

Chapter VIII

THE BALLOONISTS REFUSE TO BE CONVINCED

The President of the Weldon Institute was stupefied; his companion was astonished. But neither of them would allow any of their very natural amazement to be visible.

The valet Frycollin did not conceal his terror at finding himself borne through space on such a machine, and he took no pains whatever to hide it.

The suspensory screws were rapidly spinning overhead. Fast as they were going, they would have to triple their speed if the "Albatross" was to ascend to higher zones. The two propellers were running very easily and driving the ship at about eleven knots an hour.

As they leaned over the rail the passengers of the "Albatross" could perceive a long sinuous liquid ribbon which meandered like a mere brook through a varied country amid the gleaming of many lagoons obliquely struck by the rays of the sun. The brook was a river, one of the most important in that district. Along its left bank was a chain of mountains extending out of sight.

"And will you tell us where we are?" asked Uncle Prudent, in a voice

tremulous with anger.

"I have nothing to teach you," answered Robur.

"And will you tell us where we are going?" asked Phil Evans.

"Through space."

"And how long will that last?"

"Until it ends."

"Are we going round the world?" asked Phil Evans ironically.

"Further than that," said Robur.

"And if this voyage does not suit us?" asked Uncle Prudent.

"It will have to suit you."

That is a foretaste of the nature of the relations that were to obtain between the master of the "Albatross" and his guests, not to say his prisoners. Manifestly he wished to give them time to cool down, to admire the marvelous apparatus which was bearing them through the air, and doubtless to compliment the inventor. And so he went off to the other end of the deck, leaving them to examine the

arrangement of the machinery and the management of the ship or to give their whole attention to the landscape which was unrolling beneath them.

"Uncle Prudent," said Evans, "unless I am mistaken we are flying over Central Canada. That river in the northwest is the St. Lawrence. That town we are leaving behind is Quebec."

It was indeed the old city of Champlain, whose zinc roofs were shining like reflectors in the sun. The "Albatross" must thus have reached the forty-sixth degree of north latitude, and thus was explained the premature advance of the day with the abnormal prolongation of the dawn.

"Yes," said Phil Evans, "There is the town in its amphitheater, the hill with its citadel, the Gibraltar of North America. There are the cathedrals. There is the Custom House with its dome surmounted by the British flag!"

Phil Evans had not finished before the Canadian city began to slip into the distance.

The clipper entered a zone of light clouds, which gradually shut off a view of the ground.

Robur, seeing that the president and secretary of the Weldon

Institute had directed their attention to the external arrangements of the "Albatross," walked up to them and said: "Well, gentlemen, do you believe in the possibility of aerial locomotion by machines heavier than air?"

It would have been difficult not to succumb to the evidence. But Uncle Prudent and Phil Evans did not reply.

"You are silent," continued the engineer. "Doubtless hunger makes you dumb! But if I undertook to carry you through the air, I did not think of feeding you on such a poorly nutritive fluid. Your first breakfast is waiting for you."

As Uncle Prudent and Phil Evans were feeling the pangs of hunger somewhat keenly they did not care to stand upon ceremony. A meal would commit them to nothing; and when Robur put them back on the ground they could resume full liberty of action.

And so they followed into a small dining-room in the aftermost house. There they found a well-laid table at which they could take their meals during the voyage. There were different preserves; and, among other things, was a sort of bread made of equal parts of flour and meat reduced to powder and worked together with a little lard, which boiled in water made excellent soup; and there were rashers of fried ham, and for drink there was tea.

Neither had Frycollin been forgotten. He was taken forward and there found some strong soup made of this bread. In truth he had to be very hungry to eat at all, for his jaws shook with fear, and almost refused to work. "If it was to break! If it was to break!" said the unfortunate Negro. Hence continual faintings. Only think! A fall of over four thousand feet, which would smash him to a jelly!

An hour afterwards Uncle Prudent and Phil Evans appeared on the deck. Robur was no longer there. At the stem the man at the wheel in his glass cage, his eyes fixed on the compass, followed imperturbably without hesitation the route given by the engineer.

As for the rest of the crew, breakfast probably kept them from their posts. An assistant engineer, examining the machinery, went from one house to the other.

