

# Tom Swift and His Sky Racer

or The Quickest Flight on Record

Victor Appleton

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# The Prize Offer

“Is this Tom Swift, the inventor of several airships?”

The man who had rung the bell glanced at the youth who answered his summons.

“Yes, I’m Tom Swift,” was the reply. “Did you wish to see me?”

“I do. I’m Mr. James Gunmore, secretary of the Eagle Park Aviation Association. I had some correspondence with you about a prize contest we are going to hold. I believe—”

“Oh, yes, I remember now,” and the young inventor smiled pleasantly as he opened wider the door of his home. “Won’t you come in? My father will be glad to see you. He is as much interested in airships as I am.” And Tom led the way to the library, where the secretary of the aviation society was soon seated in a big, comfortable leather chair.

“I thought we could do better, and perhaps come to some decision more quickly, if I came to see you, than if we corresponded,” went on Mr. Gunmore. “I hope I haven’t disturbed you at any of your inventions,” and the secretary smiled at the youth.

“No. I’m through for to-day,” replied Tom.

"I'm glad to see you. I thought at first it was my chum, Ned Newton. He generally runs over in the evening."

"Our society, as I wrote you, Mr. Swift, is planning to hold a very large and important aviation meet at Eagle Park, which is a suburb of Westville, New York State. We expect to have all the prominent 'bird-men' there, to compete for prizes, and your name was mentioned. I wrote to you, as you doubtless recall, asking if you did not care to enter."

"And I think I wrote you that my big aeroplane-dirigible, the *Red Cloud*, was destroyed in Alaska, during a recent trip we made to the caves of ice there, after gold," replied Tom.

"Yes, you did," admitted Mr. Gunmore, "and while our committee was very sorry to hear that, we hoped you might have some other air craft that you could enter at our meet. We want to make it as complete as possible, and we all feel that it would not be so unless we had a Swift aeroplane there."

"It's very kind of you to say so," remarked Tom, "but since my big craft was destroyed I really have nothing I could enter."

"Haven't you an aeroplane of any kind? I made this trip especially to get you to enter. Haven't you anything in which you could compete for the prizes? There are several to be offered, some for distance flights, some for altitude, and the largest, ten thousand dollars, for the speediest craft. Ten thousand dollars is the grand prize, to be awarded for the quickest flight on record."

“I surely would like to try for that,” said Tim, “but the only craft I have is a small monoplane, the *Butterfly*, I call it, and while it is very speedy, there have been such advances made in aeroplane construction since I made mine that I fear I would be distanced if I raced in her. And I wouldn’t like that.”

“No,” agreed Mr. Gunmore. “I suppose not. Still, I do wish we could induce you to enter. I don’t mind telling you that we consider you a drawing-card. Can’t we induce you, some way?”

“I’m afraid not. I haven’t any machine which—”

“Look here!” exclaimed the secretary eagerly. “Why can’t you build a special aeroplane to enter in the next meet? You’ll have plenty of time, as it doesn’t come off for three months yet. We are only making the preliminary arrangements. It is now June, and the meet is scheduled for early in September. Couldn’t you build a new and speedy aeroplane in that time?”

Eagerly Mr. Gunmore waited for the answer. Tom Swift seemed to be considering it. There was an increased brightness to his eyes, and one could tell that he was thinking deeply. The secretary sought to clinch his argument.

“I believe, from what I have heard of your work in the past, that you could build an aeroplane which would win the ten-thousand-dollar prize,” he went on. “I would be very glad if you did win it, and, so I think, would be the gentlemen associated with me in this enterprise. It would be fine to have a New York

State youth win the grand prize. Come, Tom Swift, build a special craft, and enter the contest!"

As he paused for an answer footsteps were heard coming along the hall, and a moment later an aged gentleman opened the door of the library.

"Oh! Excuse me, Tom," he said, "I didn't know you had company." And he was about to withdraw.

"Don't go, father," said Tom. "You will be as much interested in this as I am. This is Mr. Gunmore, of the Eagle Park Aviation Association. This is my father, Mr. Gunmore."

"I've heard of you," spoke the secretary as he shook hands with the aged inventor. "You and your son have made, in aeronautics, a name to be proud of."

"And he wants us to go still farther, dad," broke in the youth. "He wants me to build a specially speedy aeroplane, and race for ten thousand dollars."

"Hum!" mused Mr. Swift. "Well, are you going to do it, Tom? Seems to me you ought to take a rest. You haven't been back from your gold-hunting trip to Alaska long enough to more than catch your breath, and now—"

"Oh, he doesn't have to go in this right away," eagerly explained Mr. Gunmore. "There is plenty of time to make a new craft."

"Well, Tom can do as he likes about it," said his father. "Do you think you could build anything speedier than your *Butterfly*, son?"

"I think so, father. That is, if you'd help me. I have a plan partly thought out, but it

will take some time to finish it. Still, I might get it done in time.”

“I hope you’ll try!” exclaimed the secretary. “May I ask whether it would be a monoplane or a biplane?”

“A monoplane, I think,” answered Tom. “They are much more speedy than the double-deckers, and if I’m going to try for the ten thousand dollars I need the fastest machine I can build.”

“We have the promise of one or two very fast monoplanes for the meet,” went on Mr. Gunmore. “Would yours be of a new type?”

“I think it would,” was the reply of the young inventor. “In fact, I am thinking of making a smaller monoplane than any that have yet been constructed, and yet one that will carry two persons. The hardest work will be to make the engine light enough and still have it sufficiently powerful to make over a hundred miles an hour, if necessary.

“A hundred miles an hour in a small monoplane! It isn’t possible!” cried the secretary.

“I’ll make better time than that,” said Tom quietly, and with not a trace of boasting in his tones.

“Then you’ll enter the meet?” asked Mr. Gunmore eagerly.

“Well, I’ll think about it,” promised Tom. “I’ll let you know in a few days. Meanwhile, I’ll be thinking out the details for my new craft. I have been going to build one ever since I got back, after having seen my *Red Cloud* crushed in the ice cave. Now I think I had better begin active work.”

“I hope you will soon let me know,” resumed the secretary. “I’m going to put you down as a possible contestant for the ten-thousand-dollar prize. That can do no harm, and I hope you win it. I trust—”

He paused suddenly, and listened. So did Tom Swift and his father, for they all distinctly heard stealthy footsteps under the open windows of the library.

“Some one is out there, listening,” said Tom in low tones.

“Perhaps it’s Eradicate Sampson,” suggested Mr. Swift, referring to the eccentric colored man who was employed by the inventor and his son to help around the place. “Very likely it was Eradicate, Tom.”

“I don’t think so,” was the lad’s answer. “He went to the village a while ago, and said he wouldn’t be back until late to-night. He had to get some medicine for his mule, Boomerang, who is sick. No, it wasn’t Eradicate; but some one was under that window, trying to hear what we said.”

As he spoke in guarded tones, Tom went softly to the casement and looked out. He could observe nothing, as the night was dark, and the new moon, which had been shining, was now dimmed by clouds.

“See anything?” asked Mr. Gunmore as he advanced to Tom’s side.

“No,” was the low answer. “I can’t hear anything now, either.”

“I’ll go speak to Mrs. Baggert, the house-keeper,” volunteered Mr. Swift. “Perhaps it was she, or she may know something about

it.”

He started from the room, and as he went Tom noticed, with something of a start, that his father appeared older that night than he had ever looked before. There was a trace of pain on the face of the aged inventor, and his step was lagging.

“I guess dad needs a rest and doctoring up,” thought the young inventor as he turned the electric chandelier off by a button on the wall, in order to darken the room, so that he might peer out to better advantage. “I think he’s been working too hard on his wireless motor. I must get Dr. Gladby to come over and see dad. But now I want to find out who that was under this window.”

Once more Tom looked out. The moon had emerged from behind a thin bank of clouds, and gave a little light.

“See anything?” asked Mr. Gunmore cautiously.

“No,” whispered the youth, for it being a warm night, the windows were open top and bottom, a screen on the outside keeping out mosquitoes and other insects. “I can’t see a thing,” went on Tom, “but I’m sure—”

He paused suddenly. As he spoke there sounded a rustling in the shrubbery a little distance from the window.

“There’s something!” exclaimed Mr. Gunmore.

“I see!” answered the young inventor.

Without another word he softly opened the screen, and then, stooping down to get under the lower sash (for the windows in the library

ran all the way to the floor), Tom dropped out of the casement upon the thick grass.

As he did so he was aware of a further movement in the bushes. They were violently agitated, and a second later a dark object sprang from them and sprinted along the path.

"Here! Who are you? Hold on!" cried the young inventor.

But the figure never halted. Tom sprang forward, determined to see who it was, and, if possible, capture him.

"Hold on!" he cried again. There was no answer.

Tom was a good runner, and in a few seconds he had gained on the fugitive, who could just be seen in the dim light from the crescent moon.

"I've got you!" cried Tom.

But he was mistaken, for at that instant his foot caught on the outcropping root of a tree, and the young inventor went flat on his face.

"Just my luck!" he cried.

He was quickly on his feet again, and took after the fugitive. The latter glanced back, and, as it happened, Tom had a good look at his face. He almost came to a stop, so startled was he.

"Andy Foger!" he exclaimed as he recognized the bully who had always proved himself such an enemy of our hero. "Andy Foger sneaking under my windows to hear what I had to say about my new aeroplane! I wonder what his game can be? I'll soon find out!"

Tom was about to resume the chase, when he lost sight of the figure. A moment later he heard the puffing of an automobile, as some one cranked it up.

“It’s too late!” exclaimed Tom. “There he goes in his car!” And knowing it would be useless to keep up the chase, the youth turned back toward his house.



## Mr. Swift is Ill

“Who was it?” asked Mr. Gunmore as Tom again entered the library. “A friend of yours?”

“Hardly a friend,” replied Tom grimly. “It was a young fellow who has made lots of trouble for me in the past, and who, lately, with his father, tried to get ahead of me and some friends of mine in locating a gold claim in Alaska. I don’t know what he’s up to now, but certainly it wasn’t any good. He’s got nerve, sneaking up under our windows!”

“What do you think was his object?”

“It would be hard to say.”

“Can’t you find him to-morrow, and ask him?”

“There’s not much satisfaction in that. The less I have to do with Andy Foger the better I’m satisfied. Well, perhaps it’s just as well I fell, and couldn’t catch him. There would have been a fight, and I don’t want to worry dad any more than I can help. He hasn’t been very well of late.”

“No, he doesn’t look very strong,” agreed the secretary. “But I hope he doesn’t get sick, and I hope no bad consequences result from the eavesdropping of this Foger fellow.”

Tom started for the hall, to get a brush with which to remove some of the dust gathered in his chase after Andy. As he opened the library door to go out Mr. Swift came in again.

"I saw Mrs. Baggert, Tom," he said. "She wasn't out under the window, and, as you said, Eradicate isn't about. His mule is in the barn, so it couldn't have been the animal straying around."

"No, dad. It was Andy Foger."

"Andy Foger!"

"Yes. I couldn't catch him. But you'd better go lie down, father. It's getting late, and you look tired."

"I am tired, Tom, and I think I'll go to bed. Have you finished your arrangements with Mr. Gunmore?"

"Well, I guess we've gone as far as we can until I invent the new aeroplane," replied Tom, with a smile.

"Then you'll really enter the meet?" asked the secretary eagerly.

"I think I will," decided Tom. "The prize of ten thousand dollars is worth trying for, and besides that, I'll be glad to get to work again on a speedy craft. Yes, I'll enter the meet."

"Good!" exclaimed Mr. Gunmore, shaking hands with the young inventor. "I didn't have my trip for nothing, then. I'll go back in the morning and report to the committee that I've been successful. I am greatly obliged to you."

He left the Swift home, after refusing Tom's invitation to remain all night, and went to his hotel. Tom then insisted that his father retire.

As for the young inventor, he was not satisfied with the result of his attempt to catch Andy Foger. He had no idea why the bully was hiding under the library window, but Tom surmised that some mischief might be afoot.

“Sam Snedecker or Pete Bailey, the two cronies of Andy, may still be around here, trying to play some trick on me,” mused Tom. “I think I’ll take a look outside.” And taking a stout cane from the umbrella rack, the youth sallied forth into the yard and extensive grounds surrounding his house.

While he is thus looking for possible intruders we will tell you a little more about him than has been possible since the call of the aviation secretary.

Tom Swift lived with his father, Barton Swift, in the town of Shopton, New York State. The young man had followed in the footsteps of his parent, and was already an inventor of note.

Their home was presided over by Mrs. Baggert, as housekeeper, since Mrs. Swift had been dead several years. In addition, there was Garret Jackson, an engineer, who aided Tom and his father, and Eradicate Sampson, an odd colored man, who, with his mule, Boomerang, worked about the place.

In the first volume of this series, entitled “Tom Swift and his Motor-Cycle,” here was related how he came to possess that machine. A certain Mr. Wakefield Damon, an eccentric gentleman, who was always blessing himself, or something about him, owned the cycle, but he came to grief on it, and sold it to Tom very

cheaply.

Tom had a number of adventures on the wheel, and, after having used the motor to save a valuable patent model from a gang of unscrupulous men, the lad acquired possession of a power boat, in which he made several trips, and took part in many exciting happenings.

Some time later, in company with John Sharp, an aeronaut, whom Tom had rescued from Lake Carlopa, after the airman had nearly lost his life in a burning balloon, the young inventor made a big airship, called the *Red Cloud*. With Mr. Damon, Tom made several trips in this craft, as set forth in the book, "Tom Swift and His Airship."

It was after this that Tom and his father built a submarine boat, and went under the ocean for sunken treasure, and, following that trip Tom built a speedy electric runabout, and by a remarkable run in that, with Mr. Damon, saved a bank from ruin, bringing gold in time to stave off a panic.

"Tom Swift and His Wireless Message" told of the young inventor's plan to save the castaways of Earthquake Island, and how he accomplished it by constructing a wireless plant from the remains of the wrecked airship *Whizzer*. After Tom got back from Earthquake Island he went with Mr. Barcoe Jenks, whom he met on the ill-fated bit of land, to discover the secret of the diamond makers. They found the mysterious men, but the trip was not entirely successful, for the mountain containing the cave where the diamonds were made was

destroyed by a lightning shock, just as Mr. Parker, a celebrated scientist, who accompanied the party, said it would be.

But his adventure in seeking to discover the secret of making precious stones did not satisfy Tom Swift, and when he and his friends got back from the mountains they prepared to go to Alaska to search for gold in the caves of ice. They were almost defeated in their purpose by the actions of Andy Foger and his father, who in an under-hand manner, got possession of a valuable map, showing the location of the gold, and made a copy of the drawing.

Then, when Tom and his friends set off in the *Red Cloud*, as related in "Tom Swift in the Caves of Ice," the Fogers, in another airship, did likewise. But Tom and his party were first on the scene, and accomplished their purpose, though they had to fight the savage Indians. The airship was wrecked in a cave of ice, that collapsed on it, and the survivors had desperate work getting away from the frozen North.

Tom had been home all the following winter and spring, and he had done little more than work on some small inventions, when a new turn was given his thoughts and energies by a visit from Mr. Gunmore, as narrated in the first chapter of the present volume.

"Well, I guess no one is here," remarked the young inventor as he completed the circuit of the grounds and walked slowly back toward the house. "I think I scared Andy so that he won't come back right away. He had the laugh on me, though, when I stumbled and fell."

As Tom proceeded he heard some one approaching, around the path at the side of the house.

“Who’s there?” he called quickly, taking a firmer grasp of his stick,

“It’s me, Massa Swift,” was the response. “I jest come back from town. I got some peppermint fo’ mah mule, Boomerang, dat’s what I got.”

“Oh! It’s you, is it, Rad?” asked the youth in easier tones.

“Dat’s who it am, Did yo’ t’ink it were some un else?”

“I did,” replied Tom. “Andy Foger has been sneaking around. Keep your eyes open the rest of the night, Rad.”

“I will, Massa Tom.”

The youth went into the house, having left word with the engineer, Mr. Jackson, to be on the alert for anything suspicious.

“And now I guess I’ll go to bed, and make an early start to-morrow morning, planning my new aeroplane,” mused Tom. “I’m going to make the speediest craft of the air ever seen!”

As he started toward his room Tom Swift heard the voice of the housekeeper calling to him:

“Tom! Oh, Tom! Come here, quickly!”

“What’s the matter?” he asked, in vague alarm.

“Something has happened to your father!” was the startling reply. “He’s fallen down, and is unconscious! Come quickly! Send for the doctor!”

Tom fairly ran toward his father’s room.

# The Plans Disappear

Mr. Swift was lying on the floor, where he had fallen, in front of his bed, as he was preparing to retire. There was no mark of injury upon him, and at first, as he knelt down at his father's side, Tom was at a loss to account for what had taken place.

"How did it happen? When was it?" he asked of Mrs. Baggert, as he held up his father's head, and noted that the aged man was breathing slightly.

"I don't know what happened, Tom," answered the housekeeper, "but I beard him fall, and ran upstairs, only to find him lying there, just like that. Then I called you. Hadn't you better have a doctor?"

"Yes; we'll need one at once. Send Eradicate Tell him to run—not to wait for his mule—Boomerang is too slow. Oh, no! The telephone, of course! Why didn't I think of that at first? Please telephone for Dr. Gladby, Mrs. Baggert. Ask him to come as soon as possible, and then tell Garret Jackson to step here. I'll have him help me get father into

bed.”

The housekeeper hastened to the instrument, and was soon in communication with the physician, who promised to call at once. The engineer was summoned from another part of the house, and then Eradicate was aroused.

Mrs. Baggert had the colored man help her get some kettles of hot water in readiness for possible use by the doctor. Mr. Jackson aided Tom to lift Mr. Swift up on the bed, and they got off some of his clothes.

“I’ll try to see if I can revive him with a little aromatic spirits of ammonia,” decided Tom, as he noticed that his father was still unconscious. He hastened to prepare the strong spirits, while he was conscious of a feeling of fear and alarm, mingled with sadness.

Suppose his father should die? Tom could not bear to think of that. He would be left all alone, and how much he would miss the companionship and comradeship of his father none but himself knew.

“Oh! but I mustn’t think he’s going to die!” exclaimed the youth, as he mixed the medicine.

Mr. Swift feebly opened his eyes after Tom and Mr. Jackson had succeeded in forcing some of the ammonia between his lips.

“Where am I? What happened?” asked the aged inventor faintly.

“We don’t know, exactly,” spoke Tom softly. “You are ill, father. I’ve sent for the doctor. He’ll fix you up. He’ll be here soon.”

“Yes, I’m—I’m ill,” murmured the aged

man. "Something hurts me—here," and he put his hand over his heart.

Tom felt a nameless sense of fear. He wished now that he had insisted on his parent consulting a physician some time before, when Mr. Swift first complained of a minor ailment. Perhaps now it was too late.

"Oh! when will that doctor come?" murmured Tom impatiently.

Mrs. Baggert, who was nervously going in and out of the room, again went to the telephone.

"He's on his way," the housekeeper reported. "His wife said he just started out in his auto."

Dr. Gladby hurried into the room a little later, and cast a quick look at Mr. Swift, who had again lapsed into unconsciousness.

"Do you think he—think he's going to die?" faltered Tom. He was no longer the self-reliant young inventor. He could meet danger bravely when it threatened himself alone, but when his father was stricken he seemed to lose all courage.

"Die? Nonsense!" exclaimed the doctor heartily. "He's not dead yet, at all events, and while there's life there's hope. I'll soon have him out of this spell."

It was some little time, however, before Mr. Swift again opened his eyes, but he seemed to gain strength from the remedies which Dr. Gladby administered, and in about an hour the inventor could sit up.

"But you must be careful," cautioned the physician. "Don't overdo yourself. I'll be in

again in the morning, and now I'll leave you some medicine, to be taken every two hours."

"Oh, I feel much better," said Mr. Swift, and his voice certainly seemed stronger. "I can't imagine what happened. I came upstairs, after Tom had received a visit from the minister, and that's all I remember."

"The minister, father!" exclaimed Tom, in great amazement. "The minister wasn't here this evening! That was Mr. Gunmore, the aviation secretary. Don't you remember?"

"I don't remember any gentleman like that calling here to-night," Mr. Swift said blankly. "It was the minister, I'm sure, Tom."

"The minister was here last night, Mr. Swift," said the housekeeper.

"Was he? Why, it seems like to-night. And I came upstairs after talking to him, and then it all got black, and—and—"

"There, now; don't try to think," advised the doctor. "You'll be all right in the morning."

"But I can't remember anything about that aviation man," protested Mr. Swift. "I never used to be that way—forgetting things. I don't like it!"

"Oh, it's just because you're tired," declared the physician. "It will all come back to you in the morning. I'll stop in and see you then. Now try to go to sleep." And he left the room.

Tom followed him, Mrs. Baggert and Mr. Jackson remaining with the sick man.

"What is the matter with my father, Dr. Gladby?" asked Tom earnestly, as the doctor prepared to take his departure. "Is it anything

serious?"

"Well," began the medical man, "I would not be doing my duty, Tom, if I did not tell you what it is. That is, it is comparatively serious, but it is curable, and I think we can bring him around. He has an affection of the heart, that, while it is common enough, is sometimes fatal.

"But I do not think it will be so in your father's case. He has a fine constitution, and this would never have happened had he not been run down from overwork. That is the principal trouble. What he needs is rest; and then, with the proper remedies, he will be as well as before."

"But that strange lapse of memory, doctor?"

"Oh, that is nothing. It is due to the fact that he has been using his brain too much. The brain protests, and refuses to work until rested. Your father has been working rather hard of late hasn't he?"

"Yes; on a new wireless motor."

"I thought so. Well, a good rest is what he needs, and then his mind and body will be in tune again. I'll be around in the morning."

Tom was somewhat relieved by the doctor's words, but not very much so, and he spent an anxious night, getting up every two hours to administer the medicine. Toward morning Mr. Swift fell into a heavy sleep, and did not awaken for some time.

"Oh, you're much better!" declared Dr. Gladby when he saw his patient that day.

"Yes, I feel better," admitted Mr Swift.

“And can’t you remember about Mr. Gunmore calling?” asked Tom.

The aged inventor shook his head, with a puzzled air.

“I can’t remember it at all,” he said. “The minister is the last person I remember calling here.”

Tom looked worried, but the physician said it was a common feature of the disease from which Mr. Swift suffered, and would doubtless pass away.

“And you don’t remember how we talked about me building a speedy aeroplane and trying for the ten-thousand-dollar prize?” asked Tom.

“I can’t remember a thing about it,” said the inventor, with a puzzled shake of his head, “and I’m not going to try, at least not right away. But, Tom, if you’re going to build a new aeroplane, I want to help you. I’ll give you the benefit of my advice. I think my new form of motor can be used in it.”

“Now! now! No inventions—at least not just yet!” objected the physician. “You must have a good rest first, Mr. Swift, and get strong. Then you and Tom can build as many airships as you like.”

Mr. Swift felt so much better about three days later that he wanted to get right to work planning the airship that was to win the big prize, but the doctor would not hear of it. Tom, however, began to make rough sketches of what he had in mind, changing them from time to time. He also worked on a type of motor, very light, and modeled after one his fa-

ther had recently patented.

Then a new idea came to Tom in regard to the shape of his aeroplane, and he worked several days drawing the plans for it. It was a new idea in construction, and he believed it would give him the great speed he desired.

“But I’d like dad to see it,” he said. “As soon as he’s well enough I’ll go over it with him.”

That time came a week later, and with a complete set of the plans, embodying his latest ideas, Tom went into the library where his father was seated in an easy-chair. Dr. Gladby had said it would not now harm the aged inventor to do a little work. Tom spread the drawings out in front of his father, and began to explain them in detail.

