in queer characters over the doorway of some of the houses, but he alone could read them.

"I have found Pelone!" he kept repeating over and over again.

And that is just what had happened. That last great blast Tom Swift had set off had broken down the rock wall that hid the lost city from view. There it was, buried deep down under the mountain, where it had been covered from sight ages ago by some mighty earthquake or landslide; perhaps both. And the earth and rocks had fallen over the main portion of the city of Pelone in such a way--in such an arch formation--that the greater part of it was preserved from the pressure of the mountain above it.

The outlying portions were crushed into dust by the awful pressure of the mountain--millions of tons of stone--but where the natural arch had formed the weight was kept off the buildings, most of which were as perfect as they had been before the cataclysm came.

The buildings were of stone block construction, mostly only one story in height, though some were two. They were simply made, somewhat after the fashion of the Aztecs. A look into some of them by the light of portable electric lamps showed that the houses were furnished with some degree of taste and luxury. There were traces of an ancient civilization.

But of the inhabitants, there was not a trace: either they had fled before the earthquake or the volcanic eruption had engulfed the city, or the countless centuries had turned their very bones to dust.

"Oh, what a find! What a find!" murmured Professor Bumper. "I shall be famous! And so will you, Tom Swift. For it was your blast that revealed the lost city of Pelone. Your name will be honored by every archeological society in the world, and all will be eager to make you an honorary member."

"That's all very nice," said Tom, "but what pleases me better is that this tunnel is a success."

"Success!" cried Mr. Damon. "I should call it a failure, Tom Swift. Why, you've run smack into an old city, and

you'll have either to curve the tunnel to one side, or start a new one."

"Nothing of the sort!" laughed Tom. "Don't you see? The tunnel comes right up to the main street of Pelone. And the street is as straight as a die, and just the width and height of the tunnel. All we will have to do will be to keep on blasting away, where the main street comes to an end, and our tunnel will be finished. The street is over half a mile long, I should judge, and we'll save all that blasting. The tunnel will be finished in time!"

"So it will!" cried Job Titus. "We can use the main street of the hidden city as part of the tunnel."

"Use the street all you like," said Mr. Bumper. "but leave the houses to me. They are a perfect mine of ancient lore and information. At last I have found it! The ancient, hidden city of Pelone, spoken of on the Peruvian tablets, of gold."

The story of the discoveries the scientist made in Pelone is an enthralling one. But this is a story of Tom Swift and his big tunnel, and no place for telling of the archeological discoveries.

Suffice it to say that Professor Bumper, though he found no gold, for which the contractors hoped, made many curious finds in the ancient houses. He came upon traces of a strange civilization, though he could find no record of what had caused the burial of Pelone beneath the mountains. He wrote many books about his discovery, giving Tom Swift due credit for uncovering the place with the mighty blast. Other scientists came in flocks, and for a time Pelone was almost as busy a place as it had been originally.

Even when the tunnel was completed and trains ran through it, the scientists kept on with their work of classifying what they found. An underground station was built on the main street of the old city, and visitors often wandered through the ancient houses, wherein was the bone-dust of the dead and gone people.

But to go back to the story of Tom Swift. Tom's surmise was right. He and the contractors were able to use the main street of Pelone as part of their tunnel, and a good half mile of blasting through solid rock was saved. The flint came to an end at the extremity of Pelone, and the last part of the tunnel had only to be dug through sand-stone and soft dirt, an easy undertaking.

So the big bore was finished on time--ahead of time in fact, and Titus Brothers received from Senor Belasdo, the

Peruvian representative, a large bonus of money, in which Tom Swift shared.

"So our rivals didn't balk us after all," said Walter Titus, "though they tried mighty hard."

The big tunnel was finished--at least Tom Swift's work on it. All that remained to do was to clear away the debris and lay the connecting rails. Tom and Mr. Damon prepared to go back home. The latter's work was done. As for Professor Bumper, nothing could take him from Pelone. He said he was going to live there, and, practically, he did.

Tom, Koku and Mr. Damon returned to Lima, thence to go to Callao to take the steamer for San Francisco. One day the manager of the hotel spoke to them.

"You are Americans, are you not?" he asked.

"Yes," answered Tom. "Why?"

"Because there is another American here. He is friendless and alone, and he is dying. He has no friends, he says. Perhaps--"

"Of course we'll do what we can for him," said Tom, impulsively. "Where is he?"

With Mr. Damon he entered the room where the dying man lay. He had caught a fever, the hotel manager said, and could not recover. Tom, catching sight of the sufferer, cried:

"The bearded man! Waddington!"

He had recognized the mysterious person who had been on the Bellaconda, and the man whose face had stared at him through the secret shaft of the tunnel.