If the speed of the ship was great the two colleagues could only estimate it imperfectly, for the "Albatross" had passed through the cloud zone which the sun showed some four thousand feet below.

"I can hardly believe it," said Phil Evans.

"Don't believe it!" said Uncle Prudent. And going to the bow they looked out towards the western horizon.

"Another town," said Phil Evans.

"Do you recognize it?"

"Yes! It seems to me to be Montreal."

"Montreal? But we only left Quebec two hours ago!"

"That proves that we must be going at a speed of seventy-five miles an hour."

Such was the speed of the aeronef; and if the passengers were not inconvenienced by it, it was because they were going with the wind. In a calm such speed would have been difficult and the rate would have sunk to that of an express. In a head-wind the speed would have been unbearable.

Phil Evans was not mistaken. Below the "Albatross" appeared Montreal, easily recognizable by the Victoria Bridge, a tubular bridge thrown over the St. Lawrence like the railway viaduct over the Venice lagoon. Soon they could distinguish the town's wide streets, its huge shops, its palatial banks, its cathedral, recently built on the model of St. Peter's at Rome, and then Mount Royal, which commands the city and forms a magnificent park.

Luckily Phil Evans had visited the chief towns of Canada, and could recognize them without asking Robur. After Montreal they passed

Ottawa, whose falls, seen from above, looked like a vast cauldron in ebullition, throwing off masses of steam with grand effect.

"There is the Parliament House."

And he pointed out a sort of Nuremburg toy planted on a hill top. This toy with its polychrome architecture resembled the House of Parliament in London much as the Montreal cathedral resembles St. Peter's at Rome. But that was of no consequence; there could be no doubt it was Ottawa.

Soon the city faded off towards the horizon, and formed but a luminous spot on the ground.

It was almost two hours before Robur appeared. His mate, Tom Turner, accompanied him. He said only three words. These were transmitted to the two assistant engineers in the fore and aft engine-houses. At a sign the helmsman changed the-direction of the "Albatross" a couple of points to the southwest; at the same time Uncle Prudent and Phil Evans felt that a greater speed had been given to the propellers.

In fact, the speed had been doubled, and now surpassed anything that had ever been attained by terrestrial Engines. Torpedo-boats do their twenty-two knots an hour; railway trains do their sixty miles an hour; the ice-boats on the frozen Hudson do their sixty-five miles an hour; a machine built by the Patterson company, with a cogged wheel,

has done its eighty miles; and another locomotive between Trenton and Jersey City has done its eighty-four.

But the "Albatross," at full speed, could do her hundred and twenty miles an hour, or 176 feet per second. This speed is that of the storm which tears up trees by the roots. It is the mean speed of the carrier pigeon, and is only surpassed by the flight of the swallow (220 feet per second) and that of the swift (274 feet per second).

In a word, as Robur had said, the "Albatross," by using the whole force of her screws, could make the tour of the globe in two hundred hours, or less than eight days.

Is it necessary to say so? The phenomenon whose appearance had so much puzzled the people of both worlds was the aëroplane of the engineer. The trumpet which blared its startling fanfares through the air was that of the mate, Tom Turner. The flag planted on the chief monuments of Europe, Asia, America, was the flag of Robur the Conqueror and his "Albatross."

And if up to then the engineer had taken many precautions against being recognized, if by preference he traveled at night, clearing the way with his electric lights, and during the day vanishing into the zones above the clouds, he seemed now to have no wish to keep his secret hidden. And if he had come to Philadelphia and presented himself at the meeting of the Weldon Institute, was it not that they

might share in his prodigious discovery, and convince "ipso facto" the most incredulous? We know how he had been received, and we see what reprisals he had taken on the president and secretary of the club.

Again did Robur approach his prisoners, who affected to be in no way surprised at what they saw, of what had succeeded in spite of them. Evidently beneath the cranium of these two Anglo-Saxon heads there was a thick crust of obstinacy, which would not be easy to remove.

On his part, Robur did not seem to notice anything particular, and coolly continued the conversation which he had begun two hours before.