“I really think you have something great there, Tom!” exclaimed Mr. Swift, at length. “It is a very small monoplane, to be sure, but I think with the new principle you have introduced it will work; but, if I were you, I’d shape those wing tips a little differently.”

“No, they’re better that way,” said Tom pleasantly, for he did not often disagree with his father. “I’ll show you from a little model I have made. I’ll get it right away.”

Anxious to demonstrate that he was right in his theory, Tom hurried from the library to get the model of which he had spoken. He left the roll of plans lying on a small table near where his father was seated.

“There, you see, dad,” said the young inventor as he re-entered the library a few minutes later, “when you warp the wing tips in making a spiral ascent it throws your tail

wings out of plumb, and so—”

Tom paused in some amazement, for Mr. Swift was lying back in his chair, with his eyes closed. The lad started in alarm, laid aside his model, and sprang to his father's side.

“He's had another of those heart attacks!” gasped Tom. He was just going to call Mrs. Baggert, when Mr. Swift opened his eyes. He looked at Tom, and the lad could see that they were bright, and did not show any signs of illness.

“Well, I declare!” exclaimed the inventor. “I must have dozed off, Tom, while you were gone. That's what I did. I fell asleep!”

“Oh!” said Tom, much relieved. “I was afraid you were ill again. Now, in this model, as you will see by the plans, it is necessary—”

He paused, and looked over at the table where he had left the drawings. They were not there!

“The plans, father!” Tom exclaimed. “The plans I left on the table! Where are they?”

“I haven't touched them,” was the answer. “They were on that table, where you put them, when I closed my eyes for a little nap. I forgot all about them. Are you sure they're missing?”

“They're not here!” And Tom gazed wildly about the room. “Where can they have gone?”

“I wasn't out of my chair,” said Mr. Swift, “I ought not to have gone to sleep, but—”

Tom fairly jumped toward the long library window, the same one from which he had leaped to pursue Andy Foger. The casement was open, and Tom noted that the screen was also unhooked, It had been closed when he

went to get the model, he was sure of that.

“Look, dad! See!” he exclaimed, as he picked up from the floor a small piece of paper.

“What is it, Tom?”

“A sheet on which I did some figuring. It is no good, but it was in with the plans. It must have dropped out.”

“Do you mean that some one has been in here and taken the plans of your new aeroplane, Tom?” gasped his father.

“That’s just what I mean! They sneaked in here while you were dozing, took the plans, and jumped out of the window with them. On the way this paper fell out. It’s the only clue we have. Stay here, dad. I’m going to have a look.” And Tom jumped from the library window and ran down the path after the unknown thief.



# Anxious Days

Peering on all sides as he dashed along the gravel walk, hoping to catch a glimpse of the unknown intruder in the garden or shrubbery, Tom sprinted on at top speed. Now and then he paused to listen, but no sound came to him to tell of some one in retreat before him. There was only silence.

“Mighty queer,” mused the youth. “Whoever it was, he couldn’t have had more than a minute start of me—no, not even half a minute—and yet they’ve disappeared as completely as though the ground had opened and let them down; and the worst of it is, that they’ve taken my plans with them!”

He turned about and retraced his steps, making a careful search. He saw no one, until, turning a corner, a little later, he met Eradicate Sampson.

“You haven’t seen any strangers around here just now, have you, Rad?” asked Tom anxiously.

“No, indeedy, I hasn’t, Massa Tom. What fo’ kind ob a stranger was him?”

“That’s just what I don’t know. Rad. But some one sneaked into the library just now

and took some of my plans while my father dozed off. I jumped out after him as soon as I could, but he has disappeared.”

“Maybe it were th’ man who done stowed hissself away on yo’ airship, de time yo’ all went after de diamonds,” suggested the colored man.

“No, it couldn’t have been him. If it was anybody, it was Andy Foger, or some of his crowd. You didn’t see Andy, did you, Rad?”

“No, indeedy; but if I do, I suah will turn mah mule, Boomerang, loose on him, an’ he won’t take any mo’ plans—not right off, Massa Tom.”

“No, I guess not. Well, I must get back to dad, or he’ll worry. Keep your eyes open, Rad, and if you see Andy Foger, or any one else, around here, let me know. Just sing out for all you’re worth.”

“Shall I call out, Massa Tom, ef I sees dat blessin’ man?”

“You mean Mr. Damon?”

“Dat’s de one. De gen’man what’s allers a-blessin’ ob hissself or his shoelaces, or suffin laik dat. Shall I sing out ef I sees him?”

“Well, no; not exactly, Rad. Just show Mr. Damon up to the house. I’d be glad to see him again, though I don’t fancy he’ll call. He’s off on a little trip, and won’t be back for a week. But watch out, Rad.” And with that Tom turned toward the house, shaking his head over the puzzle of the missing plans.

“Did you find any one?” asked his father eagerly as the young inventor entered the library.

“No,” was the gloomy answer. “There wasn’t a sign of any one.”

Tom went over to the window and looked about for clues. There was none that he could see, and a further examination of the ground under the window disclosed nothing. There was gravel beneath the casement, and this was not the best medium for retaining footprints. Nor were the gravel walks any better.

“Not a sign of any one,” murmured Tom. “Are you sure you didn’t hear any noise, dad, when you dozed off?”

“Not a sound, Tom. In fact, it’s rather unusual for me to go to sleep like that, but I suppose it’s because of my illness. But I couldn’t have been asleep long—not more than two minutes.”

“That’s what I think. Yet in that time someone, who must have been on the watch, managed to get in here and take my plans for the new sky racer. I don’t see how they got the wire screen open from the outside, though. It fastens with a strong hook.”

“And was the screen open?” asked Mr. Swift

“Yes, it was unhooked. Either they pushed a wire in through the mesh, caught it under the hook, and pulled it up from the outside, or else the screen was opened from the inside.”

“I don’t believe they could get inside to open the screen without some of us seeing them,” spoke the older inventor. “More likely, Tom, it wasn’t hooked, and they found it an easy matter to simply pull it open.”

“That’s possible. I’ll ask Mrs. Baggert if the

screen was unhooked.”

But the housekeeper could not be certain on that point, and so that part of the investigation amounted to nothing.

“It’s too bad!” exclaimed Mr. Swift. “It’s my fault, for dozing off that way.”

“No, indeed, it isn’t!” declared Tom stoutly.

“Is the loss a serious one?” asked his father. “Have you no copy of the plans?”

“Yes, I have a rough draft from which I made the completed drawings, and I can easily make another set. But that isn’t what worries me—the mere loss of the plans.”

“What is it, then, Tom?”

“The fact that whoever took them must know what they are the plans for a sky racer that is to take part in the big meet. I have worked it out on a new principle, and it is not yet patented. Whoever stole my plans can make the same kind of a sky racer that I intended to construct, and so stand as good a chance to win the prize of ten thousand dollars as I will.”

“That certainly is too bad, Tom. I never thought of that. Do you suspect any one?”

“No one, unless it’s Andy Foger. He’s mean enough to do a thing like that, but I didn’t think he’d have the nerve. However, I’ll see if I can learn anything about him. He may have been sneaking around, and if he has my plans he’d ask nothing better than to make a sky racer and beat me.”

“Oh, Tom, I’m so sorry!” exclaimed Mr. Swift “I—I feel very bad about it!”

“There, never mind!” spoke the lad, seeing

that his father was looking ill again. "Don't think any more about it, dad. I'll get back those plans. Come, now. It's time for your medicine, and then you must lie down." For the aged inventor was looking tired and weak.

Wearily he let Tom lead him to his room, and after seeing that the invalid was comfortable Tom called up Dr. Gladby, to have him come and see Mr. Swift. The doctor said his patient had been overdoing himself a little, and must rest more if he was to completely recover.

Learning that his father was no worse, Tom set off to find Andy Foger.

"I can't rest until I know whether or not he has my plans," he said to himself. "I don't want to make a speedy aeroplane, and find out at the last minute that Andy, or some of his cronies, have duplicated it."

But Tom got little satisfaction from Andy Foger. When that bully was accused of having been around Tom's house he denied it, and though the young inventor did not actually accuse him of taking the plans, he hinted at it. Andy muttered many indignant negatives, and called on some of his cronies to witness that at the time the plans were taken he and they were some distance from the Swift home.

So Tom was baffled; and though he did not believe the red-haired lad's denial, there was no way in which he could prove to the contrary.

"If he didn't take the plans, who did?" mused Tom.

As the young inventor turned away after

cross-questioning Andy, the bully called out:

“You’ll never win that ten thousand dollars!”

“What do you know about that?” demanded Tom quickly.

“Oh, I know,” sneered Andy. “There’ll be bigger and better aeroplanes in that meet than you can make, and you’ll never win the prize.”

“I suppose you heard about the affair by sneaking around under our windows, and listening,” said Tom.

“Never mind how I know it, but I do,” retorted the bully.

“Well, I’ll tell you one thing,” said Tom calmly. “If you come around again it won’t be healthy for you. Look out for live wires, if you try to do the listening act any more, Andy!” And with that ominous warning Tom turned away.

“What do you suppose he means, Andy?” asked Pete Bailey, one of Andy’s cronies.

“It means he’s got electrical wires strung around his place,” declared Sam Snedecker, “and that we’ll be shocked if we go up there. I’m not going!”

“Me, either,” added Pete, and Andy laughed uneasily.

Tom heard what they said, and in the next few days he made himself busy by putting some heavy wires in and about the grounds where they would show best. But the wires carried no current, and were only displayed to impress a sense of fear on Andy and his cronies, which purpose they served well.

But it was like locking the stable door after the horse had been stolen, for with all the precautions he could take Tom could not get back his plans, and he spent many anxious days seeking them. They seemed to have completely disappeared, however, and the young inventor decided there was nothing else to do but to draw new ones.

He set to work on them, and in the meanwhile tried to learn whether or not Andy had the missing plans. He sought this information by stealth, and was aided by his chum, Ned Newton. But all to no purpose. Not the slightest trace or clue was discovered.



# Building the Sky Racer

“What will you do, if, after you have your little monoplane all constructed, and get ready to race, you find that some one else has one exactly like it at the meet?” asked Ned Newton one day, when he and Tom were out in the big workshop, talking things over. “What will you do, Tom?”

“I don’t see that there is anything I can do. I’ll go on to the meet, of course, and trust to some improvements I have since brought out, and to what I know about aeroplanes, to help me win the race. I’ll know, too, who stole my plans.”

“But it will be too late, then.”

“Yes, too late, perhaps, to stop them from using the drawings, but not too late to punish them for the theft. It’s a great mystery, and I’ll be on the anxious seat all the while. But it can’t be helped.”

“When are you going to start work on the sky racer?”

“Pretty soon, now. I’ve got another set of plans made, and I’ve fixed them so that if they

are stolen it won't do any one any good."

"How's that?"

"I've put in a whole lot of wrong figures and measurements, and scores of lines and curves that mean nothing. I have marked the right figures and lines by a secret mark, and when I work on them I'll use only the proper ones. But any one else wouldn't know this. Oh, I'll fool 'em this time!"

"I hope you do. Well, when you get the machine done I'd like to ride in it. Will it carry two, as your *Butterfly* does?"

"Yes, only it will be much different; and, of course, it will go much faster. I'll give you a ride, all right, Ned. Well, now I must get busy and see what material I need for what I hope will prove to be the speediest aeroplane in the world."

"That's going some! I must be leaving now. Don't forget your promise. I saw Mary Nestor on my way over here. She was asking for you. She said you must be very busy, for she hadn't seen you in some time."

"Um!" was all Tom answered, but by the blush that mounted to his face it was evident that he was more interested in Mary Nestor than his mere exclamation indicated.

When Ned had gone Tom got out pencil and paper, and was busily engaged in making some intricate calculations. He drew odd little sketches on the margin of the sheet, and then wrote out a list of the things he would need to construct the new aeroplane.

This finished, he went to Mr. Jackson, the engineer, and asked him to get the various

things together, and to have them put in the special shop where Tom did most of his work.

“I want to get the machine together as soon as I can,” he remarked to the engineer, “for it will need to be given a good tryout before I enter in the race, and I may find that I’ll have to make several changes in it.”

Mr. Jackson promised to attend to the matter right away, and then Tom went in to talk to his father about the motor that was to whirl the propeller of the new air craft.

Mr. Swift had improved very much in the past few days, and though Dr. Gladby said he was far from being well, the physician declared there was no reason why he should not do some inventive work.

He and Tom were deep in an argument of gasoline motors, discussing the best manner of attaching the fins to the cylinders to make them air-cooled, when a voice sounded outside, the voice of Eradicate:

“Heah! Whar yo’ goin’?” demanded the colored man. “Whar yo’ goin’?”

“Somebody’s out in the garden!” exclaimed Tom, jumping up suddenly.

“Perhaps it’s the same person who took the plans!” suggested Mr. Swift.

“Hold on, dere!” yelled Eradicate again.

Then a voice replied:

“Bless my insurance policy! What’s the matter? Have there been burglars around? Why all these precautions? Bless my steam heater! Don’t you know me?”

“Mr. Damon!” cried Tom, a look of pleasure coming over his face. “Mr. Damon is coming!”

“So I should judge,” responded Mr. Swift, with a smile. “I wonder why Eradicate didn’t recognize him?”

They learned why a moment later, for on looking from the library window, Tom saw the colored man coming up the walk behind a well-dressed gentleman.

“Why, mah goodness! It’s Mr. Damon!” exclaimed Eradicate. “I didn’t know yo’, sah, wif dem whiskers on! I didn’t, fo’ a fac’!”

“Bless my razor! I suppose it does make a difference,” said the eccentric man. “Yes, my wife thought I’d look better, and more sedate, with a beard, so I grew one to please her. But I don’t like it. A beard is too warm this kind of weather; eh, Tom?” And Mr. Damon waved his hand to the young inventor and his father, who stood in the low windows of the library. “Entirely too warm, bless my fingernails, yes!”

“I agree with you!” exclaimed Tom. “Come in! We’re glad to see you!”

“I called to see if you aren’t going on another trip to the North Pole, or somewhere in the Arctic regions,” went on Mr. Damon.

“Why?” inquired Tom.

“Why, then this heavy beard of mine would come in handy. It would keep my throat and chin warm.” And Mr. Damon ran his hands through his luxuriant whiskers.

“No more northern trips right away,” said Tom. “I’m about to build a speedy monoplane, to take part in the big meet at Eagle Park.”

“Oh, yes, I heard about the meet,” said Mr. Damon. “I’d like to be in that.”

“Well, I’m building a machine that will carry two,” went on Tom, “and if you think you can stand a speed of a hundred miles an hour, or better, I’ll let you come with me. There are some races where a passenger is allowed.”

“Have you got a razor?” asked Mr. Damon suddenly.

“What for?” inquired Mr. Swift, wondering what the eccentric man was going to do.

“Why, bless my shaving soap! I’m going to cut off my beard. If I go in a monoplane at a hundred miles an hour I don’t want to make any more resistance to the wind than possible, and my whiskers would certainly hold back Tom’s machine. Where’s a razor? I’m going to shave at once. My wife won’t mind when I tell her what it’s for. Lend me a razor, please, Tom.”

“Oh, there’s plenty of time,” explained the lad, with a laugh. “The race doesn’t take place for over two months. But when it does, I think you would be better off without a beard.”

“I know it,” said Mr. Damon simply. “I’ll shave before we enter the contest, Tom. But now tell me all about it.”

Tom did so, relating the story of the theft of the plans. Mr. Damon was for having Andy arrested at once, but Mr. Swift and his son pointed out that they had no evidence against him.

“All we can do,” said the young inventor, “is to keep watch on him, and see if he is building another aeroplane. He has all the facilities, and he may attempt to get ahead of me. If he enters a sky craft at the meet I’ll be

pretty sure that he has made it from my stolen plans.”

“Bless my wing tips!” cried Mr. Damon. “But can’t we do anything to stop him?”

“I’m afraid not,” answered Tom; and then he showed Mr. Damon his re-drawn plans, and told in detail of how he intended to construct the new aeroplane.

The eccentric man remained as the guest of the Swift family that night, departing for his home the next day, and promising to be on hand as soon as Tom was ready to test his new craft, which would be in about a month.

As the days passed, Tom, with the help of his father, whose health was slightly better, and with the aid of Mr. Jackson, began work on the speedy little sky racer.

As you boys are all more or less familiar with aeroplanes, we will not devote much space to the description of the new one Tom Swift made. We can describe it in general terms, but there were some features of it which Tom kept a secret from all save his father.

Suffice it to say that Tom had decided to build a small air craft of the single-wing type, known as the monoplane. It was to be a cross between the Bleriot and the Antoinette, with the general features of both, but with many changes or improvements.

The wings were shaped somewhat like those of a humming-bird, which, as is well known, can, at times, vibrate its wings with such velocity that the most rapid camera lens cannot quite catch

And when it is known that a bullet in flight has been successfully photographed, the speed of the wings of the humming-bird can be better appreciated.

The writer has seen a friend, with a very rapid camera, which was used to snap automobiles in flight, attempt to take a picture of a humming-bird. He got the picture, all right, but the plate was blurred, showing that the wings had moved faster than the lens could throw them on the sensitive plate.

Not that Tom intended the wings of his monoplane to vibrate, but he adopted that style as being the best adapted to allow of rapid flight through the air; and the young inventor had determined that he would clip many minutes from the best record yet made.

The body of his craft, between the forward wings and the rear ones, where the rudders were located, was shaped like a cigar, with side wings somewhat like the fin keels of the ocean liner to prevent a rolling motion. In addition, Tom had an ingenious device to automatically adapt his monoplane to sudden currents of air that might overturn it, and this device was one of the points which he kept secret.

The motor, which was air-cooled, was located forward, and was just above the heads of the operator and the passenger who sat beside him. The single propeller, which was ten feet in diameter, gave a minimum thrust of one thousand pounds at two thousand revolutions per minute.

This was one feature wherein Tom's craft

differed from others. The usual aeroplane propeller is eight feet in diameter, and gives from four to five hundred pounds thrust at about one thousand revolutions per minute, so it can be readily seen wherein Tom had an advantage.

"But I'm building this for speed," he said to Mr. Jackson, "and I'm going to get it! We'll make a hundred miles an hour without trouble."

"I believe you," replied the engineer. "The motor you and your father have made is a wonder for lightness and power."

In fact, the whole monoplane was so light and frail as to give one the idea of a rather large model, instead of a real craft, intended for service. But a careful inspection showed the great strength it had, for it was braced and guyed in a new way, and was as rigid as a steel-trussed bridge.

"What are you going to call her?" asked Mr. Jackson, about two weeks after they had started work on the craft, and when it had begun to assume shape and form.

"I'm going to name her the *Humming-Bird*," replied Tom. "She's little, but oh, my!"

"And I guess she'll bring home the prize," added the engineer.

And as the days went by, and Tom, his father and Mr. Jackson continued to work on the speedy craft, this hope grew in the heart of the young inventor. But he could not rid himself of worry as to the fate of the plans that had disappeared. Who had them? Was some one making a machine like his own from

them? Tom wished he knew.



# Andy Foger Will Contest

One afternoon, as Tom was working away in the shop on his sky racer, adjusting one of the rear rudders, and pausing now and then to admire the trim little craft, he heard some one approaching. Looking out through a small observation peephole made for this purpose, he saw Mrs. Baggert hurrying toward the building.

“I wonder what’s the matter?” he said aloud, for there was a look of worry on the lady’s face. Tom threw open the door. “What is it, Mrs. Baggert?” he called. “Some one up at the house who wants to see me?”

“No, it’s your father!” panted the housekeeper, for she was quite stout. “He is very ill again, and I can’t seem to get Dr. Gladby on the telephone. Central says he doesn’t answer.”

“My father worse!” cried Tom in alarm, dropping his tools and hurrying from the shop. “Where’s Eradicate? Send him for the doctor. Perhaps the wires are broken. If he can’t locate Dr. Gladby, get Dr. Kurtz. We

must have some one. Here, Rad! Where are you?" he called, raising his voice.

"Heah I be!" answered the colored man, coming from the direction of the garden, which he had been weeding.

"Get out your mule, and go for Dr. Gladby. If he isn't home, get Dr. Kurtz. Hurry, Rad!"

"I's mighty sorry, Massa Tom," answered the colored man, "but I cain't hurry, nohow."

"Why not?"

"Because Boomerang done gone lame, an' he won't run. I'll go mahse'f, but I cain't take dat air mule."

"Never mind. I'll go in the *Butterfly*," decided Tom quickly. "I'll run up to the house and see how dad is, and while I'm gone, Rad, you get out the *Butterfly*. I can make the trip in that. If Dr. Kurtz had a 'phone I could get him, but he lives over on the back road, where there isn't a line. Hurry, Rad!"

"Yes, sah, Massa Tom, I'll hurry!"

The colored man knew how to get the monoplane in shape for a flight, as he had often done it.

Tom found his father in no immediate danger, but Mr. Swift had had a slight recurrence of his heart trouble, and it was thought best to have a doctor. So Tom started off in his aircraft, rising swiftly above the housetop, and sailed off toward the old-fashioned residence of Dr. Kurtz, a sturdy, elderly German physician, who sometimes attended Mr. Swift. Tom decided that as long as Dr. Gladby did not answer his 'phone, he could not be at home, and this, he learned later, was the case, the physi-

cian being in a distant town on a consultation.

“My, this *Butterfly* seems big and clumsy beside my *Humming-Bird*,” mused Tom as he slid along through the air, now flying high and now low, merely for practice. “This machine can go, but wait until I have my new one in the air! Then I’ll show ’em what speed is!”

He was soon at the physician’s house, and found him in.

“Won’t you ride back with me in the mono-plane?” asked Tom. “I’m anxious to have you see dad as soon as you can.”

“Vot! Me drust mineself in one ob dem airships? I dinks not!” exclaimed Dr. Kurtz ponderously. “Vy, I would not efen ride in an outer-mobile, yet, so vy should I go in von contrivance vot is efen more dangerous? No, I gomes to your fader in der carriage, mit mine old Dobbin horse. Dot vill not drop me to der ground, or run me up a tree, yet! Vot?”

“Very well,” said Tom, “only hurry, please.”

The young inventor, in his airship, reached home some time before the slow-going doctor got there in his carriage. Mr. Swift was no worse, Tom was glad to find, though he was evidently quite ill.

“So, ve must take goot care of him,” said the doctor, when he had examined the patient. “Dr. Gladby he has done much for him, und I can do little more. You must dake care of yourself, Herr Swift, or you vill—but den, vot is der use of being gloomy-minded? I am sure you vill go more easy, und not vork so much.”

“I haven’t worked much,” replied the aged inventor. “I have only been helping my son on

a new airship.”

“Den dot must stop,” insisted the doctor. “You must haf gocomplete rest—dot’s it—gocomplete rest.”

“We’ll do just as you say, doctor,” said Tom. “We’ll give up the aeroplane matters, dad, and go away, you and I, where we can’t see a blueprint or a pattern, or hear the sound of machinery. We’ll cut it all out.”

“Dot vould be goot,” said Dr. Kurtz ponderously.

“No, I couldn’t think of it,” answered Mr. Swift. “I want you to go in that race, Tom—and win!”

“But I’ll not do it, dad, if you’re going to be ill.”

“He is ill now,” interrupted the doctor. “Very ill, Dom Swift.”

“That settles it. I don’t go in the race. You and I’ll go away, dad—to California, or up in Canada. We’ll travel for your health.”

“No! no!” insisted the old inventor gently. “I will be all right. Most of the work on the monoplane is done now, isn’t it, Tom?”

“Yes, dad.”

“Then you go on, and finish it. You and Mr. Jackson can do it without me now. I’ll take a rest, doctor, but I want my son to enter that race, and, what’s more, I want him to win!”

