

# SAILING THE SKY

## Exciting Voyage of the Air Ship Canada.

### RUDDER AND PINIONS

#### Both Used with Some Degree of Success

[By Telegraph to the Herald]

ST. HYACINTHE, Quebec August 1, 1879. Preparations for the ascension from Montreal of the balloon Canada were completed by Messrs. Grimley, Cowan and Pagé at half-past five last evening, when the aerial voyagers stepped boldly into the car. We commenced to float at just a quarter to six o'clock, and ere the cheers of the few hundred people who were assembled had fairly commenced we had risen far above steeples and trees. The wind was blowing due east, and we passed over the aristocratic part of the town with a speed that was startling to the novices in ballooning who crowded the basket. There were six in all— Messrs. Grimley and Cowan and Pagé, Mr. Moulton, of the Montreal *Witness*; Mr. Browning, of the Montreal *Herald*, and Mr. Harper, of the Montreal *Star* staff. The latter gentleman started at a moment's notice, and had not the slightest intention of going until Mr. Cowan called for him.

There was very little conversation after the balloon started. The crowd cheered and waved their handkerchiefs. Those on the car forgot to do either until they were more than half a mile high, when Mr. Cowan made the suggestion that it should be done. He was mounted upon the netting hoop, and from that place gave his orders as coolly as if he stood on the quarter deck of a United States frigate. Mr. Moulton manned the helm, which had been remodelled with the intention of causing the airship to act in the same manner as an ordinary vessel. The new rudder was made of linen and was provided with a powerful lever as a handle. No one thought of manning the flying machinery.

#### A BEAUTIFUL BIRDSEYE VIEW

We floated upward with great rapidity, and when crossing the new dorks at the mouth of the La-chine Canal were 1,500 feet high. We were lazily watching the scenery. A bright and beautiful prospect was before, behind, all around us, and the eye was puzzled which side of the compass it should rest upon longest, as the mind was as to which scene the senses were most delighted with. We could see the Lachine Rapids, their foam now

dwindled to almost imperceptible proportions. A tiny speck upon the surface of the water looked like a small toy steamer, but was in reality the Upper Canada boat, which had carried its crowd of excursionists past the Thousand Islands. The back waters of the Ottawa shone like silver threads in an emerald carpet of various shades, and the waters of the Richelieu had the appearance of a narrow streamlet shining afar off, Victoria Bridge looked like a fairy sized cable stretched across the river and the Boucherville Mountains sank into insignificance. As we rose to a height of 2,500 feet we could see the difference between the water of the Ottawa River on the north side of the St. Lawrence and that of the St. Lawrence itself, which floated majestically along. We could discern every rock in the bed of the St. Lawrence River, and it had the appearance of a stream only three or four inches deep. Steamers were plying to and from either bank, but they looked like straws upon the surface.

The balloon continued to fall when we had reached the St. Lambert wharf, on the south side of the river, and we could distinguish small objects on shore very plainly, We must have travelled very quickly, as this point is about six miles from that from which we started, and the watches showed that only five minutes had flown past since we bade goodby to the Shamrock Lacrosse Grounds.

#### CONVERSATION IN MID AIR

Each of the party was in wrapt admiration of the scene, though what each one thought of his personal safety was a difficult question. We stood almost still at this point, nearly seventeen hundred feet high, and conversation commenced to flow.

“Are you afraid at all?” asked Mr. Grimley, of the *Star* reporter.

“Not at all,” replied the other. “I do not care much for the sensation, however, look at my hand, it is steady enough”, and he held up his hand, as did also Mr. Browning, of the *Montreal Herald*.

There certainly was not much nervousness about either. Suddenly Mr. Cowan, perched *a la* commodore in the rigging, cried out;—

"Turn the wings! We have forgotten to use them."

Then commenced the first experiment of the day with the machinery. Mr. Moulton steered, Mr. Grimley and Mr. Harper manned the port side of the windlass which worked the wings, and Mr. Browning and Mr. Pagé took the other side. Away went the wings, while the balloon showed immediately that they added considerably to her momentum. The fans had been fixed to ascend and we went up very fast, until Mr. Pagé cried out, "Stop! Stop! We are sawing away the balloon netting!" And sure enough there was much need of caution. The basket had been rigged a little too near the netting of the balloon.

Had the friction of the paddles upon the ropes, which had been hauled taut by the weight of the car, continued there is little doubt that they would soon have been separated. The six men and 400 pounds of ballast would then have flown to mother earth without further trouble. The balloon must have felt the impetus of the wings, however, for without throwing out any ballast we quickly rose to the highest attitude yet attained—some two thousand seven hundred feet. We were fairly over St. Lambert village now, and heard children's screams and the shrieks of locomotives and steamers saluting us. We answered as usual with waving handkerchiefs, while Mr. Cowan spoke to people and they answered back, proving that a conversation can be carried on at that distance

### SINKING IN A CALM

The wind had died away considerably and the weather afforded the best opportunity which had been had for testing the balloon. Mr. Cowan was impatient to commence the work, but Mr. Pagé and others suggested that it would be better to wait until we should draw nearer the earth. We were already descending. A handful of handbills thrown out flew upward with a rush, a few seconds longer and we struck a lower current of air, which carried us along with great speed. Our altitude was now 2,000, now 1,800 feet. Mr. Grimley threw over some ballast, but the descent continued until the barometer showed us but 1,500 feet from the earth. We did not get any lower just here. We were now between St. Lambert and Longueil, and the watches showed that we had been fifteen minutes in the air. The thermometer stood at 85 degrees, and the heat of the sun was intense, while the gas was running out of the mouth of the balloon with sickening velocity.