"Yes, the 'bearded man' now," said the sufferer in a hoarse voice, "and some one else too. You are right. I am Waddington!"

And so it proved. He had grown a beard to disguise himself so he might better follow Tom Swift and Mr. Titus. And he had followed them, seeking to prevent the completion of the tunnel. But he had not been successful.

Waddington it was who had thrown the bomb, though he declared he only hoped to disable Tom and Mr. Titus, and not to injure them. He was fighting for delay. And it was Waddington, working in conjunction with the rascally foreman Serato, who had induced the tunnel workers to desert so

mysteriously, hoping to scare the other Indians away. He nearly succeeded too, had it not been for the gratitude of the woman whose baby Tom had saved from the condor.

Waddington had been an actor before he became involved with the rival contractors. He was smooth shaven when first he went to Shopton, to spy on Mr. Titus, whose movements he had been commanded to follow by Blakeson & Grinder. Then he disappeared after Mr. Titus chased him, only to reappear, in disguise, on board the Bellaconda, as Senor Pinto.

Waddington, meanwhile, had grown a beard and this, with his knowledge of theatrical makeup, enabled him to deceive even Mr. Titus. Of course it was comparatively easy to deceive Tom, who had not known him. Waddington had really been ill when he called for help on the ship, and he had not noticed that it was Tom and Mr. Titus who came into his stateroom to his aid. When he did recognize them, he relied on his disguise to screen him from recognition, and he was successful. He had only pretended to be ill, though, the time he slipped out and threw the bomb.

Reaching Peru he at once began his plotting. Serato told him about the secret shaft leading into the tunnel, and with the knotted rope, and with the aid of the faithless foreman, the men were got out of the tunnel and paid to hide away. Waddington was planning further disappearances when Tom saw him, but thought it a dream.

Masni, the Indian woman, out herb-hunting one day, had seen Waddington, 'the bearded man' as he then was--working the secret stone. Hidden, she observed him and told her husband, who was afraid to reveal what he knew. But when Tom saved the baby the woman rewarded him in the only way possible. And it was Serato, who, at Waddington's suggestion, caused the "hit" among the men by working on their superstitious fears.

Waddington, knowing that he was dying, confessed everything, and begged forgiveness from Tom and his friends, which was granted, in as much as no real harm had been done. Waddington was but a tool in the hands of the rival contractors, who deserted him in his hour of need. His last hours, however, were made as comfortable as possible by the generosity of Tom and Mr. Damon.

No effort was made to bring Blakeson & Grinder to justice, as there was no evidence against them after Waddington died. And, as the tunnel was finished, the Titus brothers had no further cause for worry.

"But if it had not been for Tom's big blast, and the discovery of the hidden city of Pelone just in the right



place, we might be digging at that tunnel yet," said Job Titus.

The day before the steamer was to sail, Tom Swift received a cable message. Its receipt seemed to fill him with delight, so that Mr. Damon asked:

"Is it from your father, Tom?"

"No it's from Mary Nestor. She says her father has forgiven me. They have been away, and Mary has been ill, which accounts for no letters up to now. But everything is all right now, and they feel that the dynamite trick wasn't my fault. But, all the same, I'm going to teach Eradicate to read," concluded Tom.

"I think it would be a good idea," agreed Mr. Damon.

Tom, Mr. Damon and Koku, bidding farewell to the friends they had made in Peru, went aboard the steamer, Job Titus and his brother coming to see them off.

"Give us an option on all that explosive you make, Tom Swift!" begged Walter Titus. "We were so successful with this tunnel, thanks to you, that the government is going to have us dig another. Will you come down and help?"

"Maybe," said Tom, with a smile. "But I'm going home first," and once more he read the message from Mary Nestor.

And as Tom, on the deck of the steamer, waved his hands to Professor Bumper and his other friends whom he was leaving in Peru, we also, will say farewell.

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it, the scientists kept on with their work of classifying

what they found. An underground station was built on the main street of the old city, and visitors often wandered through the ancient houses, wherein was the bone-dust of the dead and gone people.

But to go back to the story of Tom Swift. Tom's surmise was right. He and the contractors were able to use the main street of Pelone as part of their tunnel, and a good half mile of blasting through solid rock was saved. The flint came to an end at the extremity of Pelone, and the last part of the tunnel had only to be dug through sand-stone and soft dirt, an easy undertaking.

So the big bore was finished on time--ahead of time in fact, and Titus Brothers received from Senor Belasdo, the Peruvian representative, a large bonus of money, in which Tom Swift shared.

"So our rivals didn't balk us after all," said Walter Titus, "though they tried mighty hard."