“Vell, if you don’t vork, dot is all I ask. I must forbid you to do any more. Mit Dom, dot is different. He is young und strong, und he can vork. But you—not, Herr Swift, or I doctor you no more.” And the physician shook his big head.

“Very well. I’ll agree to that if Tom will promise to enter the race,” said the inventor.

“I will,” said Tom.

The physician took his leave shortly after that, the medicine he gave to Mr. Swift somewhat relieving him. Then the young inventor, who felt in a little better spirits, went back to his workshop.

“Poor dad,” he mused. “He thinks more of me and this aeroplane than he does of himself. Well, I will go in the race, and I’ll—yes, I’ll win!” And Tom looked very determined.

He was about to resume work on his craft when something about the way one of the forward planes was tilted attracted his attention.

“I never left it that way,” mused Tom. “Some one has been in here. I wonder if it was Mr. Jackson?”

Tom stepped to the door and called for Eradicate. The colored man came from the direction of the garden, which he was still weeding.

“Has Mr. Jackson been around, Rad?” asked the lad.

“No, sah. I ain’t seed him.”

“Have you been in here, looking at the *Humming-Bird*?”

“No, Massa Tom. I nebber goes in dere, lessen as how yo’ is dere. Dem’s yo’ orders.”

“That’s so, Rad. I might have known you wouldn’t go in. But did you see any one enter the shop?”

“Not a pusson, sah.”

“Have you been here all the while?”

“All but jes’ a few minutes, when I went to

de barn to put some liniment on Boomerang's So' foot."

"H'm! Some one might have slipped in here while I was away," mused Tom. "I ought to have locked the doors, but I was in a hurry. This thing is getting on my nerves. I wonder if it's Andy Foger, or some one else, who is after my secret?"

He made a hasty examination of the shop, but could discover nothing more wrong, except that one of the planes of the *Humming-Bird* had been shifted.

"It looks as if they were trying to see how it was fastened on, and how it worked," mused Tom. "But my plans haven't been touched, and no damage has been done. Only I don't like to think that people have been in here. They may have stolen some of my ideas. I must keep this place locked night and day after this."

Tom spent a busy week in making improvements on his craft. Mr. Swift was doing well, and after a consultation by Dr. Kurtz and Dr. Gladby it was decided to adopt a new style of treatment. In the meanwhile, Mr. Swift kept his promise, and did no work. He sat in his easy-chair, out in the garden, and dozed away, while Tom visited him frequently to see if he needed anything.

"Poor old dad!" mused the young inventor. "I hope he is well enough to come and see me try for the ten-thousand-dollar prize—and win it! I hope I do; but if some one builds, from my stolen plans, a machine on this model, I'll have my work cut out for me." And he gazed

with pride on the *Humming-Bird*.

For the past two weeks Tom had seen nothing of Andy Foger. The red-haired bully seemed to have dropped out of sight, and even his cronies, Sam Snedecker and Pete Bailey, did not know where he had gone.

"I hope he has gone for good," said Ned Newton, who lived near Andy. "He's an infernal nuisance. I wish he'd never come back to Shopton."

But Andy was destined to come back.

One day, when Tom was busy installing a wireless apparatus on his new aeroplane, he heard Eradicate hurrying up the path that led to the shop.

"I wonder if dad is worse?" thought Tom, that always being his first idea when he knew a summons was coming for him. Quickly he opened the door.

"Some one's comin' out to see you, Massa Tom," said the colored man.

"Who is it?" asked the lad, taking the precaution to put his precious plans out of sight.

"I dunno, sah; but yo' father knows him, an' he said fo' me to come out heah, ahead ob de gen'man, an' tell yo' he were comin'. He'll be right heah."

"Oh, well, if dad knows him, it's all right. Let him come, Rad."

"Yes, sah. Heah he comes." And the colored man pointed to a figure advancing down the gravel path. Tom watched the stranger curiously. There was something familiar about him, and Tom was sure he had met him before, yet he could not seem to place him.

"How are you, Tom Swift?" greeted the newcomer pleasantly. "I guess you've forgotten me, haven't you?" He held out his hand, which Tom took. "Don't know me, do you?" he went on.

"Well, I'm afraid I've forgotten your name," admitted the lad, just a bit embarrassed. "But your face is familiar, somehow, and yet it isn't."

"I've shaved off my mustache," went on the other. "That makes a difference. But you haven't forgotten John Sharp, the balloonist, whom you rescued from Lake Carlopa, and who helped you build the *Red Cloud*? You haven't forgotten John Sharp, have you, Tom?"

"Well, I should say not!" cried the lad heartily. "I'm real glad to see you. What are you doing around here? Come in. I've got something to show you," and he motioned to the shop where the *Humming-Bird* was housed.

"Oh, I know what it is," said the veteran balloonist.

"You do?"

"Yes. It's your new aeroplane. In fact, I came to see you about it."

"To see me about it?"

"Yes. I'm one of the committee of arrangements for the meet to be held at Eagle Park, where I understand you are going to contest. I came to see how near you were ready, and to get you to make a formal entry of your machine. Mr. Gunmore sent me."

"Oh, so you're in with them now, eh?"

asked Tom. "Well, I'm glad to know I've got a friend on the committee. Yes, my machine is getting along very well. I'll soon be ready for a trial flight. Come in and look at it. I think it's a bird—a regular *Humming-Bird!*" And Tom laughed.

"It certainly is something new," admitted Mr. Sharp as his eyes took in the details of the trim little craft. "By the way, Shopton is going to be well represented at the meet."

"How is that? I thought I was the only one around here to enter an aeroplane."

"No. We have just received an entry from Andy Fogger."

"From Andy Fogger!" gasped Tom. "Is he going to try to win some of the prizes?"

"He's entered for the big one, the ten-thousand-dollar prize," replied the balloonist. "He has made formal application to be allowed to compete, and we have to accept any one who applies. Why, do you object to him, Tom?"

"Object to him? Mr. Sharp, let me tell you something. Some time ago a set of plans of my machine here were stolen from my house. I suspected Andy Fogger of taking them, but I could get no proof. Now you say he is building a machine to compete for the big prize. Do you happen to know what style it is?"

"It's a small monoplane, something like the Antoinette, his application states, though he may change it later."

"Then he's stolen my ideas, and is making a craft like this!" exclaimed Tom, as he sank upon a bench, and gazed from the balloonist to the *Humming-Bird*, and back to Mr. Sharp

again. “Andy Foger is trying to beat me with my own machine!”

# Seeking a Clue

John Sharp was more than surprised at the effect his piece of information had on Tom Swift. Though the young inventor had all along suspected Andy of having the missing plans, yet there had been no positive evidence on this point. That, coupled with the fact that the red-haired bully had not been seen in the vicinity of Shopton lately, had, in a measure, lulled Tom's suspicions to rest, but now his hope had been rudely shattered.

"Do you really think that's his game?" asked Mr. Sharp.

"I'm sure of it," replied the youth. "Though where he is building his aeroplane I can't imagine, for I haven't seen him in town. He's away."

"Are you sure of that?"

"Well, not absolutely sure," replied Tom. "It's the general rumor that he's out of town."

"Well, old General Rumor is sometimes a person not to be relied upon," remarked the balloonist grimly. "Now this is the way I size it up: Of course, all I know officially is that Andy Fogger has sent in an entry for the big race for the ten-thousand-dollar prize which is offered

by the Eagle Park Aviation Association. I'm a member of the arrangements committee, and so I know. I also know that you and several others are going to try for the prize. That's all I am absolutely sure of.

"Now, when you tell me about the missing plans, and you conclude that Andy is doing some underhanded work, I agree with you. But I go a step farther. I don't believe he's out of town at all."

"Why not?" exclaimed Tom.

"Because when he has an airship shed right in his own backyard, where, you tell me, he once made a craft in which he tried to beat you out in the trip to Alaska, when you think of that, doesn't it seem reasonable that he'd use that same building in which to make his new craft?"

"Yes, it does," admitted Tom slowly, "but then everybody says he's out of town."

"Well, what everybody says is generally not so. I think you'll find that Andy is keeping himself in seclusion, and that he's working secretly in his ship, building a machine with which to beat you."

"Do you, really?"

"I certainly do. Have you been around his place lately?"

"No. I've been too busy; and then I never have much to do with him."

"Then take my advice, and see if you can't get a look inside that shop. You may see something that will surprise you. If you find that Andy is infringing on your patented ideas, you can stop him by an injunction. You've got this

model patented, I take it?"

"Oh, yes. I didn't have at the time the plans were stolen, but I've patented it since. I could get at him that way."

"Then take my advice, and do it. Get a look inside that shed, and you'll find Andy working secretly there, no matter if his cronies do think he's out of town."

"I believe I will," agreed Tom, and somehow he felt better now that he had decided on a plan of action. He and the balloonist talked over at some length just the best way to go about it, for the young inventor recalled the time when he and Ned Newton had endeavored to look into Andy's shed, with somewhat disastrous results to themselves; but Tom knew that the matter at stake justified a risk, and he was willing to take it.

"Well, now that's settled," said Mr. Sharp, "tell me more about yourself and your aeroplane. My! To think that the *Red Cloud* was destroyed! That was a fine craft."

"Indeed she was," agreed Tom. "I'm going to make another on similar lines, some day, but now all my time is occupied with the *Humming-Bird*."

"She is a hummer, too," complimented Mr. Sharp. "But I almost forgot the real object of my trip here. There is no doubt about you going in the race, is there?"

"I fully expect to," replied Tom. "The only thing that will prevent me will be—"

"Don't say you're worried on account of what Andy Foger may do," interrupted Mr. Sharp.

"I'm not. I'll attend to Andy, all right. I was going to say that my father's illness might interfere. He's not well at all. I'm quite worried about him."

"Oh, I sincerely hope he'll be all right," remarked the balloonist. "We want you in this race. In fact, we're going to feature you, as they say about the actors and story-writers. The committee is planning to do considerable advertising on the strength of Tom Swift, the well-known young inventor, being a contestant for the ten-thousand-dollar prize."

"That's very nice, I'm sure," replied Tom, "and I'm going to do my best. Perhaps dad will take a turn for the better. He wants me to win as much as I want to myself. Well, we'll not worry about it, anyhow, until the time comes. I want to show you some new features of my latest aeroplane."

"And I want to see them, Tom. Don't you think you're making a mistake, though, in equipping it with a wireless outfit?"

"Why so?"

"Well, because it will add to the weight, and you want such a small machine to be as light as possible."

"Yes, but you see I have a very light engine. That part my father helped me with. In fact, it is the lightest air-cooled motor made, for the amount of horsepower it develops, so I can afford to put on the extra weight of the wireless outfit. I may need to signal when I am flying along at a hundred miles an hour."

"That's so. Well, show me some of the other good points. You've certainly got a wonderful

craft here.”

Tom and Mr. Sharp spent some time going over the *Humming-Bird* and in talking over old times. The balloonist paid another visit to Mr. Swift, who was feeling pretty good, and who expressed his pleasure in seeing his old friend again.

“Can’t you stay for a few days?” asked Tom, when Mr. Sharp was about to leave. “If you wait long enough you may be able to help me work up the clues against Andy Foger, and also witness a trial flight of the *Humming-Bird*.”

“I’d like to stay, but I can’t,” was the answer. “The committee will be anxious for me to get back with my report. Good luck to you. I’ll see you at the time of the race, if not before.”

Tom resolved to get right to work seeking clues against his old enemy, Andy, but the next day Mr. Swift was not so well, and Tom had to remain in the house. Then followed several days, during which time it was necessary to do some important work on his craft, and so a week passed without any information having been obtained.

In the meanwhile Tom had made some cautious inquiries, but had learned nothing about Andy. He had no chance to interview Pete or Sam, the two cronies, and he did not think it wise to make a bald request for information at the Foger home.

Ned Newton could not be of any aid to his friend, as he was kept busy in the bank night and day, working over a new set of books.

“I wonder how I can find out what I want to know?” mused Tom one afternoon, when he had done considerable work on the *Humming-Bird*. “I certainly ought to do it soon, so as to be able to stop Andy if he’s infringing on my patents. Yet, I don’t see how—”

His thoughts were interrupted by hearing a voice outside the shop, exclaiming:

“Bless my toothpick! I know the way, Eradicate, my good fellow. It isn’t necessary for you to come. As long as Tom Swift is out there, I’ll find him. Bless my horizontal rudder! I’m anxious to see what progress he’s made. I’ll find him, if he’s about!”

“Yes, sah, he’s right in dere,” spoke the colored man. “He’s workin’ on dat Dragon Fly of his.” Eradicate did not always get his names right.

“Mr. Damon!” exclaimed Tom in delight, at the sound of his friend’s voice. “I believe he can help me get evidence against Andy Foger. I wonder I didn’t think of it before! The very thing! I’ll do it!”

# The Empty Shed

“Bless my dark-lantern! Where are you, Tom?” called Mr. Damon as he entered the dim shed where the somewhat frail-appearing aeroplane loomed up in the semi-darkness, for it was afternoon, and rather cloudy. “Where are you?”

“Here!” called the young inventor. “I’m glad to see you! Come in!”

“Ah! there it is, eh?” exclaimed the odd man, as he looked at the aeroplane, for there had been much work done on it since he had last seen it. “Bless my parachute, Tom! But it looks as though you could blow it over.”

“It’s stronger than it seems,” replied the lad. “But, Mr. Damon, I’ve got something very important to talk to you about.”

Thereupon Tom told all about Mr. Sharp’s visit, of Andy’s entry in the big race, and of the suspicions of himself and the balloonist.

“And what is it you wish me to do?” asked Mr. Damon.

“Work up some clues against Andy Foger.”

“Good! I’ll do it! I’d like to get ahead of that bully and his father, who once tried to wreck the bank I’m interested in. I’ll help you, Tom!

I'll play detective! Let me see—what disguise shall I assume? I think I'll take the part of a tramp. Bless my ham sandwich! That will be the very thing. I'll get some ragged clothes, let my beard grow again—you see I shaved it off since my last visit—and I'll go around to the Foger place and ask for work. Then I can get inside the shed and look around. How's that for a plan?"

"It might be all right," agreed Tom, "only I don't believe you're cut out for the part of a tramp, Mr. Damon."

"Bless my fingernails! Why not?"

"Oh, well, it isn't very pleasant to go around in ragged clothes."

"Don't mind about me. I'll do it." And the odd gentleman seemed quite delighted at the idea. He and Tom talked it over at some length, and then adjourned to the house, where Mr. Swift, who had seemed to improve in the last few days, was told of the plan.

"Couldn't you go around after evidence just as you are?" asked the aged inventor. "I don't much care for this disguising business."

"Oh, it's very necessary," insisted Mr. Damon earnestly. "Bless my gizzard! but it's very necessary. Why, if I went around the Foger place as I am now, they'd know me in a minute, and I couldn't find out what I want to know."

"Well, if you keep on blessing yourself," said Tom, with a laugh, "they'll know you, no matter what disguise you put on, Mr. Damon."

"That's so," admitted the eccentric gentleman. "I must break myself of that habit. I

will. Bless my topknot! I'll never do it any more. Bless my trousers buttons!"

"I'm afraid you'll never do it!" exclaimed Tom.

"It is rather hard," said Mr. Damon ruefully, as he realized what he had said. "But I'll do it. Bless—"

He paused a moment, looked at Tom and his father, and then burst into a laugh. The habit was more firmly fastened on him than he was aware.

For several hours Tom, his father and Mr. Damon discussed various methods of proceeding, and it was finally agreed that Mr. Damon should first try to learn what Andy was doing, if anything, without resorting to a disguise.

"Then, if that doesn't work, I'll become a tramp," was the decision of the odd character. "I'll wear the raggedest clothes I can find Bless—" But he stopped in time.

Mr. Damon took up his residence in the Swift household, as he had often done before, and for the next week he went and came as he pleased, sometimes being away all night.

"It's no use, though," declared Mr. Damon at the end of the week. "I can't get anywhere near that shed, nor even get a glimpse inside of it. I haven't been able to learn anything, either. There are two gardeners on guard all the while, and several times when I've tried to go in the side gate, they've stopped me."

"Isn't there any news of Andy about town?" asked Tom. "I should think Sam or Pete would know where he is."

"Well, I didn't ask them, for they'd know

right away why I was inquiring," said Mr. Damon, "but it seems to me as if there was something queer going on. If Andy Fogger is working in that shed of his, he's keeping mighty quiet about it. Bless my—"

And once more he stopped in time. He was conquering the habit in a measure.

"Well, what do you propose to do next?" asked Tom.

"Disguise myself like a tramp, and go there looking for work," was the firm answer. "There are plenty of odd jobs on a big place such as the Fogger family have. I'll find out what I want to know, you see."

It seemed useless to further combat this resolution, and, in a few days Mr. Damon presented a very different appearance. He had on a most ragged suit, there was a scrubby beard on his face, and he walked with a curious shuffle, caused by a pair of big, heavy shoes which he had donned, first having taken the precaution to make holes in them and get them muddy.

"Now I'm all ready," he said to Tom one day, when his disguise was complete. "I'm going over and try my luck."

He left the house by a side door, so that no one would see him, and started down the walk. As he did so a voice shouted:

"Hi, there! Git right out oh heah! Mistah Swift doan't allow no tramps heah, an' we ain't got no wuk fo' yo', an' there ain't no cold victuals. I does all de wuk, me an' mah mule Boomerang, an' we takes all de cold victuals, too! Git right along, now!"

"It's Eradicate. He doesn't know you," said Tom, with a chuckle.

"So much the better," whispered Mr. Damon. But the disguise proved almost too much of a success, for seeing the supposed tramp lingering near the house, Eradicate caught up a stout stick and rushed forward. He was about to strike the ragged man, when Tom called out:

"That's Mr. Damon, Rad!"

"Wh—what!" gasped the colored man; and when the situation had been explained to him, and the necessity for silence impressed upon him, he turned away, too surprised to utter a word. He sought consolation in the stable with his mule.

Just what methods Mr. Damon used he never disclosed, but one thing is certain: That night there came a cautious knock on the door of the Swift home, and Tom, answering it, beheld his odd friend.

"Well," he asked eagerly, "what luck?"

"Put on a suit of old clothes, and come with me," said Mr. Damon. "We'll look like two tramps, and then, if we're discovered, they won't know it was you."

"Have you found out anything?" asked Tom eagerly.

"Not yet; but I've got a key to one of the side doors of the shed, and we can get in as soon as it's late enough so that everybody there will be in bed."

"A key? How did you get it?" inquired the youth.

"Never mind," was the answer, with a

chuckle. "That was because of my disguise; and I haven't blessed anything to-day. I'm going to, soon, though. I can feel it coming on. But hurry, Tom, or we may be too late."

"And you haven't had a look inside the shed?" asked the young inventor. "You don't know what's there?"

"No; but we soon will."

Eagerly Tom put on some of the oldest and most ragged garments he could find, and then he and the odd gentleman set off toward the Foger home. They waited some time after getting in sight of it, because they saw a light in one of the windows. Then, when the house was dark, they stole cautiously forward toward the big, gloomy shed.

"On this side," directed Mr. Damon in a whisper. "The key I have opens this door."

"But we can't see when we get inside," objected Tom. "I should have brought a dark lantern."

"I have one of those pocket electric flashlights," said Mr. Damon. "Bless my candlestick! but I thought of that." And he chuckled gleefully.

Cautiously they advanced in the darkness. Mr. Damon fumbled at the lock of the door. The key grated as he turned it. The portal swung back, and Tom and his friend found themselves inside the shed which, of late, had been such an object of worry and conjecture to the young inventor. What would he find there?

"Flash the light," he called to Mr. Damon in a hoarse whisper.

The eccentric man drew it from his packet. He pressed the spring switch, and in an instant a brilliant shaft of radiance shot out, cutting the intense blackness like a knife. Mr. Damon flashed it on all sides.

But to the amazement of Tom and his companion, it did not illuminate the broad white wings and stretches of canvas of an aeroplane. It only shone on the bare walls of the shed, and on some piles of rubbish in the corners. Up and down, to right and left, shot the pencil of light. "There's—there's nothing here!" gasped Tom,

"I—I guess you're right!" agreed Mr. Damon. "The shed is empty!"

"Then where is Andy Foger building his aeroplane?" asked Tom in a whisper; but Mr. Damon could not answer him.



# A Trial Flight

For a few moments after their exclamations of surprise Tom and Mr. Damon did not know what else to say. They stared about in amazement, hardly able to believe that the shed could be empty. They had expected to see some form of aeroplane in it, and Tom was almost sure his eyes would meet a reproduction of his *Humming-Bird*, made from the stolen plans.

“Can it be possible there’s nothing here?” went on Tom, after a long pause. He could not seem to believe it

“Evidently not,” answered Mr. Damon, as he advanced toward the center of the big building and flashed the light on all sides. “You can see for yourself.”

“Or, rather, you can’t see,” spoke the youth. “It isn’t here, that’s sure. You can’t stick an aeroplane, even as small a one as my *Humming-Bird*, in a corner. No; it isn’t here,”

“Well, we’ll have to look further,” went on Mr. Damon. “I think—”

But a sudden noise near the big main doors of the shed interrupted him.

“Come on!” exclaimed Tom in a whisper.

“Some one’s coining! They may see us! Let’s get out!”

Mr. Damon released the pressure on the spring switch, and the light went out. After waiting a moment to let their eyes become accustomed to the darkness, he and Tom stole to the door by which they had entered. As they swung it cautiously open they again heard the noise near the main portals by which Andy had formerly taken in and out the *Anthony*, as he had named the aeroplane in which he and his father went to Alaska, where, like Tom’s craft, it was wrecked.

“Some one is coming in!” whispered Tom.

Hardly had he spoken when a light shone in the direction of the sound. The illumination came from a big lantern of the ordinary kind, carried by some one who had just entered the shed.

“Can you see who it is?” whispered Mr. Damon, peering eagerly forward; too eagerly, for his foot struck against the wooden side wall with a loud hang.

“Who’s there?” suddenly demanded the person carrying the lantern.

He raised it high above his head, in order to cast the gleams into all the distant corners. As he did so a ray of light fell upon his face. “Andy Foger!” gasped Tom in a hoarse whisper.

Andy must have heard, for he ran forward just as Tom and Mr. Damon slipped out.

“Hold on! Who are you?” came in the unmistakable tones of the red-haired bully.

“I don’t think we’re going to tell,” chuckled

Tom softly, as he and his friend sped off into the darkness. They were not followed, and as they looked back they could see a light bobbing about in the shed.

“He’s looking for us!” exclaimed Mr. Damon with an inward laugh. “Bless my watch chain! But it’s a good thing we got in ahead of him. Are you sure it was Andy himself?”

“Sure! I’d know his face anywhere. But I can’t understand it. Where has he been? What is he doing? Where is he building his aeroplane? I thought he was out of town.”

“He may have come back to-night,” said Mr. Damon. “That’s the only one of your questions I can answer. We’ll have to wait about the rest, I’m sure he wasn’t around the house today, though, for I was working at weeding the flower beds, in my disguise as a tramp, and if he was home I’d have seen him. He must have just come back, and he went out to his shed to get something. Well, we did the best we could.”

“Indeed we did,” agreed Tom, “and I’m ever so much obliged to you, Mr. Damon.”

“And we’ll try again, when we get more clues. Bless my shoelaces! but it’s a relief to be able to talk as you like.”

And forthwith the eccentric man began to call down so many blessings on himself and on his belongings, no less than on his friends, that Tom laughingly warned him that he had better save some for another time.

The two reached home safely, removed their “disguises,” and told Mr. Swift of the result of their trip. He agreed with them that

there was a mystery about Andy's aeroplane which was yet to be solved.

But Tom was glad to find that, at any rate, the craft was not being made in Shopton, and during the next two weeks he devoted all his time to finishing his own machine. Mr. Jackson was a valuable assistant, and Mr. Damon gave what aid he could.