"Gentlemen," said he, "you ask yourselves doubtless if this apparatus, so marvelously adapted for aerial locomotion, is susceptible of receiving greater speed. It is not worth while to conquer space if we cannot devour it. I wanted the air to be a solid support to me, and it is. I saw that to struggle against the wind I must be stronger than the wind, and I am. I had no need of sails to drive me, nor oars nor wheels to push me, nor rails to give me a faster road. Air is what I wanted, that was all. Air surrounds me as it surrounds the submarine boat, and in it my propellers act like the screws of a steamer. That is how I solved the problem of aviation. That is what a balloon will never do, nor will any machine that is lighter than air."

Silence, absolute, on the part of the colleagues, which did not for a moment disconcert the engineer. He contented himself with a half-smile, and continued in his interrogative style, "Perhaps you ask if to this power of the "Albatross" to move horizontally there is added an equal power of vertical movement--in a word, if, when, we visit the higher zones of the atmosphere, we can compete with an aerostat? Well, I should not advise you to enter the "Go-Ahead" against her!"

The two colleagues shrugged their shoulders. That was probably what the engineer was waiting for.

Robur made a sign. The propelling screws immediately stopped, and after running for a mile the "Albatross" pulled up motionless.

At a second gesture from Robur the suspensory helices revolved at a speed that can only be compared to that of a siren in acoustical experiments. Their f-r-r-r-r rose nearly an octave in the scale of sound, diminishing gradually in intensity as the air became more rarified, and the machine rose vertically, like a lark singing his song in space.

"Master! Master!" shouted Frycollin. "See that it doesn't break!"

A smile of disdain was Robur's only reply. In a few minutes the "Albatross" had attained the height of 8,700 feet, and extended the

range of vision by seventy miles, the barometer having fallen 480 millimeters.

Then the "Albatross" descended. The diminution of the pressure in high altitudes leads to the diminution of oxygen in the air, and consequently in the blood. This has been the cause of several serious accidents which have happened to aeronauts, and Robur saw no reason to run any risk.

The "Albatross" thus returned to the height she seemed to prefer, and her propellers beginning again, drove her off to the southwest.

"Now, sirs, if that is what you wanted you can reply." Then, leaning over the rail, he remained absorbed in contemplation.

When he raised his head the president and secretary of the Weldon Institute stood by his side.

"Engineer Robur," said Uncle Prudent, in vain endeavoring to control himself, "we have nothing to ask about what you seem to believe, but we wish to ask you a question which we think you would do well to answer."

"Speak."

"By what right did you attack us in Philadelphia in Fairmount Park?"

By what right did you shut us up in that prison? By what right have you brought us against our will on board this flying machine?"

"And by what right, Messieurs Balloonists, did you insult and threaten me in your club in such a way that I am astonished I came out of it alive?"

"To ask is not to answer," said Phil Evans, "and I repeat, by what right?"

"Do you wish to know?"

"If you please."

"Well, by the right of the strongest!"

"That is cynical."

"But it is true."

"And for how long, citizen engineer," asked Uncle Prudent, who was nearly exploding, "for how long do you intend to exercise that right?"

"How can you?" said Robur, ironically, "how can you ask me such a question when you have only to cast down your eyes to enjoy a spectacle unparalleled in the world?"

The "Albatross" was then sweeping across the immense expanse of Lake Ontario. She had just crossed the country so poetically described by Cooper. Then she followed the southern shore and headed for the celebrated river which pours into it the waters of Lake Erie, breaking them to powder in its cataracts.

In an instant a majestic sound, a roar as of the tempest, mounted towards them and, as if a humid fog had been projected into the air, the atmosphere sensibly freshened. Below were the liquid masses. They seemed like an enormous flowing sheet of crystal amid a thousand rainbows due to refraction as it decomposed the solar rays. The sight was sublime.

Before the falls a foot-bridge, stretching like a thread, united one bank to the other. Three miles below was a suspension-bridge, across which a train was crawling from the Canadian to the American bank.

"The falls of Niagara!" exclaimed Phil Evans. And as the exclamation escaped him, Uncle Prudent was doing all could do to admire nothing of these wonders.

A minute afterwards the "Albatross" had crossed the river which separates the United States from Canada, and was flying over the vast territories of the West.