The big tunnel was finished--at least Tom Swift's work on it. All that remained to do was to clear away the debris and lay the connecting rails. Tom and Mr. Damon prepared to go back home. The latter's work was done. As for Professor Bumper, nothing could take him from Pelone. He said he was

going to live there, and, practically, he did.

Tom, Koku and Mr. Damon returned to Lima, thence to go to Callao to take the steamer for San Francisco. One day the manager of the hotel spoke to them.

"You are Americans, are you not?" he asked.

"Yes," answered Tom. "Why?"

"Because there is another American here. He is friendless and alone, and he is dying. He has no friends, he says.

Perhaps--"

"Of course we'll do what we can for him," said Tom, impulsively. "Where is he?"

With Mr. Damon he entered the room where the dying man lay. He had caught a fever, the hotel manager said, and could not recover. Tom, catching sight of the sufferer, cried:

"The bearded man! Waddington!"

He had recognized the mysterious person who had been on the Bellaconda, and the man whose face had stared at him through the secret shaft of the tunnel.

"Yes, the 'bearded man' now," said the sufferer in a hoarse voice, "and some one else too. You are right. I am Waddington!"

And so it proved. He had grown a beard to disguise himself so he might better follow Tom Swift and Mr. Titus. And he had followed them, seeking to prevent the completion of the tunnel. But he had not been successful.

Waddington it was who had thrown the bomb, though he declared he only hoped to disable Tom and Mr. Titus, and not to injure them. He was fighting for delay. And it was Waddington, working in conjunction with the rascally foreman Serato, who had induced the tunnel workers to desert so mysteriously, hoping to scare the other Indians away. He nearly succeeded too, had it not been for the gratitude of the woman whose baby Tom had saved from the condor.

Waddington had been an actor before he became involved with the rival contractors. He was smooth shaven when first he went to Shopton, to spy on Mr. Titus, whose movements he had been commanded to follow by Blakeson & Grinder. Then he disappeared after Mr. Titus chased him, only to reappear, in disguise, on board the Bellaconda, as Senor Pinto.

Waddington, meanwhile, had grown a beard and this, with his knowledge of theatrical makeup, enabled him to deceive even Mr. Titus. Of course it was comparatively easy to deceive Tom, who had not known him. Waddington had really been ill when he called for help on the ship, and he had not noticed that it was Tom and Mr. Titus who came into his stateroom to his aid. When he did recognize them, he relied on his disguise to screen him from recognition, and he was successful. He had only pretended to be ill, though, the time he slipped out and threw the bomb.

Reaching Peru he at once began his plotting. Serato told him about the secret shaft leading into the tunnel, and with the knotted rope, and with the aid of the faithless foreman, the men were got out of the tunnel and paid to hide away.

Waddington was planning further disappearances when Tom saw him, but thought it a dream.

Masni, the Indian woman, out herb-hunting one day, had seen Waddington, 'the bearded man' as he then was--working the secret stone. Hidden, she observed him and told her husband, who was afraid to reveal what he knew. But when Tom saved the baby the woman rewarded him in the only way possible. And it was Serato, who, at Waddington's suggestion, caused the "hit" among the men by working on their superstitious fears.

Waddington, knowing that he was dying, confessed everything, and begged forgiveness from Tom and his friends, which was granted, in as much as no real harm had been done.

Waddington was but a tool in the hands of the rival contractors, who deserted him in his hour of need. His last hours, however, were made as comfortable as possible by the generosity of Tom and Mr. Damon.

No effort was made to bring Blakeson & Grinder to justice, as there was no evidence against them after Waddington died.

And, as the tunnel was finished, the Titus brothers had no further cause for worry.

"But if it had not been for Tom's big blast, and the discovery of the hidden city of Pelone just in the right place, we might be digging at that tunnel yet," said Job Titus.

The day before the steamer was to sail, Tom Swift received a cable message. Its receipt seemed to fill him with delight, so that Mr. Damon asked:

"Is it from your father, Tom?"

"No it's from Mary Nestor. She says her father has forgiven me. They have been away, and Mary has been ill,

which accounts for no letters up to now. But everything is all right now, and they feel that the dynamite trick wasn't my fault. But, all the same, I'm going to teach Eradicate to read," concluded Tom.

"I think it would be a good idea," agreed Mr. Damon.

Tom, Mr. Damon and Koku, bidding farewell to the friends they had made in Peru, went aboard the steamer, Job Titus and his brother coming to see them off.

"Give us an option on all that explosive you make, Tom Swift!" begged Walter Titus. "We were so successful with this tunnel, thanks to you, that the government is going to have us dig another. Will you come down and help?"

"Maybe," said Tom, with a smile. "But I'm going home first," and once more he read the message from Mary Nestor.

And as Tom, on the deck of the steamer, waved his hands to Professor Bumper and his other friends whom he was leaving in Peru, we also,