"Well, I think I'll be ready for a trial flight in another week," said Tom one day, as he stepped back to get a view of the almost completed *Humming-Bird*.

"Shall you want a passenger?" asked Mr. Damon.

"Yes, I wish you would take a chance with me. I could use a bag of sand, not that I mean you are to be compared to that," added Tom quickly, "but I'd rather have a real person, in order to test the balancing apparatus. Yes, we'll make a trial trip together."

In the following few days Tom went carefully over the aeroplane, making some slight changes, strengthening it here and there, and testing the motor thoroughly. It seemed to work perfectly.

At length the day of the trial came, and the *Humming-Bird* was wheeled out of the shed. In spite of the fact that it was practically finished, there yet remained much to do on it. It was not painted or decorated, and looked rather crude. But what Tom wanted to know was how it would fly, what control he had over it, what speed it could make, and how it balanced. For it was, at best, very frail, and the least change in equilibrium might be fatal.

Before taking his place in the operator's seat Tom started the motor, and by means of a spring balance tested the thrust of the propellers. It was satisfactory, though he knew that when the engine had been run for some time, and had warmed up, it would do much better.

"All ready, I guess, Mr. Damon!" he called, and the odd gentleman took his place. Tom got up into his own seat, in front of several wheels and levers by which he operated the craft.

"Start the propeller!" he requested of Mr. Jackson, and soon the motor was spitting fire, while the big, fanlike blades were whirring around like wings of light. The engineer and Eradicate were holding back the *Humming-Bird*.

"Let her go!" cried Tom as he turned on more gasoline and further advanced the spark of the motor. The roar increased, the propeller looked like a solid circle of wood, and the trim little monoplane moved slowly across the rising ground, increasing its speed every second, until, like some graceful bird, it suddenly rose in the air as Tom tilted the wing tips, and soared splendidly aloft!



# A Midnight Intruder

Tom Swift sent his wonderful little craft upward on a gentle slant. Higher and higher it rose above the ground. Now it topped the trees; now it was well over them.

On the earth below stood Mr. Swift, Mr. Jackson, Eradicate and Mrs. Baggert. They were the only witnesses of the trial flight, and as the aged inventor saw his son's latest design in aeroplanes circling in the air he gave a cheer of delight. It was too feeble for Tom to hear, but the lad, glancing down, saw his father waving his hand to him.

"Dear old dad!" thought Tom, waving in return. "I hope he's well enough to see me win the big prize."

Tom and Mr. Damon went skimming easily through the air, at no great speed, to be sure, for the young inventor did not want to put too sudden a strain on his motor.

"This is glorious!" cried the odd gentleman. "I never shall have enough of aeroplaning, Tom!"

"Nor I, either," added his companion. "But

how do you like it? Don't you think it's an improvement on my *Butterfly*, Mr. Damon?"

"It certainly is. You're a wonder, Tom! Look out! What are you up to?" for the machine had suddenly swerved in a startling manner.

"Oh, that's just a new kind of spiral dip I was trying," answered Tom. "I couldn't do that with my other machine, for I couldn't turn sharp enough."

"Well, don't do it right away again," begged Mr. Damon, who had turned a little white, and whose breath was coming in gasps, even though he was used to hair-raising stunts in the frail craft of the air.

Tom did not take his machine far away, for he did not want to exhibit it to the public yet, and he preferred to remain in the vicinity of his home, in case of any accident. So he circled around, did figures of eight, went up and down on long slants, took sharp turns, and gave the craft a good tryout.

"Does it satisfy you?" asked Mr. Damon, when Tom had once more made the spiral dip, but not at high speed.

"In a way, yes," was the answer. "I see a chance for several changes and improvements. Of course, I know nothing about the speed yet, and that's something that I'm anxious about, for I built this with the idea of breaking all records, and nothing else. I know, now, that I can construct a craft that will successfully navigate the air; in fact, there are any number of people who can do that; but to construct a monoplane that will beat anything ever before made is a different thing. I don't

yet know that I have done it.”

“When will you?”

“Oh, when I make some changes, get the motor tuned up better, and let her out for all she’s worth. I want to do a hundred miles an hour, at least. I’ll arrange for a speedy flight in about two weeks more.”

“Then I think I will stay home,” said Mr. Damon.

“No; I’ll need you,” insisted Tom, laughing. “Now watch. I’m going to let her out just a little.”

He did, with the result that they skimmed through the air so fast that Mr. Damon’s breath became a mere series of gasps.

“We’ll have to wear goggles and mouth protectors when we really go fast!” yelled Tom above the noise of the motor, as he slowed down and turned about for home.

“Go fast! Wasn’t that fast?” asked Mr. Damon.

Tom shook his head.

“You wait, and you’ll see,” he announced.

They made a good landing, and Mr. Swift hastened up to congratulate his son.

“I knew you could do it, Tom!” he cried.

“I couldn’t, though, if it hadn’t been for that wonderful engine of yours, dad! How do you feel?”

“Pretty good. Oh! but that’s a fine machine, Tom!”

“It certainly is,” agreed Mr. Jackson.

“It will be when I have it in better trim,” admitted the young inventor modestly.

"By golly!" cried Eradicate, who was grinning almost from ear to ear, "I's proud oh yo', Massa Tom, an' so will mah mule Boomerang be, when I tells him. Yes, sah, dat's what he will be—proud ob yo', Massa Tom!"

"Thanks, Rad."

"Well, some folks is satisfied with mighty little under 'em, when they go up in the air, that's my opinion," said Mrs. Baggert.

"Why, wouldn't you ride in this?" asked Tom of the buxom housekeeper.

"Not if you was to give me ten thousand dollars!" she cried firmly. "Oh, dear! I think the potatoes are burning!" And she rushed back into the house.

The next day Tom started to work overhauling the *Humming-Bird*, and making some changes. He altered the wing tips slightly, and adjusted the motor, until in a thrust test it developed nearly half again as much power as formerly.

"And I'll need it all," declared Tom as he thought of the number of contestants that had entered the great race.

For the Eagle Park meet was to be a large and important one, and the principal "bird-men" of the world were to have a part in it. Tom knew that he must do his very best, and he spared no efforts to make his monoplane come up to his ideal, which was a very exacting one.

"We'll have a real speed test to-morrow," Tom announced to Mr. Damon one night. "I'll see what the *Humming-Bird* can really do. You'll come, won't you?"

“Oh, I suppose so. Bless my insurance policy! I might as well take the same chance you do. But if you’re going to have such a nerve-racking thing as that on the program, you’d better get to bed early and have plenty of sleep.”

“Oh, I’m not tired. I think I’ll go out this evening.”

“Where?”

“Oh, just around town, to see some of the fellows.” But if Tom was only going around town merely to see his male friends, why did he dress so carefully, put on a new necktie, and take several looks in the glass before he went out? We think you can guess, and also the girl’s name.

The young inventor got in rather late, and after a visit to the aeroplane shed, to see that all was right there, he went to bed, first connecting up the burglar-alarm wires that guarded the doors and windows of the aerodrome.

How long he had been asleep Tom did not know, but he was suddenly awakened by hearing the buzzing of the alarm at the head of his bed. At first he took it for the droning and humming of the aeroplane motor, as he had a hazy notion, and a sort of dream, that he was in his craft.

Then, with a start, he realized what it was—the burglar alarm.

“Some one’s in the shed!” he gasped.

Out of bed he leaped, drawing on his trousers and coat, and putting on a pair of slippers, with speed worthy of a fireman. He

grabbed up a revolver and rushed from his room, pounding on the door of Mr. Jackson's apartment in passing.

“Some one in the shed, after the *Humming-Bird!*” shouted Tom. “Get a gun, and come down!”

# Tom Is Hurt

As Tom passed down the hall on his way to the side door, from which he could more quickly reach the aeroplane shed, he saw his father coming from his room.

“What’s the matter? What is it?” asked Mr. Swift, and alarm showed on his pale face.

“It’s nothing much, dad,” said the youth, as quietly as he could, for he realized that to excite his father might have a bad effect on the invalid.

“Then why are you in such a hurry? Why have you that revolver? I know there is something wrong, Tom. I am going to help you!”

In his father’s present weakened state Tom desired this least of all, so he said:

“Now, never mind, dad. I thought I heard a noise out in the yard, and I’m not going to take any chances. So I roused Mr. Jackson, and I’m going down to see what it is. Perhaps it may only be Eradicate’s mule, Boomerang, kicking around, or it may be Rad himself, or some one after his chickens. Don’t worry. Mr. Jackson and I can attend to it. You go back to bed, father.”

Tom spoke with such assurance that Mr.

Swift believed him, and retired to his room, just as the engineer, partly dressed, came hurrying out in response to Tom's summons. He had his rifle, and, had the invalid inventor seen that, he surely would have worried more.

"Come on!" whispered Tom. "Don't make any noise. I don't want to excite my father."

"What was it?" asked the engineer.

"I don't know. Burglar alarm went off, that's all I can say until we get to the shed."

Together the two left the house softly, and soon were hurrying toward the aeroplane shed.

"Look!" exclaimed Mr. Jackson. "Didn't you see a light just then, Tom?"

"Where?"

"By the side window of the shed?"

"No, I didn't notice it! Oh, yes! There it is! Some one is in there! If it's Andy Foger, I'll have him arrested, sure!"

"Maybe we can't catch him."

"That's so. Andy is a pretty slippery customer. Say, Mr. Jackson, you go around and get Eradicate, and have him bring a club. We can't trust him with a gun. Tell him to get at the back door, and I'll wait for you to join me, and we'll go in the front door. Then we'll have 'em between two fires. They can't get away."

"How about the windows?"

"They're high up, and hard to open since I put the new catches on them. Whoever got in must have forced the lock of the door. There goes the light again!"

As Tom spoke there was seen the faint glimmer of a light. It moved slowly about the

interior of the shed, and with a peculiar bobbing motion, which indicated that some one was carrying it.

“Go for Eradicate, and don’t make any more noise than you can help in waking him up,” whispered Tom, for they were now close to the shed, and might be heard.

Mr. Jackson slipped off in the darkness, and Tom drew nearer to the building that housed his *Humming-Bird*. There was one window lower than the others, and near it was a box, that Tom remembered having seen that afternoon. He planned to get up on that and look in, before making a raid to capture the intruder.

Tom raised himself up to the window. The light had been visible a moment before he placed the box in position, but an instant later it seemed to go out, and the place was in darkness.

“I wonder if they’ve gone away?” thought Tom. “I can’t hear any noise.”

He listened intently. It was dark and silent in the shop. Suddenly the light flashed up brighter than before, and the young inventor caught sight of a man walking around the new aeroplane, examining it carefully. He carried, as Tom could see, a large-sized electric flash-lamp, with a brilliant tungsten filament, which gave a powerful light.

As the youth watched, he saw the intruder place the light on a bench, in such a position that the rays fell full upon the *Humming-Bird*. Then, adjusting the spring switch so that the light would continue to glow, the man

stepped back and drew something from an inner pocket.

"I wonder what he's up to?" mused Tom. "I wish Eradicate and Mr. Jackson would hurry back. Who can that fellow be, I wonder? I've never seen him before, as far as I know. I thought sure it was going to turn out to be Andy Foger!"

Tom turned around to look into the dark yard surrounding the shed. He was anxious to hear the approach of his two allies, but there was no sound of their footsteps.

As he turned back to watch the man he could not repress a cry of alarm, for what the intruder had drawn from his pocket was a small hatchet, and he was advancing with it toward the *Humming-Bird*!

"He's going to destroy my aeroplane!" gasped Tom, and he raised his revolver to fire.

He did not intend to shoot at the man, but only to fire to scare him, and thus hasten the coming of Mr. Jackson and the colored man. But there was no need of this, for an instant later the two came running up silently, Eradicate with a big club.

"Whar am he?" he asked in a hoarse whisper. "Let me git at him, Massa Tom!"

"Hush!" exclaimed the young inventor. "We have no time to lose! He's in there, getting ready to chop my aeroplane to bits! Go to the back door, Rad, and if he tries to come out don't let him get away."

"I won't!" declared the colored man emphatically, and he shook his club suggestively.

"Come on! We'll go in the front door," whis-

pered Tom to the engineer. "I have the key. We'll catch him red-handed, and hand him over to the police."

Waiting a few seconds, to enable Eradicate to get to his place, Tom and the engineer stole softly toward the big double doors. Every moment the youth expected to hear the crash of the hatchet on his prize machine. He shivered in anticipation, but the blows did not fall.

Tom pushed open the door and stepped inside, followed by Mr. Jackson. As they did so they saw the man standing in front of the *Humming-Bird*. He again raised the little hatchet, which was like an Indian tomahawk, and poised it for an instant over the delicate framework and planes of the air craft. Then his arm began to descend.

"Stop!" yelled Tom, and at the same time he fired in the air.

The man turned as suddenly as though a bullet had struck him, and for a moment Tom was afraid lest he had hit him by accident; but an instant later the intruder grabbed up his flashlight, and holding it before him, so that its rays shone full on Tom and Mr. Jackson, while it left him in the shadow, sprang toward them, the hatchet still in his hand.

"Look out, Tom!" cried Mr. Jackson.

"Out of my way!" shouted the man.

Bravely Tom stood his ground. He wished now that he had a club instead of his revolver. The would-be vandal was almost upon him. Mr. Jackson clubbed his rifle and swung it at the fellow. The latter dodged, and came straight at Tom.

“Look out!” yelled the engineer again, but it was too late. There was the sound of a blow, and Tom went down like a log. Then the place was in darkness, and the sound of footsteps in rapid flight could be heard outside the shed.

The intruder, after wounding the young inventor, had made his escape.

# Miss Nestor Calls

“What’s de mattah? Shall I come in? Am anybody hurted?” yelled Eradicate Sampson as he pounded on the rear door of the aeroplane shed. “Let me in, Massa Tom!”

“All right! Wait a minute! I’m coming!” called Mr. Jackson. He tried to peer through the darkness, to where a huddled heap indicated the presence of Tom. Then he thought of the electric lights, which were run by a storage battery when the dynamo was shut down, and a moment later the engineer had switched on the incandescents, filling the big shed with radiance.

“Tom, are you badly hurt?” gasped Mr. Jackson.

There was no answer, for Tom was unconscious.

“Let me in! Let me git at dat robber wif mah club!” cried the colored man eagerly.

Knowing that he would need help in carrying Tom to the house, Mr. Jackson hurried to the back door. He had a key to it, and it was quicker to open it than to send Eradicate away around the shed to the front portals.

“Whar am he?” gasped the faithful darky,

as he took a firmer grasp of his club and looked around the place. "Let me git mah hands on him! I'll feed him t' Boomerang, when I gits froo wif him!"

"He's gone," said the engineer. "Help me look after Tom. I'm afraid he's badly hurt."

They hastened to the unconscious lad. On one side of his head was a bad cut, which was bleeding freely.

"Oh! he's daid! I know he's daid!" wailed Eradicate.

"Not a bit of it. He isn't dead, but he may die, if we don't get him into the house, and have a doctor here soon," said Mr. Jackson sternly. "Catch hold of him, Rad, and, mind, don't carry on, and get excited, and scare Mr. Swift. Just pretend it isn't very bad, or we'll have two patients on our hands instead of only Tom."

They managed to get the youth into the house, and, contrary to their fears, Mr. Swift was not nearly so nervous as they had expected. Calmly he took charge of matters, and even telephoned for Dr. Gladby himself, while Mr. Jackson and Eradicate undressed Tom and got him to bed. Mrs. Baggert busied herself heating water and getting things in readiness for the doctor, who had promised to come at once.

Tom was just regaining consciousness when the physician came in, having driven over at top speed.

"What—what happened? Did the *Humming-Bird* fall?" asked Tom in a whisper, putting his hand to his head.

“No, something fell on you, I guess,” said the doctor, who had been hurriedly told of the circumstances. “But don’t worry, Tom. You’ll be all right in a few days. You got a bad cut on the head, but the skull isn’t fractured, I’m glad to say. Here, now, just drink this,” and he gave Tom some medicine he had mixed in a glass.

The cut was soon dressed, and Tom felt much better, though weak and a trifle dizzy.

“Did he hit me with the hatchet?” he asked Mr. Jackson.

“I couldn’t tell,” was the engineer’s reply, “it all happened so quickly. In another instant I’d have bowled him over, instead of him landing on you, but I just missed him. He either used the hatchet, or some blunt instrument.”

“Well, don’t talk about it now,” urged the doctor. “I want Tom to get quiet and go to sleep. We’ll be much better in the morning, but I must forbid any aeroplane flights.” And he shook his finger at Tom in warning. “You’ll have to lie quiet for several days,” he added.

“All right,” agreed the young inventor weakly, and then he dozed off, for the physician had given him a quieting medicine.

“Haven’t you any idea who it was?” asked Dr. Gladby of Mr. Jackson, as he prepared to leave.

“Not the slightest. It was no one Tom or I had ever seen before. But whoever it was, he intended to destroy the *Humming-Bird*, that was evident!”

“The scoundrel! I’m glad you foiled him in time; but it’s too bad about Tom. However,

we'll soon have him all right again."

"I knows who done it!" broke in Eradicate, who was a sort of privileged character about the Swift home.

"Who?" asked Mr. Jackson.

"It were dat Andy Foger. Leastways, he send dat man heah t' make mincemeat oh de Hummin'-Bird. I's positib 'bout dat, so I am!" And Eradicate grinned triumphantly.

"Well, perhaps Andy did have a hand in it," admitted Mr. Swift, "but we have no proof of it. I can't see what his object would be in wanting to destroy Tom's new craft."

"Pure meanness. Afraid that Tom will beat him in the race," suggested Mr. Jackson.

"It's too big a risk to take," went on the aged inventor. "I'm inclined to think it might be one of the gang of men who made the diamonds in the cave in the mountains. They might have sent a spy on East, and he might try to damage the aeroplane to be revenged for what Tom and Mr. Jenks did to them."

"It's possible," agreed the engineer. "Well, we'll wait until Tom can talk, and we'll go over it with him."

"Not until he is stronger, though," stipulated the physician as he went away. "Don't excite Tom for a few days."

The young inventor was much better the following day, and when Dr. Gladby called he said Tom could sit up for a little while. Two days later Tom was well enough to be talked to, and his father and Mr. Jackson went over all the details of the matter. Mr. Damon, who had returned home, came to see his friend as

soon as he heard of his plight, and was also a member of the consulting party.

“Bless my dictionary!” exclaimed the eccentric man. “I wish I had been here to take a hand in it. But, Tom, do you believe it was one of the diamond-making gang?”

“I hardly think so,” was the reply. “They would take some other means of revenge than by destroying my new aeroplane. I’m inclined to think it was some one who is in with Andy Foger.”

“Then we’ll hire detectives, and locate him and them,” declared Mr. Damon, blessing several things in succession.

Tom, however, did not like that plan, and it was decided to do nothing right away. In another few days Tom was able to be up, though he was still a semi-invalid, not venturing out of the house.

It was one afternoon, when, rather tired of his confinement, he was wishing he could resume work on his air craft, that Mrs. Baggert came in, and said:

“Some one to see you, Tom.”

“Is it Mr. Damon?”

“No, it’s a lady. She—”

“Oh, Tom! How are you?” cried a girlish voice, and Mary Nestor walked into the room, holding out both hands to the young inventor. Tom, with a blush, arose hastily.

“No! no! Sit still!” commanded the girl. “Oh! I’m so sorry to hear about your accident! In fact, I only heard this morning. We’ve been away, mamma and I, and we just got back. Tell me all about it, that is, if you feel able.

But don't exert yourself. Oh! I wish I had hold of that man!"

And Miss Nestor clenched her two pretty little hands and set her white, even teeth grimly together, as though she would do most desperate things indeed.

"I wish you did, too!" exclaimed Tom. "That is, so you could hold him until I had a chance at him. But I'm all right now. It was very good of you to call. How are you, and how are your folks?"

"Very well. But I came to hear about you. Tell me," and she looked anxiously at Tom, while Mrs. Baggert discreetly withdrew to the adjoining room, and made a great noise, rattling papers and moving chairs about.

Thereupon Tom told what had happened, while Mary Nestor listened interestedly and with expressions of fear at times.

"But if Andy had anything to do with it," concluded Tom, "I can't understand what his object is. Andy is acting very strangely lately. We can't locate him, nor find out where he is building his airship. That's what I want to know; but Mr. Damon and I, after a lot of trouble, only found his aeroplane shed empty."

"And you want to find out where Andy Foger is building his aeroplane which he has entered in the big race?" asked Miss Nestor.

"That's what I'd like to know," declared Tom earnestly. "Only we can't seem to do it. No one knows."

"Why don't you write to Mr. Sharp, or some one of the aviation meet committee?" asked the girl simply. "They would know, for you say

Andy made his formal entry with them, and the rules require him to tell from what city and State he will enter his craft. Write to the committee, Tom.”

For a moment the young inventor stared at her. Then he banged his fist down on the arm of his chair.

“By Jove, Mary! That’s the very thing!” he cried. “I wonder why I never thought of that, instead of fiddling around in disguises, and things like that? I wonder why I never thought of that plan?”

“Perhaps because it was so simple,” she answered, with a pretty blush.

“I guess that’s it,” agreed Tom. “It takes a woman to jump across a bridge to a conclusion every time. I’ll write to Mr. Sharp at once.”



# A Clash with Andy

Tom lost no time in writing to Mr. Sharp. He wondered more and more at his own neglect in not before having asked the balloonist, when the latter was in Shopton, where Andy was building his aeroplane. But, as it developed later, Mr. Sharp did not know at that time.

While waiting for a reply to his letter, Tom busied himself about his own craft, making several changes he had decided on. He also began to paint and decorate it, for he wanted to have the *Humming-Bird* present a neat appearance when she was officially entered in the great race.

Miss Nestor called on Tom again, and Mr. Damon was a frequent visitor. He agreed to accompany Tom to the aviation park when it was time for the race, and also to be a passenger in the ten-thousand-dollar contest.

“It must be perfectly wonderful to fly through the air,” said Miss Nestor one day, when Tom and Mr. Damon had the *Humming-Bird* out on the testing ground, trying the engine, which had been keyed up to a higher pitch of speed. “I consider it perfectly marvelous, and I can’t imagine how it must seem

to skim along that way.”

“Come and try it,” urged Tom suddenly. “There’s not a bit of danger. Really there isn’t.”

“Oh! I’d never dare do it!” replied the girl, with a gasp. “That machine is too swift by name and swift by nature for me.”

“Why don’t you take Miss Nestor on a grass-cutting flight, Tom?” suggested Mr. Damon. “Bless my lawn mower! but she wouldn’t be frightened at that.”

“Grass cutting?” repeated the girl. “What in the world does that mean?”

“It means skimming along a few feet up in the air,” answered the young inventor, who had now fully recovered from the effects of the blow given him by the midnight intruder. In spite of many inquiries, no clues to his identity had been obtained.

“How high do you go when you ‘cut grass,’ as you call it?” asked Miss Nestor, and Tom thought he detected a note of eager curiosity in her voice.

“Not high at all,” he said. “In fact, sometimes I do cut off the tops of tall daisies. Come, Mary! Won’t you try that? I know you’ll like it, and when you’ve been over the lawn a few times you’ll be ready for a high flight. Come! there’s no danger.”

“I—I almost believe I will,” she said hesitatingly. “Will you take me down when I want to come?”

“Of course,” said Tom. “Get in, and we’ll start.”

The *Humming-Bird* was all ready for a

trial flight, and Tom was glad of the chance to test it, especially with such a pretty passenger as was Miss Nestor.

“Bless my shoelaces!” cried Mr. Damon. “I can see where I am going to be cut out, Tom Swift. I’ll not get many more rides with you now that Miss Nestor is taking to aeroplaning, you young rascal!” And he playfully shook his finger at Tom.

“Oh, I don’t expect to get enthusiastic over it,” said Miss Nestor, who, now that she had taken her place in one of the small seats under the engine, appeared as if she would be glad of the chance to change her mind. But she did not.

“Now, if you take me more than five feet up in the air, I’ll never speak to you again, Tom Swift!” she exclaimed.

“Five feet it shall be, unless you yourself ask to go higher,” was the youth’s reply, as he winked at Mr. Damon. Well he knew the fascination of aeroplaning, and he was almost sure of what would happen. “You can take a tape measure along, and see for yourself,” he added to his fair passenger. “The barograph will hardly register such a little height.”

“Well, it’s as high as I want to go,” said the girl. “Oh!” with a scream, as Tom started the propeller. “Are we going?”

“In a moment,” was his reply. He took his seat beside the girl. The motor was speeded up until it sounded like the roar of the ocean surf in a storm.

“Let her go!” cried Tom to Mr. Damon and Mr. Jackson, who were holding back the

*Humming-Bird*. They gave her a slight shove to overcome the inertia, and the trim little craft darted across the ground at ever-increasing speed.

Miss Nestor caught her breath with a gasp, glanced at Tom, and noted how cool he was, and then her frantic grip of the uprights slightly relaxed.

"We'll go up a little way in a minute!" shouted Tom in her ear as they were speeding over the level ground.

He pulled a lever slightly, and the *Humming-Bird* rose a little in the air, but only for a short distance, not more than five feet, and Tom held her there, though he had to run the engine at a greater speed than would have been the case had he been in the sustaining upper currents. It was as if the *Humming-Bird* resented being held so closely to the earth.

Around in a big circle, back and forth went the craft, at no time being more than seven feet from the ground. Tom glanced at Miss Nestor. Her cheeks were unusually red, and there was a bright sparkle in her eyes.

"It's glorious!" she cried. "Do you—do you think there's any danger in going higher? I believe I'd like to go up a bit."

"I knew it!" cried Tom. "Up we go!" And he pulled the wind-bending plane lever toward him. Upward shot the craft, as if alive.

"Oh!" gasped Mary.

"Sit still! It's all right!" commanded Tom.

"It's glorious; glorious!" she cried. "I'm not a bit afraid now!"

"I knew you wouldn't be," declared the young inventor, who had calculated on the fascination which the motion through the air, untrammelled and free, always produces. "Shall we go higher?"

"Yes!" cried Miss Nestor, and she gazed fearlessly down at the earth, which was falling away from beneath their feet. She was in the grip of the air, and it was a new and wonderful sensation.

Tom went up to a considerable distance, for, once a person loses his first fright, one hundred feet or one thousand feet elevation makes little difference to him. It was this way with Miss Nestor.

Now, indeed, could Tom demonstrate to her some of the fine points of navigation in the upper currents, and though he did no risky "stunts," he showed the girl what it means to do an ascending spiral, how to cut corners, how to twist around in the figure eight, and do other things. Tom did not try for the great speed of which he knew his craft was capable, for he knew there was some risk with Miss Nestor aboard. But he did nearly everything else, and when he sent the *Humming-Bird* down he had made another convert and devotee to the royal sport of aeroplaning.

"Oh! I never would dared believe I could do it!" exclaimed the girl, as with flushed cheeks and dancing eyes she dismounted from the seat. "Mamma and papa will never believe I did it!"

"Bring them over, and I'll take them for a flight," said Tom, with a laugh, as Mary de-

parted.

Tom received an answer to his letter to Mr. Sharp that night.

“Andy Foger’s entry blank states,” wrote the balloonist, “that he is constructing his aeroplane in the village of Hampton, which is about fifty miles from your place. If there is anything further I can do for you, Tom, let me know. I will see you at the meet. Hope you win the prize.”

“In Hampton, eh?” mused Tom. “So that’s where Andy has been keeping himself all this while. His uncle lives there, and that’s the reason for it. He wanted to keep it a secret from me, so he could use my stolen plans for his craft. But he shan’t do it! I’ll go to Hampton!”

“And I’ll go with you!” declared Mr. Damon, who was with Tom when he got the note from the balloonist. “We’ll get to the bottom of this mystery after a while, Tom.”

Delaying a few days, to make the final changes in his aeroplane, Tom and Mr. Damon departed for Hampton one morning. They thought first of going in the *Butterfly*, but as they wanted to keep their mission as secret as possible, they decided to go by train, and arrive in the town quietly and unostentatiously. They got to Hampton late that afternoon.

“What’s the first thing to be done?” asked Mr. Damon as they walked up from the station, where they were almost the only persons who alighted from the train.

“Go to the hotel,” decided Tom. “There’s only one, I was told, so there’s not much

choice.”

Hampton was a quiet little country town of about five thousand inhabitants, and Tom soon learned the address of Mr. Bentley, Andy's uncle, from the hotel clerk.

“What business is Mr. Bentley in?” asked Tom, for he wanted to learn all he could without inquiring of persons who might question his motives.

“Oh, he's retired,” said the clerk. “He lives on the interest of his money. But of late he's been erecting some sort of a building on his back lot, like a big shed, and folks are sort of wondering what he's doing in it. Keeps mighty secret about it. He's got a young fellow helping him.”

“Has he got red hair?” asked Tom, while his heart beat strangely fast.

“Who? Mr. Bentley? No. His hair's black.”

“I mean the young fellow.”

“Oh! his? Yes, his is red. He's a nephew, or some relation to Mr. Bentley. I did hear his name, but I've forgotten it. Sandy, or Andy, or some such name as that.”

This was near enough for Tom and Mr. Damon, and they did not want to risk asking any more questions. They turned away to go to their rooms, as the clerk was busy answering inquiries from some other guests. A little later, supper was served, and Tom, having finished, whispered to Mr. Damon to join him upstairs as soon as he was through.

“What are you going to do?” asked the eccentric man.

“We're going out and have a look at this

new shed by moonlight," decided Tom. "I want to see what it's like, and, if possible, I want to get a peep inside. I'll soon be able to tell whether or not Andy is using my stolen plans."

"All right. I'm with you. Bless my bill of fare! But we seem to be doing a lot of mysterious work of late."

"Yes," agreed Tom. "But if you have to bless anything to-night, Mr. Damon, please whisper it. Andy, or some of his friends, may be about the shed, and as soon as they hear one of your blessings they'll know who's coming."

"Oh, I'll be careful," promised Mr. Damon.

"Andy will find out, sooner or later, that we are in town," went on Tom, "but we may be able to learn to-night what we want to know, and then we can tell how to act."

A little later, as if they were merely strolling about, Mr. Damon and Tom headed for Mr. Bentley's place, which was on the outskirts of the town. There was a full moon, and the night was just right for the kind of observation Tom wanted to make. There were few persons abroad, and the young inventor thought he would have no one spying on him.

They located the big house of Andy's uncle without trouble. Going down a side street, they had a glimpse of a shed, built of new boards, standing in the middle of a large lot. About the structure was a new, high wooden fence, but as Tom and his friend passed along it they saw that a gate in it was open.

"I'm going in!" whispered Tom.

"Will it be safe?" asked Mr. Damon.

"I don't care whether it will be or not. I've

got to know what Andy is doing. Come on! We'll take a chance!"

Cautiously they entered the enclosure. The big shed was dark, and stood out conspicuously in the moonlight.

"There doesn't seem to be any one here," whispered Tom. "I wonder if we could get a look in the window?"

"It's worth trying, anyhow," agreed Mr. Damon. "I'm with you, Tom."

They drew nearer to the shed. Suddenly Tom stepped on a stick, which broke with a sharp report.

"Bless my spectacles!" cried Mr. Damon, half aloud.

There was silence for a moment, and then a voice cried out:

"Who's there? Hold on! Don't come any farther! It's dangerous!"

Tom and Mr. Damon stood still, and from behind the shed stepped Andy Foger and a man.

"Oh! it's you, is it, Tom Swift?" exclaimed the red-haired bully. "I thought you'd come sneaking around. Come on, Jake! We'll make them wish they'd stayed home!" And Andy made a rush for Tom.



# The Great Test

“Bless my gizzard!” exclaimed Mr. Damon, who hardly knew what to do. “We’d better be getting out of here, Tom!”

“Not much!” exclaimed the young inventor. “I never ran from Andy Foger yet, and I’m not going to begin now.”

He assumed an attitude of defense, and stood calmly awaiting the onslaught of the bully; but Andy knew better than to come to a personal argument with Tom, and so the red-haired lad halted some paces off. The man, who had followed young Foger, also stopped.

“What do you want around here, Tom Swift?” demanded Andy.

“You know very well what I want,” said the young inventor, calmly. “I want to know what you did with the aeroplane plans you took from my house.”

“I never took any!” declared Andy vigorously

“Well, there’s no use discussing that,” went on Tom. “What I came here to find out, and I don’t mind telling you, is whether or not you are building a monoplane to compete against me, and building it on a model invented by

me; and what's more, Andy Foger, I intend to find this out, too!"

Tom started toward the big shed, which loomed up in the moonlight.

"Stand back!" cried Andy, getting in Tom's way. "I can build any kind of an aeroplane I like, and you can't stop me!"

"We'll see about that," declared the young inventor, as he kept on. "I'm not going to allow my plans to be stolen, and a monoplane made after them, and do nothing about it."

"You keep away!" snarled Andy, and he grabbed Tom by the shoulder and struck him a blow in the chest. He must have been very much excited, or otherwise he never would have come to hostilities this way with Tom, whom he well knew could easily beat him.

The blow, together with the many things he had suffered at Andy's hands, was too much for our hero. He drew back his fist, and a moment later Andy Foger was stretched out on the grass. He lay there for a moment, and then rose up slowly to his knees, his face distorted with rage.

"You—you hit me!" he snarled.

"Not until you hit first," said Tom calmly.

"Bless my punching bag! That's so!" exclaimed Mr. Damon.

"You'll suffer for this!" whined Andy, getting to his feet, but taking care to retreat from Tom, who stood ready for him. "I'll get square with you for this! Jake, come on, and we'll get our guns!"

Andy turned and hurried back toward the shed, followed by the evil-looking man, who

had apparently been undecided whether to attack Mr. Damon or Tom. Now the bully and his companion were in full retreat.

"We'll get our guns, and then we'll see whether they'll want to stay where they're not wanted!" went on Andy, threateningly.

"Bless my powderhorn! What had we better do?" asked Mr. Damon.

"I guess we'd better go back," said Tom calmly. "Not that I'm afraid of Andy. His talk about guns is all bluff; but I don't want to get into any more of a row, and he is just ugly and reckless enough to make trouble. I'm afraid we can't learn what we came to find out, though I'm more convinced than ever that Andy is using my plans to make his aeroplane."

"But what can you do?"

"I'll see Mr. Sharp, and send a protest to the aviation committee. I'll refuse to enter if Andy flies in a model of my *Humming-Bird*, and I'll try to prevent him from using it after he gets it on the ground. That is all I can do, it seems, lacking positive information. Come on, Mr. Damon. Let's get back to our hotel, and we'll start for home in the morning."

"I have a plan," whispered the odd man.

"What is it?" asked Tom, narrowly watching for the reappearance of Andy and the man.

"I'll stay here until they come, then I'll pretend to run away. They'll chase after me, and get all excited, and you can go up and look in the shed windows. Then you can join me later. How's that?"

"Too risky. They might fire at you by mis-

take. No. We'll both go. I've found out more than enough to confirm my suspicions."

They turned out of the lot which contained the shed, and walked toward the road, just as Andy and his crony came back.

"Huh! You'd better go!" taunted the bully.

Tom had a bitter feeling in his heart. It seemed as if he was defeated, and he did not like to retreat before Andy.

"You'd better not come back here again, either," went on Andy.

Tom and Mr. Damon did not reply, but kept on in silence. They returned to Shopton the next day.

"Well," remarked Tom, when he had gone out to look at his *Humming-Bird*, "I know one thing. Andy Foger may build a machine something like this, but I don't believe he can put in all the improvements I have, and certainly he can't equal that engine; eh, dad?"

"I hope not, Tom," replied his father, who seemed to be much improved in health.

"When are you going to try for speed?" asked Mr. Damon.

"To-morrow, if I can get it tuned up enough," replied Tom, "and I think I can. Yes, we'll have the great test to-morrow, and then I'll know whether I really have a chance for that ten thousand dollars."

Never before had Tom been so exacting in his requirements of his air craft as when, the next day, the *Humming-Bird* was wheeled out to the flight ground, and gotten ready for the test. The young inventor went over every bolt, brace, stay, guy wire and upright. He exam-

ined every square inch of the wings, the tips, planes and rudders. The levers, the steering wheel, the automatic equilibrium attachments and the balancing weights were looked at again and again.

As for the engine, had it been a delicate watch, Tom could not have scrutinized each valve, wheel, cam and spur gear more carefully. Then the gasoline tank was filled, the magneto was looked after, the oil reservoirs were cleaned out and freshly filled, and finally the lad remarked:

“Well, I guess I’m ready. Come along, Mr. Damon.”

“Am I going with you in the test?”

“Surely. I’ve been counting on you. If you’re to be with me in the race, you want to get a sample of what we can do. Take your place. Mr. Jackson, are you ready to time us?”

“All ready, Tom.”

“And, dad, do you feel well enough to check back Mr. Jackson’s results? I don’t want any errors.”

“Oh, yes, Tom. I can do it.”

“Very well, then. Now this is my plan. I’m going to mount upward on an easy slant, and put her through a few stunts first, to warm up, and see that everything is all right. Then, when I give the signal, by dropping this small white ball, that means I’m ready for you to start to time me. Then I’ll begin to try for the record. I’ll go about the course in a big ellipse, and—well, we’ll see what happens.”

While Mr. Damon was in his seat the young inventor started the propeller, and

noted the thrust developed. It was satisfactory, as measured on the scale, and then Tom took his place.

“Let her go!” he cried to Mr. Jackson and Eradicate, after he had listened to the song of the motor for a moment. The *Humming-Bird* flew across the course, and a moment later mounted into the air.

Tom quickly took her up to about two thousand feet, and there, finding the conditions to his liking, he began a few evolutions designed to severely test the craft’s stability, and to learn whether the engine was working properly.

“How about it?” asked Mr. Damon anxiously.

“All right!” shouted Tom in his ear, for the motor was making a great racket. “I guess we’ll make the trial next time we come around. Get ready to drop the signal ball.”

Tom slowly brought the aeroplane around in a graceful curve. He sighted down, and saw the first tall white pole that marked the beginning of the course.

“Drop!” he called to Mr. Damon.

The white rubber ball went to the earth like a shot. Mr. Jackson and Mr. Swift saw it, and started their timing-watches. Tom opened the throttle and advanced the spark. The great test was on!

The *Humming-Bird* trembled and throbbed with the awful speed of the motor, like a thing alive. She seemed to rush forward as an eagle dropping down from a dizzy height upon some hapless prey.

“Faster yet!” murmured Tom. “We must go faster yet!”

The motor was warming up. Streaks of fire came from it. The exhaust of the explosions was a continuous roar. Faster and faster flew the frail craft.

Around and around the air course she circled. The wind appeared to be rushing beneath the planes and rudders with the velocity of a hurricane. Had it not been for the face protectors they wore, Tom and Mr. Damon could not have breathed. For ten minutes this fearful speed was kept up. Then Tom, knowing he had run the motor to the limit, slowed it down. Next he shut it off completely, and prepared to volplane back to earth. The silence after the terrific racket was almost startling. For a moment neither of the aviators spoke. Then Mr. Damon said:

“Do you think you did it, Tom?”

“I don’t know. We’ll soon find out. They’ll have the record.” And he motioned toward the earth, which they were rapidly nearing.



# A Noise in the Night

“Well, did I make it? Make any kind of a record?” asked Tom eagerly, as he brought the trim little craft to a stop, after it had rolled along the ground on the bicycle wheels.

“What do you think you did?” asked Mr. Jackson, who had been busy figuring on a slip of paper.

“Did I get her up to ninety miles an hour?” inquired Tom eagerly. “If I did, I know when the motor wears down a bit smoother that I can make her hit a hundred in the race, easily. Did I touch ninety, Mr. Jackson?”

“Better than that, Tom! Better than that!” cried his father.

“Yes,” joined in Mr. Jackson. “Allowing for the difference in our watches, Tom, your father and I figure that you did the course at the rate of one hundred and twelve miles an hour!”

“One hundred and twelve!” gasped the young inventor, hardly able to believe it.

“I made it a hundred and fifteen,” said Mr. Swift, who was almost as pleased as was his

son, "and Mr. Jackson made it one hundred and eleven; so we split the difference, so to speak. You certainly have a sky racer, Tom, my boy!"

"And I'll need it, too, dad, if I'm to compete with Andy Foger, who may have a machine almost like mine."

"But I thought you were going to object to him if he has," said Mr. Damon, who had hardly recovered from the speedy flight through space.

"Well, I was just providing for a contingency, in case my protest was overruled," remarked Tom. "But I'm glad the *Humming-Bird* did so well on her first trial. I know she'll do better the more I run her. Now we'll get her back in her 'nest,' and I'll look her over, when she cools down, and see if anything has worked loose."

But the trim little craft needed only slight adjustments after her tryout, for Tom had built her to stand up under a terrific strain.

"We'll soon be in shape for the big race," he announced, "and when I bring home that ten thousand dollars I'm going to abandon this sky-scraping business, except for occasional trips."

"What will you do to occupy your mind?" asked Mr. Damon.

"Oh, I'm going to travel," announced Tom. "Then there's my new electric rifle, which I have not perfected yet. I'll work on that after I win the big race."

For several days after the first real trial of his sky racer Tom was busy going over the

*Humming-Bird*, making slight changes here and there. He was the sort of a lad who was satisfied with nothing short of the best, and though neither his father nor Mr. Jackson could see where there was room for improvement, Tom was so exacting that he sat up for several nights to perfect such little details as a better grip for the steering-lever, a quicker way of making the automatic equilibrumizer take its position, or an improved transmitter for the wireless apparatus.

That was a part of his monoplane of which Tom was justly proud, for though many aeroplanes to-day are equipped with the sending device, few can receive wireless messages in mid-air. But Tom had seen the advantage of this while making a trip in the ill-fated *Red Cloud* to the cave of the diamond makers, and he determined to have his new craft thus provided against emergencies. The wireless outfit of the *Humming-Bird* was a marvel of compactness.

Thus the days passed, with Tom very busy; so busy, in fact, that he hardly had time to call on Miss Nestor. As for Andy Foger, he heard no more from him, and the bully was not seen around Shopton. Tom concluded that he was at his uncle's place, working on his racing craft.

The young inventor sent a formal protest to the aviation committee, to be used in the event of Andy entering a craft which infringed on the *Humming-Bird*, and received word from Mr. Sharp that the interests of the young inventor would be protected. This satisfied

Tom.

Still, at times, he could not help wondering how the first plans had so mysteriously disappeared, and he would have given a good deal to know just how Andy got possession of them, and how he knew enough to use them.

“He, or some one whom he hired, must have gotten into our house mighty quickly that day,” mused Tom, “and then skipped out while dad fell into a little doze. It was a mighty queer thing, but it’s lucky it was no worse.”

The time was approaching for the big aviation meet. Tom’s craft was in readiness, and had been given several other trials, developing more speed each time. Additional locks were put on the doors of the shed, and more burglar-alarm wires were strung, so that it was almost a physical impossibility to get into the *Humming-Bird’s* “nest” without arousing some one in the Swift household.

“And if they do, I guess we’ll be ready for them,” said Tom grimly. He had been unable to find out who it was that had attempted once before to damage the monoplane, but he suspected it was the ill-favored man who was working with Andy.

As for Mr. Swift, at times he seemed quite well, and again he required the services of a physician.

“You will have to be very careful of your father, Tom,” said Dr. Gladby. “Any sudden shock or excitement may aggravate his malady, and in that case a serious operation will be necessary.”

“Oh, we’ll take good care of him,” said the lad; but he could not help worrying, though he tried not to let his father see the strain which he was under.

It was some days after this, and lacking about a week until the meet was to open, when a peculiar thing happened. Tom had given his *Humming-Bird* a tryout one day, and had then begun to make arrangements for taking it apart and shipping it to Eagle Park. For he would not fly to the meet in it, for fear of some accident. So big cases had been provided.

“I’ll take it apart in the morning,” decided Tom, as he went to his room, after seeing to the burglar alarm, “and ship her off. Then Mr. Damon and I will go there, set her up, and get ready to win the race.”

Tom had opened all the windows in his room, for it was very warm. In fact it was so warm that sleep was almost out of the question, and he got up to sit near the windows in the hope of feeling a breeze.

There it was more comfortable, and he was just dozing off, and beginning to think of getting back into bed, when he was aware of a peculiar sound in the air overhead.

“I wonder if that’s a heavy wind starting up?” he mused. “Good luck, if it is! We need it.” The noise increased, sounding more and more like wind, but Tom, looking out into the night, saw the leaves of the trees barely moving.

“If that’s a breeze, it’s taking its own time getting here,” he went on.

The sound came nearer, and then Tom knew that it was not the noise of the wind in the trees. It was more like a roaring and rumbling,

“Can it be distant thunder?” Tom asked himself. “There is no sign of a storm.” Once more he looked from the window. The night was calm and clear—the trees as still as if they were painted.

The sound was even more plain now, and Tom, who had sharp ears, at once decided that it was just over the house—directly overhead. An instant later he knew what it was.

“The motor of an aeroplane, or a dirigible balloon!” he exclaimed. “Some one is flying overhead!”

For an instant he feared lest the shed had been broken into, and his *Humming-Bird* taken, but a glance toward the place seemed to show that it was all right.

Then Tom hastily made his way to where a flight of stairs led to a little enclosed observatory on the roof.

“I’m going to see what sort of a craft it is making that noise,” he said.

As he opened the trap door, and stepped out into the little observatory the sound was so plain as to startle him. He looked up quickly, and, directly overhead he saw a curious sight.

For, flying so low as to almost brush the lightning rod on the chimney of the Swift home, was a small aeroplane, and, as Tom looked up, he saw in a light that gleamed from it, two figures looking down on him.

# A Mysterious Fire

For a few moments Tom did not know what to think. Not that the sight of aeroplanes in flight were any novelty to him, but to see one flying over his house in the dead of night was a little out of the ordinary. Then, as he realized that night-flights were becoming more common, Tom tried to make out the details of the craft.

“I wish I had brought the night glasses with me,” he said aloud.

“Here they are,” spoke a voice at his side, and so suddenly that Tom was startled. He looked down, and saw Mr. Jackson standing beside him.

“Did you hear the noise, too?” the lad asked the engineer.

“Yes. It woke me up. Then I heard you moving around, and I heard you come up here. I thought maybe it was a flight of meteors you’d come to see, and I knew the glasses would be handy, so I stopped for them. Take a look, Tom. It’s an aeroplane; isn’t it?”

“Yes, and not moving very fast, either. They seem to be circling around here.”

The young inventor was peering through

the binoculars, and, as soon as he had the mysterious craft in focus, he cried:

“Look, Mr. Jackson, it’s a new kind of monoplane. I never saw one like it before. I wonder who could have invented that? It’s something like a Santos-Dumont and a Blériot, with some features of Cornu’s Helicopter. That’s a queer machine.”

“It certainly is,” agreed the engineer, who was now sighting through the glasses. In spite of the darkness the binoculars brought out the peculiarities of the aeroplane with considerable distinctness.

“Can you make out who are in it?” asked Tom.

“No,” answered Mr. Jackson. “You try.”

But Tom had no better luck. There were two persons in the odd machine, which was slowly flying along, moving in a great circle, with the Swift house for its center.

“I wonder why they’re hanging around here?” asked Tom, suspiciously.

“Perhaps they want to talk to you,” suggested Mr. Jackson. “They may be fellow inventors—perhaps one of them is that Philadelphia man who had the *Whizzer*.”

“No,” replied the lad. “He would have sent me word if he intended calling on me. Those are strangers, I think. There they are, coming back again.”

The mysterious aeroplane was once more circling toward the watchers on the roof. There was a movement on the steps, near which Tom was standing, and his father came up.

“Is anything the matter?” he asked anxiously.

“Only a queer craft circling around up here,” was the reply. “Come and see, dad.”

Mr. Swift ascended to the roof. The aeroplane was higher now, and those in her could not so easily be made out. Tom felt a vague sense of fear, as though he was being watched by the evil eyes of his enemies. More than once he looked over to the shed where his craft was housed, as though some danger might threaten it. But the shed of the *Humming-Bird* showed no signs of invaders.

Suddenly the mysterious aeroplane increased its speed. It circled about more quickly, and shot upward, as though to show the watchers of what it was capable. Then, with a quick swoop it darted downward, straight for the building where Tom’s newest invention was housed.

“Look out! They’ll hit something!” cried the young inventor, as though those in the aeroplane could hear him.

Then, just as though they had heeded his warning, the pilots of the mysterious craft shot her upward, after she had hovered for an instant over the big shed.

“That was a queer move,” said Tom. “It looked as if they lost control of her for a moment.”

“And they dropped something!” cried Mr. Jackson. “Look! something fell from the aeroplane on the roof of the shed.”

“Some tool, likely,” spoke Tom. “I’ll get it in the morning, and see what sort of instruments

they carry. I'd like to examine that machine, though."

The queer aeroplane was now shooting off in the darkness and Tom followed it with the glasses, wondering what its construction could be like. He was to have another sight of it sooner than he expected.

"Well, we may as well get back to bed," said Mr. Jackson. "I'm tired, and we've got lots to do to-morrow."

"Yes," agreed Tom. "It's cooler now. Come on, dad."

Tom fell into a light doze. He thought afterward he could not have slept more than half an hour when he heard a commotion out in the yard. For an instant he could not tell what it was, and then, as he grew wider awake he knew that it was the shouting of Eradicate Sampson, and the braying of Boomerang.

But what was Eradicate shouting?

"Fire! Fire! Fire!"

Tom leaped to his window.

"Wake up, Massa Tom! Wake up! De aeroplane shed am on fire, an' de *Humming-Bird* will burn up! Hurry! Hurry!"

Tom looked out. Flames were shooting up from the roof of the shed where his precious craft was kept.

# Mr. Swift is Worse

Almost before the echoes of Eradicate's direful warning cry had died away, Tom was on his way out of the house, pausing only long enough to slip on a pair of shoes and his trousers. There was but one thought in his mind. If he could get the *Humming-Bird* safely out he would not care if the shed did burn, even though it contained many valuable tools and appliances.

"We must save my new aeroplane!" thought Tom, desperately. "I've got to save her!"

As he raced through the hall he caught up a portable chemical fire-extinguisher. Tom saw his father's door open, and Mr. Swift looked out.

"What is it?" he called anxiously.

"Fire!" answered the young inventor, almost before he thought of the doctor's warning that Mr. Swift must not be excited. Tom wished he could recall the word, but it was too late. Besides Eradicate, down in the yard was shouting at the top of his voice:

"Fire! Fire! Fire!"

"Where, Tom?" gasped Mr. Swift, and his

son thought the aged inventor grew suddenly paler.

"Aeroplane shed," answered the lad. "But don't worry dad. It's only a small blaze. We'll get it out. You stay here. We'll attend to it—Mr. Jackson and Eradicate and I."

"No—I'm going to help!" exclaimed Mr. Swift, sturdily. "I'll be with you, Tom. Go on!"

The lad rushed down to the yard, closely followed by the engineer, who had caught up another extinguisher. Eradicate was rushing about, not knowing what to do, but still keeping up his shouting.

"It's on de roof! De roof am all blazin'!" he yelled.

"Quit your noise, and get to work!" cried Tom. "Get out a ladder, Rad, and raise it to the side of the shed. Then play this extinguisher on the blaze. Mr. Jackson, you help me run the *Humming-Bird* out. After she's safe we'll tackle the fire."

Tom cast a hurried look at the burning shed. The flames were shooting high up from the roof, now, and eating their way down. As he rushed toward the big doors, which he intended to open to enable him to run out his sky racer, he was wondering how the fire came to start so high up as the roof. He wondered if a meteor could have fallen and caused it.

As the doors, which were quickly unlocked by Tom, swung back, and as he and the engineer started to go in, they were met by choking fumes as if of some gas. They recoiled for the moment.

"What—what's that?" gasped Tom, cough-

ing and sneezing.

“Some chemical—I—I don’t know what kind,” spluttered Mr. Jackson. “Have you any carboys of acid in there Tom, that might have exploded by the heat?”

“No; not a thing. Let’s try again.”

Once more they tried to go in, but were again driven back by the distressing fumes. The fire was eating down, now. There was a hole burned in the roof, and by the leaping tongues of flame Tom could see his aeroplane. It was almost in the path of the blaze.

“We must get her out!” he shouted. “I’m going in!”

But it was impossible, and the daring young inventor nearly succumbed to the choking odors. Mr. Jackson dragged him back.

“We can’t go in!” he cried. “There has been some mysterious work here! Those fumes were put here to keep us from saving the machine. This fire has been set by some enemy! We can’t go in!”

“But I am going!” declared Tom. “We’ll try the back door.”

They rushed to that, but again were driven out by the gases and vapors, which were mingled with the smoke. Disheartened, yet with a wild desire to do something to save his precious craft, Tom Swift drew back for a moment.

As he did so he heard a hiss, as Eradicate turned the chemical stream on the blaze. Tom looked up. The faithful colored man was on a ladder near the burning roof, acting well his part as a fireman.

"That's the stuff!" cried Tom. "Come on, Mr. Jackson. Maybe if we use the chemical extinguishers we can drive out those fumes!"

The engineer understood. He took up the extinguisher he had brought, and Tom got a second one from a nearby shed. Then Mr. Swift came out bearing another.

"You shouldn't have come, dad! We can attend to it!" cried Tom, fearing for the effect of the excitement on his invalid parent.

"Oh, I couldn't stay there and see the shed burn. Are you getting it under control? Why don't you run out the *Humming-Bird*?"

Tom did not mention the choking fumes. He passed up a full extinguisher to Eradicate, who had used all the chemical in his. Then Tom got another ladder, and soon three streams were being directed on the flames. They had eaten, a pretty big hole in the roof, but the chemicals were slowly telling on them.

As soon as he saw that Eradicate and Mr. Jackson could control the blaze, Tom descended to the ground, and ran once more to the big doors. He was determined to make another try to wheel out the aeroplane, for he saw from above that the flames were now on the side wall, and might reach the craft any minute. And it would not take much to inflict serious damage on the sky racer.

"I'll get her, fumes or no fumes!" murmured Tom, grimly. And, whether it was the effect of the chemical streams, or whether the choking odors were dissipated through the hole in the roof was not manifested, but, at any rate, Tom found that he could go in, though he coughed

and gasped for breath.

He wheeled the aeroplane outside, for the *Humming-Bird* was almost as light as her namesake. A hurried glance by the gleam of the dying fire assured Tom that his craft was not damaged beyond a slight scorching of one of the wing tips.

"That was a narrow escape!" he murmured, as he wheeled the sky racer far away, out of any danger from sparks. Then he went back to help fight the fire, which was extinguished in about ten minutes more.

"It was a mighty queer blaze," said Mr. Jackson, "starting at the top that way. I wonder what caused it?"

"We'll investigate in the morning," decided Tom. "Now, dad, you must get back to your room." He turned to help his father in, but at that moment Mr. Swift, who was trying to say something, fell over in a dead faint.

"Quick! Help me carry him into the house!" cried Tom. "Then telephone for Dr. Gladby, Mr. Jackson."

The physician looked grave when, half an hour later, he examined his patient.

"Mr. Swift is very much worse," he said in a low voice. "The excitement of the fire has aggravated his ailment. I would like another doctor to see him, Tom."

"Another doctor?" Tom's voice showed his alarm.

"Yes, we must have a consultation. I think Dr. Kurtz will be a good one to call in. I should like his opinion before I decide what course to take."

“I’ll send Eradicate for him at once,” said the young inventor, and he went to give the colored man his instructions, while his heart was filled with a great fear for his father.

# The Broken Bridge

Dr. Kurtz looked as grave as did Dr. Gladby when he had made an examination of the patient. Mr. Swift was still in a semi-conscious condition, hardly breathing as he rested on the bed where they had placed him after the fire.

“Vell,” said the German physician, after a long silence, “vot is your obinion, my dear Gladby?”

“I think an operation is necessary.”

“Yes, dot is so; but you know vot kind of an operation alone vill safe him; eh, my dear Gladby?”

Dr. Gladby nodded.

“It will be a rare and delicate one,” he said. “There is but one surgeon I know of who can do it.”

“You mean Herr Hendrix?” asked Dr. Kurtz.

“Yes, Dr. Edward Hendrix, of Kirkville. If he can be induced to come I think there is a chance of saving Mr. Swift’s life. I’ll speak to Tom about it.”

The two physicians, who had been consulting together, summoned the youth from an-

other room, where, with Mrs. Baggert and Mr. Jackson he had been anxiously awaiting the verdict.

“What is it?” the young inventor asked Dr. Gladby.

The medical man told him to what conclusion he and his colleague had arrived, adding:

“We advise that Dr. Hendrix be sent for at once. But I need hardly tell you, Tom, that he is a noted specialist, and his services are in great demand. He is hard to get.”

“I’ll pay him any sum he asks!” burst out the youth. “I’ll spend all my fortune—and I have made considerable money of late—I’ll spend every cent to get my father well! Money need not stand in the way, Dr. Gladby.”

“I knew that, Tom. Still Dr. Hendrix is a very busy man, and it is hard to induce him to come a long distance. It is over a hundred miles to Kirksville, and it is an out-of-the-way place. I never could understand why Dr. Hendrix settled there. But there he is, and if we want him he will have to come from there. The worst of it is that there are few trains, and only a single railroad line from there to Shop-ton.”

“Then I’ll telegraph,” decided Tom. “I’ll offer him his own price, and ask him to rush here as soon as he can.”

“You had better let Dr. Kurtz and me attend to that part of it,” suggested the physician. “Dr. Hendrix would hardly come on the request of some one whom he did not know. I’ll prepare a telegram, briefly explaining the case. It is the sort of an operation Dr. Hen-

drix is much interested in, and I think he will come on that account, if for no other reason. I'll write out the message, and you can have Eradicate take it to the telegraph office."

"I'll take it myself!" exclaimed Tom, as he got ready to go out into the night with the urgent request. "Is there any immediate danger for my father?" he asked.

"No; not any immediate danger," replied Dr. Gladby. "But the operation is imperative if he is to live. It is his one and only chance."

Tom thought only of his father as he hurried on through the night. Even the prospect of the great race, so soon to take place, had no part in his mind.

"I'll not race until I'm sure dad is going to get better," he decided. With the message to the noted specialist Tom also sent one to Mr. Damon, telling him the news, and asking him to come to Shopton. Tom felt that the presence of the odd gentleman would help him, and Mr. Damon, who first intended to stay on at the Swift home until he and Tom departed for Eagle Park, had gone back to his own residence to attend to some business. Tom knew he would come in the morning, and Mr. Damon did arrive on the first train.

"Bless my soul!" he exclaimed with ready sympathy, as he extended his hand to Tom. "What's all this?" The young inventor told him, beginning with the fire that had been the cause of the excitement which produced the change in Mr. Swift.

"But I have great hopes that the specialist will be able to cure him," said Tom, for,

with the coming of daylight, his courage had returned to him. "Dr. Gladby and Dr. Kurtz depend a great deal on Dr. Hendrix," he said.

"Yes, he certainly is a wonderful man. I have heard a great deal about him. I have no doubt but what he will cure your father. But about the fire? How did it start?"

"I don't know, but now that I have a few hours to spare before the doctor can get here, I'm going to make an examination."

"Bless my penwiper, but I'll help you."

Tom went into the house, to inquire of Mrs. Baggert, for probably the tenth time that morning, how his father was doing. Mr. Swift was still in a semi-conscious condition, but he recognized Tom, when the youth stood at his bedside.

"Don't worry about me, son," said the brave old inventor, as he took Tom's hand. "I'll be all right. Go ahead and get ready for the race. I want you to win!"

Tears came into Tom's eyes. Would his father be well enough to allow him to take part in the big event? He feared not.

By daylight it was seen that quite a hole had been burned in the aeroplane shed. Tom and Mr. Damon, accompanied by Mr. Jackson, walked through the place.

"And you say the fire broke out right after you had seen the mysterious airship hovering over the house?" asked the eccentric man.

"Well, not exactly after," answered Tom, "but within an hour or so. Why do you ask?"

But Mr. Damon did not answer. Something on the floor of the shed, amid a pile of black-

ened and charred pieces of wood, attracted his attention. He stooped over and picked it up.

“Is this yours?” he asked Tom.

“No. What is it?”

The object looked like a small iron ball, with a tube about half an inch in diameter projecting slightly from it. Tom took it.

“Why, it looks like an infernal machine or a dynamite bomb,” he said. “I wonder where it came from? Guess I’d better drop it in a pail of water. Maybe Eradicate found it and brought it here. I never saw it before. Mr. Jackson, please hand me that pail of water. We’ll soak this bomb.”

“There is no need,” said Mr. Damon, quietly. “It is harmless now. It has done its work. It was that which set fire to your shed, and which caused the stifling fumes.”

“That?” cried Tom.

“Yes. This ball is hollow, and was filled with a chemical. It was dropped on the roof, and, after a certain time, the plug in the tube was eaten through, the chemicals ran out, set the roof ablaze, and, dripping down inside spread the choking odors that nearly prevented you from getting out your aeroplane.”

“Are you sure of this?” asked the young inventor.

“Positive. I read about these bombs recently. A German invented them to be used in attacking a besieged city in case of war.”

“But how did this one get on my shed roof?” asked Tom.

“It was dropped there by the mysterious airship!” exclaimed the odd man. “That was

why the aeroplane moved about over your place. Those in it hoped that the fire would not break out until you were all asleep, and that the shed and the *Humming-Bird* would be destroyed before you came to the rescue. Some of your enemies are still after you, Tom."

"And it was Andy Foger, I'll wager!" he cried. "He was in that aircraft! Oh, I'll have a long score to settle with him!"

"Of course you can't be sure it was he," said Mr. Damon, "but I wouldn't be a bit surprised but what it was. Andy is capable of such a thing. He wanted to prevent you from taking part in the race."

"Well, he sha'n't!" cried Tom, and then he thought of his invalid father. They made a further examination of the shed, and discovered another empty bomb. Then Tom recalled having seen something drop from the mysterious aeroplane as it passed over the shed.

"It was these bombs," he said. "We certainly had a narrow escape! Oh, wait until I settle my score with Andy Foger!"

As there would be but little use for the aeroplane shed now, if Tom sent his craft off to the meet, it was decided to repair it temporarily only, until he returned.

Accordingly, a big tarpaulin was fastened over the hole in the roof. Then Tom put a new wing tip on in place of the one that had been scorched. He looked all over his sky racer, and decided that it was in fit condition for the coming meet.

"I'll begin to take it apart for shipment, as soon as I hear from the specialist that dad is

well enough for me to go," he said.

It was a few hours after the discovery of the empty bomb that Tom saw Dr. Gladby coming along. The physician was urging his horse to top speed. Tom felt a vague fear in his heart.

"I've got a message from Dr. Hendrix, Tom," he said, as he stopped his carriage, and approached the lad.

"When can he come?" asked the young inventor, eagerly.

"He can't get here, Tom."

"Can't get here! Why not?"

"Because the railroad bridge has collapsed, and there is no way to come. He can't make any other connections to get here in time—in time to do your father any good, Tom. He has just sent me a telegram to that effect. Dr. Hendrix can't get here, and . . ." Dr. Gladby paused.

"Do you mean that my father may die if the operation is not performed?" asked Tom, in a low voice.

"Yes," was the answer.

"But can't Dr. Hendrix drive here in an auto?" asked the lad. "Surely there must be some way of getting over the river, even if the railroad bridge is down. Can't he cross in a boat and drive here?"

"He wouldn't be in time, Tom. Don't you understand, Dr. Hendrix must be here within four hours, if he is to save your father's life. He never could do it by driving or by coming on some other road, or in an auto. He can't make the proper connections. There is

no way.”

“Yes, there is!” cried Tom, suddenly. “I know a way!”

“How?” asked Dr. Gladby, thrilled by Tom’s ringing tones. “How can you do it, Tom?”

“I’ll go for Dr. Hendrix in my *Humming-Bird*.”

“Going for him would do no good. He must be brought here.”

“And so he shall be!” cried Tom. “I’ll bring him here in my sky racer—if he has the nerve to stand the journey, and I think he has! I’ll bring Dr. Hendrix here!” and Tom hurried away to prepare for the thrilling trip.

# A Nervy Specialist

There was little time to lose. Every moment of delay meant so much less chance for the recovery of Mr. Swift. Even now the periods of consciousness were becoming shorter and farther apart. He seemed to be sinking.

Tom resolutely refused to think of the possibility of death, as he went in to bid his parent good-by before starting off on his trip through the air. Mr. Swift barely knew his son, and, with tears in his eyes, though he bravely tried to keep them back, the young inventor went out into the yard.

There stood the *Humming-Bird*, with Mr. Jackson, Mr. Damon and Eradicate working over her, to get her in perfect trim for the race before her—a race with death.

Fortunately there was little to be done to get the speedy craft ready. Tom had accomplished most of what was necessary, while waiting for word from Dr. Hendrix. Now about all that needed to be done was to see that there was plenty of gasoline and oil in the reservoirs.

“I’ll give you a note to Dr. Hendrix,” said Mr. Gladby, as Tom was fastening on his face-

guard. "I—I trust you won't be disappointed, Tom. I hope he will consent to return with you."

"He's got to come," said the young inventor, simply, as if that was all there was to it.

"Do you think you can make the trip in time?" asked Mr. Damon. "It is a little less than a hundred miles in an airline, but you have to go and go back. Can the aeroplane do it?"

"I'd be ashamed of her if she couldn't," said Tom, with a grim tightening of his lips. "She's just got to do it; that's all! But I know she will," and he patted the big propeller and the motor's shining cylinders as though the machine was a thing alive, like a horse or a dog, who could understand him.

He climbed to his seat, the other one holding a bag of sand to maintain a good balance.

"Start her," ordered Tom, and Mr. Jackson twisted the propeller. The motor caught at once, and the air throbbed with the noise of the explosions. Tom listened to the tune of the machinery. It sang true.

"Two thousand pounds thrust!" called the engineer, as he looked at the scale.

"Let her go!" cried Tom, whose voice was hardly heard above the roar. The trim little aeroplane scudded over the ground, gathering speed at every revolution of the wheels. Then with a spring like that of some great bird launching itself in flight, she left the earth, and took to the air. Tom was off on his trip.

Those left behind sent up a cautious cheer, for they did not want to disturb Mr. Swift.

They waved their hands to the young inventor, and he waved his in reply. Then he settled down for one of the swiftest flights he had ever undertaken.

Tom ascended until he struck a favorable current of air. There was a little wind blowing in the direction he wished to take, and that aided him. But even against a powerful head-wind the *Humming-Bird* could make progress.

The young inventor saw the ground slipping backward beneath him. Carefully he watched the various indicators, and listened intently to the sound of the cylinders' explosions. They came rapidly and regularly. The motor was working well.

Tom glanced at the barograph. It registered two thousand feet, and he decided to keep at about that height, as it gave him a good view, and he could see to steer, for a route had been hastily mapped out for him by his friends.

Over cities, towns, villages, scattered farmhouses; across stretches of forest; over rivers, above big stretches of open country he flew. Often he could see eager crowds below, gazing up at him. But he paid no heed. He was looking for a sight of a certain broad river, which was near Kirkville. Then he knew he would be close to his goal.

He had speeded up the motor to the limit, and there was nothing to do now, save to manage the planes, wing tips and rudders, and to see that the gasoline and oil were properly fed to the machine.

Faster and faster went the *Humming-Bird*, but Tom's thoughts were even faster. He was thinking of many things—of his father—of what he would do if Mr. Swift died—of the mysterious airship—of the stolen plans—of the fire in the shed—of the great race—and of Andy Foger.

He took little note of time, and when, in less than an hour he sighted the river that told him he was near to Kirckville, he was rather startled.

"You certainly did come right along, *Humming-Bird!*" he murmured proudly.

He descended several hundred feet, and, as he passed over the town, the people of which grew wildly excited, he looked about for the house of the noted specialist. He knew how to pick it out, for Dr. Gladby had described it to him, and Tom was glad to see, as he came within view of the residence, that it was surrounded by a large yard.

"I can land almost at his door," he said, and he did, volplaning to earth with an ease born of long practice.

To say that Dr. Hendrix was astonished when Tom dropped in on him in this manner, would not be exactly true. The specialist was not in the habit of receiving calls from youths in aeroplanes, but the fact was, that Dr. Hendrix was so absorbed in his work, and thought so constantly about it, that it took a great deal to startle him out of his usual calm.

"And so you came for me in your aeroplane?" he asked of Tom, as he gazed at the trim little craft. It is doubtful if he really

saw it, however, as Dr. Hendrix was just then thinking of an operation he had performed a few hours before. "I'm sorry you had your trip for nothing," he went on. "I'd like very much to come to your father, but didn't you get my telegram, telling about the broken bridge? There is no way for me to get to Shopton in time."

"Yes, there is!" cried Tom, eagerly.

"How?"

"The same way I came—in the aeroplane! Dr. Hendrix you must go back with me! It's the only way to save my father's life. Come with me in the *Humming-Bird*. It's perfectly safe. I can make the trip in less than an hour. I can carry you and your instruments. Will you come? Won't you come to save my father's life?" Tom was fairly pleading now.

"A trip in an aeroplane," mused Dr. Hendrix "I've never taken such a thing. I—"

"Don't be afraid, there's really no danger," said Tom.

The physician seemed to reach a sudden conclusion. His eyes brightened. He walked over and looked at the little *Humming-Bird*. For the time being he forgot about his operations.

"I'll go with you!" he suddenly cried. "I'll go with you, Tom Swift! If you've got the nerve, so have I! and if my science and skill can save your father's life, he'll live to be an old man! Wait until I get my bag and I'll be with you!"

Tom's heart gave a bound of hope.



# Just in Time

While Dr. Hendrix was in his office, getting ready to make the thrilling trip through the air with Tom, the young inventor spent a few minutes going over his monoplane. The wonderful little craft had made her first big flight in excellent time, though Tom knew she could do better the farther she was flown. Not a stay had started, not a guy wire was loose. The motor had not overheated, and every bearing was as cool as though it had not taken part in thousands of revolutions.

“Oh, I can depend on you!” murmured Tom, as he looked to see that the propeller was tight on the shaft. He gave the bearing a slight adjustment to make sure of it.

He was at this when the specialist reappeared. Dr. Hendrix, after his first show of excitement, when he had made his decision to accompany Tom, had resumed his usual calm demeanor. Once again he was the grave surgeon, with his mind on the case before him.

“Well, is my auto ready?” he asked absent-mindedly. Then, as he saw the little aeroplane, and Tom standing waiting beside it, he added: “Oh, I forgot for the moment that I was

to make a trip through the air, instead of in my car. Well, Mr. Swift, are we all ready?"

"All ready," replied the young inventor. "We're going to make fast time, Dr. Hendrix. You'd better put this on," and Tom extended a face protector.

"What's it for?" The physician looked curiously at it.

"To keep the air from cutting your cheeks and lips. We are going to travel a hundred miles an hour this trip."

"A hundred miles an hour!" Dr. Hendrix spoke as though he would like to back out.

"Maybe more, if I can manage it," went on Tom, calmly, as he proceeded to remove the bag of sand from the place where the surgeon was to sit. Then he looked to the various equilibrium arrangements and the control levers. He was so cool about it, taking it all for granted, as if rising and flying through the air at a speed rivaling that of the fastest birds, was a matter of no moment, that Dr. Hendrix was impressed by the calm demeanor of the young inventor.

"Very well," said the surgeon with a shrug of his shoulders, "I guess I'm game, Tom Swift."

The doctor took the seat Tom pointed out to him, with his bag of instruments on his knees. He put on the face protector, and had, at the suggestion of our hero, donned a heavy coat.

"For it's cold in the upper regions," said Tom.

Several servants in the physician's household had gathered to see him depart in this

novel fashion, and the chauffeur of the auto, in which the specialist usually made his calls, was also there.

"I'll give you a hand," said the chauffeur to the young inventor. "I was at an aviation meet once, and I know how it's done."

"Good," exclaimed Tom. "Then you can hold the machine, and shove when I give the word."

Tom started the propeller himself, and quickly jumped into his seat. The chauffeur held back the *Humming-Bird* until the young aviator had speeded up the motor.

"Let go!" cried the youthful inventor, and the man gave the little craft a shove. Across the rather uneven ground of the doctor's yard it ran, straight for a big iron barrier.

"Look out! We'll be into the fence!" shouted the surgeon. "We'll be killed!" He seemed about to leap off.

"Sit still!" cried Tom, and at that instant he tilted the elevation planes, and the craft shot upward, going over the fence like a circus horse taking a seven-barred gate.

"Oh!" exclaimed the physician in a curious voice. They were off on their trip to save the life of Mr. Swift.

What the sensations of the celebrated specialist were, Tom never learned. If he was afraid, his fright quickly gave place to wonder, and the wonder soon changed to delight as the machine rose higher and higher, acquired more speed, and soared in the air over the country that spread out in all directions from Kirkville.

“Magnificent! Magnificent!” murmured the doctor, and then Tom knew that the surgeon was in the grip of the air, and was one of the “bird-men.”

Every moment the *Humming-Bird* increased her speed. They passed over the river near where men were working on the broken bridge. It was now no barrier to them. Tom, noting the barograph, and seeing that they were twenty-two hundred feet high, decided to keep at about that distance from the earth.

“How fast are we going?” cried Dr. Hendrix, into the ear of the young inventor.

“Just a little short of a hundred an hour!” Tom shouted back. “We’ll hit a hundred and five before long.”

His prediction proved true, and when about forty miles from Shopton that terrific speed had been attained. It seemed as if they were going to have a trip devoid of incident, and Tom was congratulating himself on the quick time made, when he ran into a contrary strata of air. Almost before he knew it the *Humming-Bird* gave a dangerous and sickening dive, and tilted at a terrifying angle.

“Are we going to turn turtle?” cried the doctor.

“I—I hope not!” gasped Tom. He could not understand why the equilibrium weights did not work, but he had no time then to investigate. Quickly he warped the wing tips and brought the craft up on an even keel.

He gave a sigh of relief as the aeroplane was once more shooting forward, and he was not mistaken when he thought he heard Dr.

Hendrix murmur a prayer of thankfulness. Their escape had been a narrow one. Tom's nerve, and the coolness of the physician, had alone saved them from a fall to death.

But now, as if ashamed of her prank, the *Humming-Bird* went along even better than before. Tom was peering through the slight haze that hung over the earth, for a sight of Shopton. At length the spires of the churches came into view.

"There it is," he called, pointing downward. "We'll land in two minutes more."

"No time to spare," murmured the doctor, who knew the serious nature of the aged inventor's illness. "How long did it take us?"

"Fifty-one minutes," replied Tom, glancing at a small clock in front of him. Then he shut off the motor and volplaned to earth, to the no small astonishment of the surgeon. He made a perfect landing in the yard before the shed, leaped from his seat, and called:

"Come, Dr. Hendrix!"

The surgeon followed him. Dr. Gladby and Dr. Kurtz came to the door of the house. On their faces were grave looks. They greeted the celebrated surgeon eagerly.

"Well?" he asked quickly, and they knew what he meant.

"You are only just in time," said Dr. Gladby, softly, and Tom, following the doctors into the house, wondered if his trip with the specialist had been in vain.



## “Will He Live?”

Soon there were busy scenes in the Swift home, as preparations were made for a serious operation on the aged inventor. Tom's father had sunk into deep unconsciousness, and was stretched out on the bed as though there was no more life in him. In fact, Tom, for the moment, feared that it was all over. But good old Dr. Kurtz, noting the look on the lad's face, said:

“Ach, Dom, doan't vorry! Maybe it vill yet all be vell, und der vater vill hear of der great race. Bluck up your courage, und doan't gif up. Der greatest surgeon in der vorld is here now, und if anybody gan safe your vater, Herr Hendriz gan. Dot vos a great drip you made—a great drip!”

Tom felt a little comforted and, after a sight of his father, and a silent prayer that God would spare his life for years to come, the young inventor went out in the yard. He wanted to be busy about something, for he knew, with the doctors, and a trained nurse who had been hastily summoned, there was no immediate need for him. He wanted to get his mind off the operation that would soon

take place, and so he decided to look over his aeroplane.

Mr. Damon came out when Tom was going over the guy wires and braces, to see how they had stood the strain.

“Well, Tom, my lad,” said the eccentric man, sadly, as he grasped our hero’s hand, “it’s too bad. But hope for the best. I’m sure your father will pull through. We will have to begin taking the *Humming-Bird* apart soon; won’t we, if we’re going to ship it to Eagle Park?” He wanted to take Tom’s mind off his troubles.

“I don’t know whether we will or not,” was the answer, and Tom tried to speak unbrokenly, but there was a troublesome lump in his throat, and a mist of tears in his eyes that prevented him from seeing well. The *Humming-Bird*, to him, looked as if she was in a fog.

“Nonsense! Of course we will!” cried Mr. Damon. “Why, bless my wishbone! Tom, you don’t mean to say you’re going to let that little shrimp Andy Foger walk away with that ten-thousand-dollar prize without giving him a fight for it; are you?”

This was just what Tom needed, and it seemed good to have Mr. Damon bless something again, even if it was only a wishbone.

“No!” exclaimed Tom, in ringing tones. “Andy Foger isn’t going to beat me, and if I find out he is going to race with a machine made after my stolen plans, I’ll make him wish he’d never taken them.”

“But if the machine he had flying over here when he dropped that bomb on the shed roof,

and set fire to it, is the one he’s going to race with, it isn’t like yours,” suggested Mr. Damon, who was glad he had turned the conversation into a more cheerful channel.

“That’s so,” agreed the young inventor. “We’ll, we’ll have to wait and see.” He was busy now, going over every detail of the *Humming-Bird*. Mr. Damon helped him, and they discovered the defect in the equilibrium weights, and remedied it.

“We can’t afford to have an accident in the race,” said Tom. He glanced toward the house, and wondered if the operation had begun yet. He could see the trained nurse hurrying here and there, Mrs. Baggert helping her.

Eradicate Sampson shuffled out from the stable where he kept his mule Boomerang. On the face of the honest colored man there was a dejected look.

“Am Massa Swift any better, Massa Tom?” he asked.

“We can’t tell yet,” was the answer.

“Well, if he doan’t git well, den I’m goin’ t’ sell mah mule,” went on the dirt-chaser, from which line of activity Eradicate had derived his name.

“Sell Boomerang! Bless my curry comb! what for?” asked Mr. Damon.

“Case as how he wouldn’t neber be any good fo’ wuk any mo’,” explained Eradicate. “He’s got so attached t’ dis place, an’ all de folkes on it, dat he’d feel so sorry ef— ef—well, ef any ob ’em went away, dat I couldn’t git no mo’ wuk out ob him, no how. So ef Massa Swift doan’t git well, den I an’ Boomerang parts!”

“Well, we hope it won’t happen,” said Tom, greatly touched by the simple grief of Eradicate. The young inventor was silent a moment, and then he softly added: “I—I wonder when—when we’ll know?”

“Soon now, I think,” answered Mr. Damon, in a low voice.

Silently they waited about the aeroplane. Tom tried to busy himself, but he could not. He kept his eyes fastened on the house.

It seemed like several hours, but it was not more than one, ere the white-capped nurse came to the door and waved her hand to Tom. He sprang to his feet and rushed forward. What would be the message he was to receive?

He stood before the nurse, his heart madly beating. She looked gently at him.

“Will he—will he live?” Tom asked, pantingly.

“I think so,” she answered gently. “The operation is over. It was a success, so far. Time alone will tell, now. Dr. Hendrix says you can see your father for just a moment.”

# Off to the Meet

Softly Tom tiptoed into the room where his father lay. At the bedside were the three doctors, and the nurse followed the young inventor in. Mrs. Baggert stood in the hall, and near her was Garret Jackson. The aged housekeeper had been weeping, but she smiled at Tom through her tears.

“I think he’s going to get well,” she whispered. She always looked on the bright side of things. Tom’s heart felt better.

“You must only speak a few words to him,” cautioned the specialist, who had performed such a rare and delicate operation, near the heart of the invalid. “He is very weak, Tom.”

Mr. Swift opened his eyes as his son approached. He looked around feebly.

“Tom—are you there?” he asked in a whisper.

“Yes, dad,” was the eager answer

“They tell me you—you made a great trip to get Dr. Hendrix—broken bridge—came through the air with him. Is that right?”

“Yes, dad. But don’t tire yourself. You must get well and strong.”

“I will, Tom. But tell me; did you go in—in

the *Humming-Bird*?"

"Yes, dad."

"How did she work?"

"Fine. Over a hundred, and the motor wasn't at its best."

"That's good. Then you can go in the big race, and win."

"No, I don't believe I'll go, dad."

"Why not?" Mr. Swift spoke more strongly.

"I—because—well, I don't want to."

"Nonsense, Tom! I know; it's on my account. I know it is. But listen to me. I want you to go in! I want you to win that race! Never mind about me. I'm going to get well, and I'll recover all the more quickly if you win that race. Now promise me you'll go in it and—and—win!"

The invalid's strength was fast leaving him.

"I—I—," began Tom.

"Promise!" insisted the aged inventor, trying to rise. Dr. Hendrix made a hasty move toward the bed.

"Promise!" whispered the surgeon to Tom.

"I—I promise!" exclaimed Tom, and the aged inventor sank back with a smile of satisfaction on his pale face.

"Now you must go," said Dr. Gladby to Tom. "He has talked long enough. He must sleep now, and get up his strength."

"Will he get better?" asked Tom, anxiously.

"We can't say for sure," was the answer. "We have great hopes."

"I don't want to enter the race unless I know he is going to live," went on Tom, as Dr.

Gladby followed him out of the room.

“No one can say for a certainty that he will recover,” spoke the physician. “You will have to hope for the best, that is all, Tom. If I were you I’d go in the race. It will occupy your mind, and if you could send good news to your father it might help him in the fight for life he is making.”

“But suppose—suppose something happens while I am away?” suggested the young inventor.

The doctor thought for a moment. Then he exclaimed:

“You have a wireless outfit on your craft; haven’t you?”

“Yes.”

“Then you can receive messages from here every hour if you wish. Garret Jackson, your engineer, can send them, and you can pick them up in mid-air if need be.”

“So I can!” cried Tom. “I will go to the meet. I’ll take the *Humming-Bird* apart at once, and ship it to Eagle Park. Unless Dr. Hendrix wants to go back in it,” he added as an after thought.

“No,” spoke Dr. Gladby, “Dr. Hendrix is going to remain here for a few days, in case of an emergency. By that time the bridge will have been repaired, and he can go back by train. I gather, from what he said, that though he liked the air trip, he will not care for another one.”

“Very well,” assented Tom, and Mr. Damon and he were kept busy, packing the *Humming-Bird* for shipment. Mr. Jackson

helped them, and Eradicate and his mule Boomerang were called on occasionally when boxes or crates were to be taken to the railroad station.

In the meanwhile, Mr. Swift, if he did not improve any, at least held his own. This the doctors said was a sign of hope, and, though Tom was filled with anxiety, he tried to think that fate would be kind to him, and that his father would recover. Dr. Hendrix left, saying there was nothing more he could do, and that the rest depended on the local physicians, and on the nurse.

“Und ve vill do our duty!” ponderously exclaimed Dr. Kurtz. “You go off to dot bird race, Dom, und doan’t vorry. Ve vill send der with-out-vire messages to you venever dere is anyt’ing to report. Go mit a light heart!”

How Tom wished he could, but it was out of the question. The last of the parts of the *Humming-Bird* had been sent away, and our hero forwarded a telegram to Mr. Sharp, of the arrangement committee, stating that he and Mr. Damon would soon follow. Then, having bidden his father a fond farewell, and after arranging with Mr. Jackson to send frequent wireless messages, Tom and the eccentric man left for the meet.

There was a wireless station at Eagle Park, and Tom had planned to receive the messages from home there until he could set up his own plant. He would have two outfits. One in the big tent where the *Humming-Bird* was to be put together, and another on the machine itself, so that when in the air, practicing,

or even in the great race itself, there would be no break in the news that was to be flashed through space.

Tom and Mr. Damon arrived at Eagle Park on time, and Tom's first inquiry was for a message from home. There was one, Stating that Mr. Swift was fairly comfortable, and seemed to be doing well. With happiness in his heart, the young inventor then set about getting the parts of his craft from the station to the park, where he and Mr. Damon, with a trusty machinist whom Mr. Sharp had recommended, would assemble it. Tom arranged that in his absence the wireless operator on the grounds would take any message that came for him.

The *Humming-Bird*, in the big cases and boxes, had safely arrived, and these were soon in the tent which had been assigned to Tom. It was still several days until the opening of the meet, and the grounds presented a scene of confusion.

Workmen were putting up grand stands, tents and sheds were being erected, exhibitors were getting their machines in shape, and excited contestants of many nationalities were hurrying to and fro, inquiring about parts delayed in shipment, or worrying lest some of their pet ideas be stolen.

Tom and Mr. Damon, with Frank Forker, the young machinist, were soon busy in their big tent, which was a combined workshop and living quarters, for Tom had determined to stay right on the ground until the big race was over.

"I don't see anything of Andy Foger," re-

marked Mr. Damon, on the second day of their residence in the park. "There are lots of new entries arriving, but he doesn't seem to be on hand."

"There's time enough," replied Tom. "I am afraid he's hanging back until the last minute, and will spring his machine so late that I won't have time to lodge a protest. It would be just like him."

"Well, I'll be on the lookout for him. Have you heard from home to-day, Tom?"

"No. I'm expecting a message any minute." The young inventor glanced toward the wireless apparatus which had been set up in the tent. At that moment there came the peculiar sound which indicated a message coming through space, and down the receiving wires. "There's something now!" exclaimed Tom, as he hurried over and clamped the telephone receiver to his ear. He listened a moment.

"Good news!" he exclaimed. "Dad sat up a little to-day! I guess he's going to get well!" and he clicked back congratulations to his father and the others in Shopton.

Another day saw the *Humming-Bird* almost in shape again, and Tom was preparing for a tryout of the engine.

Mr. Damon had gone over to the committee headquarters to consult with Mr. Sharp about the steps necessary for Tom to take in case Andy did attempt to enter a craft that infringed on the ideas of the young inventor, and on his way back he saw a newly-erected tent. There was a young man standing in the entrance, at the sight of whom the eccentric

man murmured:

“Bless my skate-strap! His face looks very familiar!”

The youth disappeared inside the tent suddenly, and, as Mr. Damon came opposite the canvas shelter, he started in surprise.

For, on a strip of muslin which was across the tent, painted in gay colors, were the words:

#### THE FOGGER AEROPLANE

“Bless my elevation rudder!” cried Mr. Damon. “Andy’s here at last! I must tell Tom!”



# The Great Race

“Well,” remarked Mr. Sharp, when Tom and Mr. Damon had called on him, to state that Andy Foger’s machine was now on the grounds, and demanding to be allowed to view it, to see if it was an infringement on the one entered by the young inventor, “I’ll do the best I can for you. I’ll lay the case before the committee. It will meet at once, and I’ll let you know what they say.”

“Understand,” said Tom, “I don’t want to interfere unless I am convinced that Andy is trying an underhand trick. My plans are missing, and I think he took them. If his machine is made after those plans, it is, obviously, a steal, and I want him ruled out of the meet.”

“And so he shall be!” exclaimed Mr. Sharp. “Get the evidence against him, and we’ll act quickly enough.”

The committee met in about an hour, and considered the case. Meanwhile, Tom and Mr. Damon strolled past the tent with its flaring sign. There was a man on guard, but Andy was not in sight.

Then Tom was sent for, and Mr. Sharp told

him what conclusion had been arrived at. It was this:

“Under the rules of the meet,” said the balloonist, “we had to guarantee privacy to all the contestants until such time as they choose to exhibit their machines. That is, they need not bring them out until just before the races,” he added. “This is not a handicap affair, and the speediest machine, or the one that goes to the greatest height, according to which class it enters, will win. In consequence we cannot force any contestant to declare what kind of a machine he will use until he gets ready.

“Some are going to use the familiar type of biplanes and, as you can see, there is no secret about them. They are trying them out now.” This was so, for several machines of this type were either in the air, circling about, or were being run over the ground.

“But others,” continued Mr. Sharp, “will not even take the committee into their confidence until just before the race. They want to keep their craft a secret. We can’t compel them to do otherwise. I’m sorry, Tom, but the only thing I see for you to do is to wait until the last minute. Then, if you find Andy has infringed on your machine, lodge a protest—that is unless you can get evidence against him before that time.”

Tom well knew the uselessness of the latter plan. He and Mr. Damon had tried several times to get a glimpse of the craft Andy had made, but without success. As to the other alternative—that of waiting until the last moment—Tom feared that, too, would be

futile.

“For,” he reasoned, “just before the race there will be a lot of confusion, officials will be here and there, scattered over the ground, they will be hard to find, and it will be almost useless to protest then. Andy will enter the race, and there is a possibility that he may win. Almost any one could with a machine like the *Humming-Bird*. It’s the machine almost as much as the operator, in a case like this.”

“But you can protest after the race,” suggested Mr. Damon.

“That would be little good, in case Andy beat me. The public would say I was a sore-head, and jealous. No, I’ve either got to stop Andy before the race, or not at all. I will try to think of a plan.”

Tom did think of several, but abandoned them one after the other. He tried to get a glimpse inside the tent where the Foger aeroplane was housed, but it was too closely guarded. Andy himself was not much in evidence, and Tom only had fleeting glimpses of the bully.

Meanwhile he and Mr. Damon, together with their machinist, were kept busy. As Tom’s craft was fully protected by patents now, he had no hesitation in taking it out, and it was given several severe tests around the aerial course. It did even better than Tom expected of it, and he had great hopes.

Always, though, there were two things that worried him. One was his father’s illness, and the other the uneasiness he felt as to what

Andy Foger might do. As to the former, the wireless reports indicated that Mr. Swift was doing as well as could be expected, but his improvement was not rapid. Regarding the latter worry, Tom saw no way of getting rid of it.

"I've just got to wait, that's all," he thought.

The day before the opening of the meet, Tom and Mr. Damon had given the *Humming-Bird* a grueling tryout. They had taken her high up—so high that no prying eyes could time them, and there Tom had opened the motor for all the power in it. They had flashed through space at the rate of one hundred and twenty miles an hour.

"If we can only do that in the race, the ten thousand dollars is mine!" exulted Tom, as he slanted the nose of the aeroplane toward the earth.

The day of the race dawned clear and beautiful. Tom was up early, for there remained many little things to do to get his craft in final trim for the contest. Then, too, he wanted to be ready to act promptly as soon as Andy's machine was wheeled out, and he also wanted to get a message from home.

The wireless arrived soon after breakfast, and did not contain very cheering news.

"Your father not so well," Mr. Jackson sent. "Poor night, but doctor thinks day will show improvement. Don't worry."

"Don't worry! I wonder who could help it," mused poor Tom. "Well, I'll hope for the best," and he wired back to tell the engineer in Shopton to keep in touch with him, and to flash the messages to the *Humming-Bird* in the air, af-

ter the big race started.

“Now I’ll go out and see if I can catch a glimpse of what that sneak Andy has to pit against me,” said Tom.

The Foger tent was tightly closed, and Tom turned back to his own place, having arranged with a messenger to come and let him know as soon as Andy’s craft was wheeled out.

All about was a scene of great activity. The grand stands were filled, and a big crowd stood about the field anxiously waiting for the first sight of the “bird-men” in their wonderful machines. Now and then the band blared out, and cheers arose as one after another the frail craft were wheeled to the starting place.

Men in queer leather costumes darted here and there—they were the aviators who were soon to risk life and limb for glory and gold. Most of them were nervously smoking cigarettes. The air was filled with guttural German or nasal French, while now and then the staccato Russian was heard, and occasionally the liquid tones of a Japanese. For men of many nations were competing for the prizes.

The majority of the machines were monoplanes and biplanes though one triplane was entered, and there were several “freaks” as the biplane and monoplane men called them—craft of the helicopter, or the wheel type. There was also one Witzig Liore Dutilleul biplane, with three planes behind.

Tom was familiar with most of these types, but occasionally he saw a new one that excited his curiosity. However, he was more interested in what Andy Foger would turn out.

Andy's machine had not been tried, and Tom wondered how he dared risk flying in it, without at least a preliminary tryout. But Andy, and those with him, were evidently full of confidence.

News of the suspicions of Tom, and what he intended to do in case these suspicions proved true, had gotten around, and there was quite a crowd about his own tent, and another throng around that of Andy.

Tom and Mr. Damon had wheeled the *Humming-Bird* out of her canvas "nest.". There was a cheer as the crowd caught sight of the trim little craft. The young inventor, the eccentric man, and the machinist were busy going over every part.

Meanwhile the meet had been officially opened, and it was announced that the preliminary event would be some air evolutions at no great height, and for no particular prize. Several biplanes and monoplanes took part in this. It was very interesting, but the big ten-thousand-dollar race, over a distance of a hundred miles was the principal feature of the meet, and all waited anxiously for this.

The opening stunts passed off successfully, save that a German operator in a Bleriot came to grief, crashing down to the ground, wrecking his machine, and breaking an arm. But he only laughed at that, and coolly demanded another cigarette, as he crawled out of the tangle of wires, planes and the motor.

After this there was an exhibition flight by a French aviator in a Curtis biplane, who raced against one in a Baby Wright. It was a

dead heat, according to the judges. Then came a flight for height; and while no records were broken, the crowd was well satisfied.

“Get ready for the hundred-mile ten-thousand-dollar-prize race!” shouted the announcer, through his megaphone.

Tom’s heart gave a bound. There were seven entrants in this contest besides Tom and Andy Foger, and as announced by the starter they were as follows:

<u>CONTESTANT</u>	<u>MACHINE</u>
VON BERGEN	WRIGHT BIPLANE
ALAMEDA	ANTOINETTE MONOPLANE
PERIQUE	BLERIOT MONOPLANE
LOI TONG	SANTOS-DUMONT MONOPLANE
WENDELL	CURTIS BIPLANE
DE TROMP	FARMAN BIPLANE
LASCALLE	DEMOISELLE MONOPLANE
ANDY FOGER	*****
TOM SWIFT	HUMMING-BIRD MONOPLANE

“What is the style of the Foger machine?” yelled some one in the crowd, as the announcer lowered his megaphone.

“It has not been announced,” was the reply. “It will at once be wheeled out though, in accordance with the conditions of the race.”

There was a craning of necks, and an uneasy movement in the crowd, for Tom’s story was now generally known.

“Get ready to make your protest,” advised Mr. Damon to the young inventor. “I’ll stay by the machine here until you come back. Bless my radiator! I hope you beat him!”

"I will, if it's possible!" murmured Tom, with a grim tightening of his lips.

There was a movement about Andy's tent, whence, for the last half hour had come spasmodic noises that indicated the trying-out of the motor. The flaps were pulled back and a curious machine was wheeled into view. Tom rushed over toward it, intent on getting the first view. Would it prove to be a copy of his speedy *Humming-Bird*?

Eagerly he looked, but a curious sight met his eyes. The machine was totally unlike any he had expected to see. It was large, and to his mind rather clumsy, but it looked powerful. Then, as he took in the details, he knew that it was the same one that had flown over his house that night—it was the one from which the fire bomb had been dropped.

He pushed his way through the crowd. He saw Andy standing near the curious biplane, which type of air craft it nearest resembled, though it had some monoplane features. On the side was painted the name:

#### SLUGGER

Andy caught sight of Tom Swift.

"I'm going to beat you!" the bully boasted, and I haven't a machine like yours, after all. You were wrong."

"So I see," stammered Tom, hardly knowing what to think. "What did you do with my plans then?"

"I never had them!"

Andy turned away, and began to assist the men he had hired to help him. Like all the

others, his machine had two seats, for in this race each operator must carry a passenger.

Tom turned away, both glad and sorry,—glad that his rival was not to race him in a duplicate of the *Humming-Bird*, but sorry that he had as yet no track of the strangely missing plans.

“I wonder where they can be?” mused the young inventor.

Then came the firing of the preliminary gun. Tom rushed back to where Mr. Damon stood waiting for him.

There was a last look at the *Humming-Bird*. She was fit to race any machine on the ground. Mr. Damon took his place. Tom started the propeller. The other contestants were in their seats with their passengers. Their assistants stood ready to shove them off. The explosions of so many motors in action were deafening.

“How much thrust?” cried Tom to his machinist.

“Twenty-two hundred pounds!”

“Good!”

The report of the starting-gun could not be heard. But the smoke of it leaped into the air. It was the signal to go.

Tom’s voice would not have carried five feet. He waved his hands as a signal. His helper thrust the *Humming-Bird* forward. Over the smooth ground it rushed. Tom looked eagerly ahead. On a line with him were the other machines, including Andy Foger’s *Slugger*.

Tom pulled a lever. He felt his craft soar

upward. The other machines also pointed their noses into the air.

The big race for the ten-thousand-dollar prize was under way!

# Won by a Length

Rising upward, on a steep slant, for he wanted to get into the upper currents as soon as possible, Tom looked down and off to his left and saw one machine going over the ground in curious leaps and bounds. It was the tiny Demoiselle—the smallest craft in the race, and its peculiar style of starting was always thus manifested.

“I don’t believe he’s going to make it,” thought Tom.

He was right. In another moment the tiny craft, after rising a short distance, dove downward, and was wrecked. The young inventor saw the two men crawling out from the tangled planes and wings, apparently uninjured.

“One contestant less,” thought Tom, grimly, though with pity in his heart for the unfortunates.

However, he must think of himself and his own craft now. He glanced at Mr. Damon sitting beside him. That odd gentleman, with never a thought of blessing anything now, unless he did it silently, was watching the lubricating system. This was a vital part of the craft, for if anything went wrong with it, and

the bearings overheated, the race would have to be abandoned. So Tom was not trusting to any automatic arrangement, but had instituted, almost at the last moment, a duplicate hand-worked system, so that if one failed him he would have the other.

"A good start!" shouted Mr. Damon in his car.

Tom nodded, and glanced behind him. On a line with the *Humming-Bird*, and at about the same elevation, were the Bleriot monoplane and a Wright biplane. Below were the Santos-Dumont and the Antoinette.

"Where's the *Slugger*?" called Tom to his friend.

Mr. Damon motioned upward. There, in the air above Tom's machine, and slightly in advance, was Andy Foger's craft. He had gotten away in better shape than had the *Humming-Bird*.

For a moment Tom's heart misgave him. Then he turned on more power, and had the satisfaction of mounting upward and shooting onward until he was on even terms with Andy.

The bully gave one glance over toward his rival, and pulled a lever. The *Slugger* increased her speed, but Tom was not a second behind him.

There was a roaring noise in the rear, and up shot De Tromp in the Farman, and Loi Tong, the little Japanese, in the Santos-Dumont. Truly the race was going to be a hotly contested one. But the end was far off yet.

After the first jockeying for a start and po-

sition, the race settled down into what might be termed a "grind." The course was a large one, but so favorable was the atmosphere that day, and such was the location of Eagle Park in a great valley, that even on the far side of the great ellipse the contestants could be seen, dimly with the naked eye, but very plainly with glasses, with which many of the spectators were provided.

Around and around they went, at no very great height, for it was necessary to make out the signals set up by the race officials, so that the contestants would know when they were near the finish, that they might use the last atom of speed. So at varying heights the wonderful machines circled about the course.

The *Humming-Bird* was working well, and Tom felt a sense of pride as he saw the ground slipping away below him. He felt sure that he would win, even when Alameda, the Spaniard, in the *Antoinette*, came creeping up on him, and even when Andy Foger, with a burst of speed, placed himself and his passenger in the lead.

"I'll catch him!" muttered Tom, and he opened the throttle a trifle wider, and went after Andy, passing him with ease.

They had covered about thirty miles of the course, when the humming and crackling of the wireless apparatus told Tom that a message was coming. He snapped the receiver to his ear, adjusting the outer covering to shut out the racket of the motor, and listened.

"Well?" asked Mr. Damon, as Tom took off the receiver.

“Dad isn’t quite so well,” answered the lad. “Mr. Jackson says they have sent for Dr. Hendrix again. But dad is game. He sends me word to go on and win, and I’ll do it, too, only—”

Tom paused, and choked back a sob. Then he prepared to get more speed out of his motor.

“Of course you will!” cried Mr. Damon. “Bless my—!”

But they encountered an adverse current of wind at that moment, and it required the attention of both of the aviators to manage the machine. It was soon on an even keel again, and once more was shooting forward around the course.

At times Tom would be in advance, and again he would have to give place to the Curtis, the Farman, or the Santos-Dumont, as these speedy machines, favored by a spurt from their motors, or by some current of air, shot ahead. But, in general, Tom maintained the lead, and among the spectators there began a series of guesses as to how much he would win by.

Tom glanced at the barograph. It registered a little over twelve hundred feet. He looked at the speed gage. He was doing a trifle better than a hundred miles an hour. He looked down at the signals. There was twenty miles yet to go. It was almost time for the spurt for which he had been holding back. Yet he would wait until five miles from the end, and then he felt that he could gain and maintain a lead.

“Andy seems to be doing well,” said Mr. Da-

mon.

“Yes, he has a good machine,” conceded Tom.

Five miles more were reeled off. Then another five. Another round of that distance and Tom would key his motor up to the highest pitch, and then the *Humming-Bird* would show what she could do. Eagerly Tom waited for the right signal.

Suddenly the wireless began buzzing again. Quickly the young inventor clamped the receiver to his ear. Mr. Damon saw him turn pale.

“Dr. Gladby says dad has a turn for the worse. There is little hope,” translated Tom.

“Will you—are you going to quit?” asked Mr. Damon.

Tom shook his head.

“No!” he cried. “My father has become unconscious, so Mr. Jackson says, but his last words were to me: ‘Tell Tom to win the race!’ And I’m going to do it!”

Tom suddenly changed his plans. There was to be no waiting for the signal now. He would begin his final spurt, and if possible finish the hundred miles at his utmost speed, win the race and then hasten to his father’s side.

With a menacing roar the motor of the *Humming-Bird* took up the additional power that Tom sent into her. She shot ahead like an eagle darting after his prey. Tom opened up a big gap between his machine and the one nearest him, which, at that moment, was the Antoinette, with the Spaniard driving her.

“Now to win!” cried Tom, grimly.

Surely no race was ever flown as was that one! Tom flashed through the air so quickly that his speed was almost incredible. The gage registered one hundred and thirty miles an hour!

Down below in the grand stands, and on the aviation field, there were yells of approval—of wonder—of fear. But Tom and Mr. Damon could not hear them. They only heard the powerful song of the motor.

Faster and faster flew the *Humming-Bird*. Tom looked down, and saw the signal put up which meant that there were but three miles more to go. He felt that he could do it. He was half a lap ahead of them all now. But he saw Andy Foger's machine pulling away from the bunch.

“He's going to try to catch me!” exulted Tom.

Then something happened. The motor of the *Humming-Bird* suddenly slackened its speed, it missed explosions, and the trim little craft began to drop behind.

“What's the matter?” cried Mr. Damon.

“Three of the cylinders are out of business!” yelled Tom. “We're done for, I guess.”

On came the other machines, Andy in the lead, then the Santos-Dumont, then the Farman, and lastly the Wright. They saw the plight of the *Humming-Bird* and determined to beat her. Tom cast a despairing look up at the motor. There was nothing to be done. He could not reach it in mid-air. He could only keep on, crippled as he was, and trust to luck.

Andy passed by his rival with an evil smile on his ugly face. Then the Antoinette flashed by. In turn all the others left Tom in the rear. Tom's heart was like lead. Mr. Damon gazed blankly forward. They were beaten. It did not seem possible.

There was but a single chance. If Tom shut off all power, coasted for a moment, and then, ere the propeller had ceased revolving, if he could start the motor on the spark, the silent cylinders might pick up, with the others, and begin again. He would try it. They could be no worse off than they were.

"A mile behind!" gasped Tom. "It's a long chance, but I'll take it."

He shut off the power. The motor was silent. the *Humming-Bird* began to fall. But ere she had gone down ten feet Tom suddenly switched on the batteries. There was a moment of silence, and then came the welcome roar that told of the rekindled motor. And such a roar as it was! Every cylinder was exploding as though none of them had ever stopped!

"We did it!" yelled Tom. Opening up at full speed, he sent the sky racer on the course to overtake and pass his rivals.

Slowly he crept on them. They looked back and saw him coming. They tried to put on more speed, but it was impossible. Andy Foger was in the lead. He was being slowly overhauled by the Santos-Dumont, with the queer tail-rudders.

"I'll get him!" muttered Tom. "I'll pass 'em all!"

And he did. With a wonderful burst of speed the little *Humming-Bird* overtook one after another of her larger rivals, and passed them. Then she crept up on Andy's *Slugger*.

In an instant more it was done, and, a good length in advance of the Foger craft, Tom shot over the finish line a winner, richer by ten thousand dollars, and, not only that, but he had picked up a mile that had been lost, and had snatched victory from almost certain defeat.

There was a succession of thundering cheers as he shut off the motor, and volplaned to earth, but he paid little attention to them. He brought his craft to a stop just as the wireless on it buzzed again.

He listened with a look of pain on his face.

"My father is dying," he said simply. "I must go to him. Mr. Damon, will you fill the tanks with oil and gasoline, while I send off a message?"

"Oil and gasoline," murmured the odd man, while hundreds pressed up to congratulate Tom Swift "What are you going to do?"

"I'm going to my father in the *Humming-Bird*," said Tom. "It's the only way I can see him alive," and he began to click off a message to Mr. Jackson, stating that he had won the race and was going to fly to Shopton, while Mr. Damon and several others replenished the fuel and oil of the aeroplane.

Tom Swift had won one race. Could he win the other?

# Home Again — Conclusion

Mr. Sharp pushed his way through the crowd.

“The committee has the certified check ready for you, Tom,” called the balloonist. “Will you come and get it?”

“Send it to me, please,” answered the young inventor. “I must go to my father.”

“Huh! I’d have beaten him in another round,” boasted Andy Foger. No one paid any attention to him.

“Monsieur ezz plucky!” said the Frenchman, Perique. “I am honaired to shake his hand! He has broken all ze records!”

“Dot’s der best machine I effer saw,” spoke the Dutchman, De Tromp, ponderously. “Shake hands!”

“Ver’ fine, ver’ good!” came from the little Japanese, and all the contestants congratulated Tom warmly. Never before had a hundred miles been covered so speedily.

A man elbowed his way through the press of people.

“Is your machine fully protected by patents?” he inquired earnestly.

"It is," said Tom.

"Then, as a representative of the United States Government, I would like an option to purchase the exclusive right to use them," said the man. "Can you guarantee that no one else has any plans of them? It will mean a fortune to you."

Tom hesitated. He thought of the stolen plans. If he could only get possession of them! He glanced at Andy Foger, who was wheeling his machine hack into the tent. But there was no time now to have it out with the bully.

"I will see you again," said Tom to the government agent. "I must go to my father, who is dying. I can't answer you now."

The tanks were filled. Tom gave a hasty look to his machine, and, bidding his new friends fairwell, he and Mr. Damon took their places aboard the *Humming-Bird*. The little craft rose in the air, and soon they had left Eagle Park far behind. Eagerly Tom strained his eyes for a sight of his home town, though he knew it would be several hours ere he could hover over it.

Would he be in time? Would he be in time? That question came to him again and again.

For a time the *Humming-Bird* skimmed along as though she delighted in the rapid motion, in slipping through the air and sliding along on the billows of wind. Tom, with critical ears, listened to the hum of the motor, the puffing of the exhaust, the grinding of the gear wheels, and the clicking of the trips, as valve after valve opened or closed to admit the mixture of air and gasoline, or closed to

give the compression necessary for the proper explosion.

“Is she working all right?” asked Mr. Damon, anxiously, and, such was the strain on him that he did not think to bless anything. “Is she all right, Tom, my lad?”

“I think so. I’m speeding her to the limit. Faster than I ever did before, but I guess she’ll do. She was built to stand a strain, and she’s got to do it now!”

Then there was silence again, as they slid along through the air like a coaster gliding down a steep descent.

“It was a great race, wasn’t it?” asked Mr. Damon, as he shifted to an easier position in his seat. “A great race, Tom. I didn’t think you’d do it, one spell there.”

“Neither did I,” came the answer, as the young inventor changed the spark lever. “But I made up my mind I wouldn’t be beaten by Andy Foger, if I could help it. Though it was taking a risk to shut off the current the way I did.”

“A risk?”

“Yes; it might not have started again,” and Tom looked down at the earth below them, as if measuring the distance he would have fallen had not his sky racer kept on at the critical moment.

“And—and if the current hadn’t come on again; eh, Tom? Would we—?”

Mr. Damon did not finish, but Tom knew what he meant.

“It would have been all up with us,” he said simply. “I might have volplaned back to earth,

but at the speed we were going, and at the height, around a curve, we might have turned turtle.”

“Bless my—!” began Mr. Damon, and then he stopped. The thought of Tom’s trouble came to him, and he realized that his words might grate on the feelings of his companion.

On they rushed through the air with the *Humming-Bird* speeded up faster and faster as she warmed to her task. The machinery seemed to be working perfectly, and as Tom listened to the hum a look of pleasure replaced the look of anxiety on his face.

“Don’t you think we’ll make it?” asked Mr. Damon, after another pause, during which they passed over a large city, the inhabitants exhibiting much excitement as they sighted the airship over their heads.

“We’ve got to make it!” declared Tom between his clenched teeth.

He turned on a little more gasoline, and there was a spurt in their speed which made Mr. Damon grasp the upright braces near him with firm hands, and his face became a little paler.

“It’s all right,” spoke Tom, reassuringly. “There’s no danger.”

But Tom almost reckoned without his host, for a few moments later, as he was trying to get more revolutions out of the propellers, he ran into an adverse current of air.

In an instant the *Humming-Bird* was tilted up almost on her “beams’ ends,” so to speak, and had it not been that the young inventor quickly warped the wing tips, to coun-

teract the pressure on one side, there might have been a different end to this story.

“Bless my—!” began Mr. Damon, but he got no further, for he had to bend his body as Tom did, to equalize the pressure of the wind current.

“A little farther over!” yelled the lad. “A little farther over this way, Mr. Damon!”

“But if I come any more toward you I’ll be out of my seat!” objected the eccentric man.

“If you don’t you’ll be out of the aeroplane!” cried Tom grimly, and his companion leaned over as far as he could until the young pilot had brought the craft to an even keel again.

Then Tom speeded up the motor, which he had partly shut down as they passed through the danger zone, and again they were racing through space.

They were nearing Shopton now, as the lad and Mr. Damon could tell by the familiar landmarks which loomed up in sight. Tom strained his eyes for the first view of his home.

Suddenly, as they were skimming along, there came a cessation of the hum and roar that told of the perfectly-working motor. It was an ominous silence.

“What’s—what’s wrong?” gasped Mr. Damon.

“Something’s given way,” answered Tom quickly. “I’m afraid the magneto isn’t sparking as it ought to.”

“Well, can’t we volplane hack to earth?” asked the odd man, for he had become familiar with this feat when anything happened to the motor.

“We could,” answered Tom, “but I’m not going to.”

“Why not?”

“Because we’re too far from Shopton—and dad! I’m going to keep on. I’ve got to—if I want to be there in time!”

“But if the motor doesn’t work?”

“I’ll make her work!”

Tom was desperately manipulating the various levers and handles connected with the electrical ignition system. He tried in vain to get the magneto to resume the giving out of sparks, and, failing in that, he switched on the batteries. But, to his horror, the dry cells had given out. There was no way of getting a spark unless the little electrical machine would work.

The propellers were still whirring around by their own momentum, and if Tom could switch in the magneto in time all might yet be well.

They had started to fall, but, by quickly bringing up the head plane tips, Tom sent his craft soaring upward again on a bank of air.

“Here!” he cried to Mr. Damon. “Take the steering-wheel and kept her on this level as long as you can.”

“What are you going to do?”

“I’ve got to fix that magneto!”

“But if she dips down?”

“Throw up the head planes as I did. It’s our only chance! I can’t go down now, so far from Shopton!”

Mr. Damon reached over and took the wheel from Tom’s hands. Then the young in-

ventor, leaning forward, for the magneto was within easy reach, looked to see what the trouble was. He found it quickly. A wire had vibrated loose from a binding-post. In a second Tom had it in place again; and, ere the propellers had ceased revolving, he had turned the switch. The magneto took up the work in a flash. Once more the spark exploded the gasoline mixture, and the propellers sent the *Humming-Bird* swiftly ahead.

“We’ll make it now!” declared Tom grimly.

“We’re almost there,” added Mr. Damon, as he relinquished the wheel to the young pilot. The craft had gone down some, but Tom sent her up again.

Nearer and nearer home they came, until at last the spires of the Shopton churches loomed into view. Then he was over the village. Now he was within sight of his own house.

Tom coasted down a bank of air, and brought the *Humming-Bird* up with a jerk of the ground brakes. Before the wheels had ceased turning he had leaped out.

“It’s Massa Tom!” cried Eradicate, as he saw Tom alight.

The young inventor hurried into the house. He was met by the nurse, who held up a warning finger. Tom’s heart almost stopped beating. He was aware that Dr. Gladby came from the room where Mr. Swift lay.

“Is he—is he—am I too late?” gulped Tom.

“Hush!” cautioned the nurse.

Tom reeled, and would have fallen had not the doctor caught him, for the lad was weak

and worn out.

"He is going to get well!" were the joyful words he heard, as if in a dream, and then his strength suddenly came back to him. "The crisis is just passed, Tom," went on Dr. Gladby, "and your father will recover, and be stronger than ever. Your good news of winning was like a tonic to him. Now let me congratulate you on the race." Tom had flashed by wireless a brief message of his success.

"Dad's news is better than all the congratulations in the world," he said softly, as he grasped the doctor's hand.

It was a week later. Mr. Swift improved rapidly once the course of the disease was permanently checked, and he was soon able to sit up. Tom was with him in the room, talking of the great race, and how he had won. He fingered the certified check for ten thousand dollars that had just come to him by mail.

"You certainly did wonderfully well," said the aged inventor, softly. "Wonderfully well, Tom. I'm proud of you."

"You may well be," added Mr. Damon. "Bless my shoelaces, but I thought Andy Foger had us there one spell; didn't you, Tom?"

"Indeed I did. But you helped me win, Mr. Damon."

"Nonsense!" exclaimed the odd man.

"Yes, you did. You helped me a lot."

"Well, are you going to keep after more air-prizes, Tom, or are you going to try for something else?" asked his father.

"I don't believe I'll go in any more aero-

plane races right away,” answered the young inventor. “For some time I’ve been wanting to complete and perfect my electric rifle. I think I’ll begin work on that soon.”

“And go hunting?” asked Mr. Damon.

“I think so,” answered Tom, dreamily. “I don’t know just where, though.”

Where he went, and what he shot, will be told in the next volume of this series, to be called: “Tom Swift and His Electric Rifle; or, Daring Adventures in Elephant Land.”

For a few moments after Tom’s announcement no one spoke, then the young inventor said:

“It’s too bad that first set of plans were stolen. If I had them I could make a good deal with the Government about my little aeroplane. But they don’t want to take up with it as long as there is a chance of some foreign nation getting information about the secret parts, and my patents won’t hold abroad. I wonder if there is any way of getting those plans away from Andy Foger? I don’t understand why he hasn’t used them before this. I thought sure he would make a craft like the *Humming-Bird* to race against me.”

“What plans are those?” asked Mr. Swift.

“Why, don’t you remember?” asked Tom. “The ones I showed you one day, in the library, when you fell asleep, and some one slipped in and stole them.”

A curious look came over Mr. Swift’s face. He passed his hand across his brow.

“I am beginning to remember something I have been trying to recall ever since I became

ill," he said slowly. "It is coming back to me. Those plans—in the library—I fell asleep, but before I did so I hid those plans, Tom!"

"You hid those plans!" Tom fairly shouted the words.

"Yes, I remember feeling a drowsy feeling coming on, and I feared lest some one might see the drawings. I got up and put them under the window, in a little, hollow place in the foundation wall. Then I came back in through the window again, and went to sleep. Then, on account of my illness, just as I once before forgot something, and thought the minister had called, I lost all recollection of them. I hid those plans."

Tom leaped to his feet. He rushed to the place named by his father. Soon his triumphant shout told of his success. He came hurrying back into the house with a roll of papers in his hands.

And there were the long-missing plans! damp and stained by the weather, but all there. No enemy had them, and Tom's secret was safe.

"Now I can accept the Government offer!" he cried. And a few weeks later he made a most advantageous deal with the United States officials for his patents.

Dr. Gladby explained that Mr. Swift's queer action was due to his illness. He became liable to lapses of memory, and one happened just after he hid away the plans. Even the hiding of them was caused by the peculiar condition of his brain. He had opened the library window, slipped out with the papers, and has-

tened in again, to fall asleep in his chair, during the short time Tom was gone.

“And Andy Foger never took them at all,” remarked Mary Nestor, when Tom was telling her about it a few days afterward.

“No. I guess I must apologize to him.” Which Tom did, but Andy did not receive it very graciously, especially as Tom accused him of trying to destroy the *Humming-Bird*.

Andy denied this and denied having anything to do with the mysterious fire, and, as there was no way to prove him guilty, Tom could not proceed against him. So the matter was dropped.

Mr. Swift continued to improve, and was soon himself again, and able to resume his inventive work. Tom received several offers to give exhibition flights at big aero meets, but refused, as he was busy on his new rifle. Mr. Damon helped him.

Andy Foger made several successful flights in his queer aeroplane, which turned out to be the product of a German genius who was supplied with money by Mr. Foger. Andy became very proud, and boasted that he and the German were going abroad to give flights in Europe.

“I’d be glad if he would,” said Tom, when he heard of the plan. “He wouldn’t bother me then.”

With the money received from winning the big race, and from his contracts from the Government, Tom Swift was now in a fair way to become quite wealthy. He was destined to have many more adventures; yet, come what

might, never would he forget the thrilling happenings that fell to his lot while flying for the ten-thousand dollar prize in his sky racer.