“Look up the mouth of the balloon,” said Mr. Grimley

The gas was as transparent as air, and we could see every stitch in the canvas which separated us from a prospective eternity above and a perilous plunge below.

“It would not take us long to get down,” suggested one of the party.

The suggestion sent a thrill through more than one of us, which was heightened by the noise of a cord in the netting snapping. Just before the balloon left the earth a clumsy citizen, while removing one of the ballast bags from the car netting, had torn a large hole in the netting and the crack, crack of the companion cords every now and then was not encouraging. But who cared? We wore over a prospect beautiful and intoxicating in splendor, such a one as no one but a balloonist can see, and there was a charm in the whole business which drove fear from the heart of the most timid.

## TESTING THE WINGS

Suddenly the balloon gave a lurch, and Mr. Cowan, whose nervous movement had caused it, remarked, "We must have a trial of those wings." By this time we were nearing the Richelieu River. Boucherville Mountain was below us, to the right, and the large lake looked like a mirror, except that we could see that its banks were composed of weeds, rock and mud. "Come up here Mr. Grimley," said Mr. Cowan. "We must try the wings."

Mr. Grimley, supplied with knife and stout cord, climbed into the netting and proceeded to take rest in the supporting ropes. Mr. Cowan helped him, and the pair worked away there, 2,750 feet above the earth, as coolly as if they were seated in some workshop on Sixth Avenue. Meanwhile the air was very calm, and the little party at the bottom of the bucket waited with impatience for the result. At length Mr. Cowan remarked— "There she is! That will do now."

Mr. Grimley then descended to the basket, and in a few moments the wings were adjusted. By this time it was fifteen minutes past six o'clock. The wheels were manned, and, the fans having been adjusted to lower the balloon, away she went with a few turns 200 feet down. We floated for a time downward, and at length became stationary. From the paper thrown overboard it was evident that the air ship was stationary, and the wings having been adjusted in the meantime for rising, we worked away for about thirty seconds. The going up was not so easily performed as had been the descent, but the barometer showed that we had risen 150 feet. Soon after this we commenced to descend rapidly.

"If this is to succeed we must have a motor," remarked Mr. Grimley.

The effect of the paddles or wings was now beyond question.

## FLYING WITH THE WIND

"Now try the wings going forward." said Commodore Cowan from his perch.

Mr. Pagé adjusted the machine in a few seconds and soon the wheels were revolving in a manner that greatly accelerated the movements of the balloon as we were paddling with the wind.

"Give it to her!" said Grimley and four willing hands paddled away with might and main, the balloon car shaking and jolting as we sped along. We were falling a little as well as going forward, and Mr. Grimley suddenly cried out, "Stop! Stop!" in such a peremptory and energetic manner as to startle every one. We looked up inquiringly, but the Professor was silent.

“I have a big tear in that netting.” he at length remarked in an undertone, “and I do not like this jolting just at present.”

We stopped our labors, and had now time to notice that we had crossed the Richelieu River and were passing several miles north of the village of St. Hilaire, situated on its bank. We had changed our course a good deal, the wind having shifted around toward the north, and instead of passing directly over Beloeil Mountain we went away ten miles to the north of it. After we had ceased the paddling the balloon fell considerably, and as we passed along we could hold conversation with the people. On looking around we could see lakes and rivers in all directions. We could trace the Richelieu's course from its junction with the St. Lawrence at Sorel away toward Lake Champlain and past St. Hilaire, Chambly Basin, St. Johns, to the lake itself. Montreal Island sat like a small spot upon the waters, and the river Ottawa could be seen, with all its branches, from St. Anns downward. The sun was sinking, and on expressing surprise that we could see such a distance Mr. Grimley reminded us that he had discharged some ballast. When we crossed the Richelieu we were again floating at a height of about twenty-eight hundred feet, with the thermometer at eighty-five.

#### ATTEMPTING TO LAND

The speed of the balloon must have been about forty miles an hour, and the railway trains seemed to move at a snail's pace compared to the speed at which we sometimes went. It was proposed that a landing should be made at a point near St. Hilaire, and, as the *Star* representative was anxious to be near a railway, it was suggested that he should be the passenger dropped. A man in a buggy was hailed and asked if he would take a passenger to the railway, but there were other parties to the contract. The lower current of air was struck and it was a severe one, for it carried us over St. Madeline in a mile a minute hurry. The drop rope had struck the ground and was trailing along, while cows, horses and sheep ran for dear life, as if a condor of the olden time were after them. Women and children were heard to scream, and the drag rope looked as if we were to do some damage to a couple of houses directly in front of us. The rope hit a shed and made the chips fly. At the next moment it tore three or four shingles off the roofs of some homes and smashed a pane of glass or two.

“Haul in the rope; we must rise,” said Mr. Grimley, and we did.

#### PROLONGING THE DAY

He threw over some ballast and we went up with a rush. It had been very near sunset before, but as we went up to a height of 3,800 feet we saw "Old Sol" in all his glory, and the gas again commenced to expand under the influence of the heat. The fields, which before had been plainly visible, were now like checker-boards. The railroad beds were like telegraph wires in size, and human beings were indistinguishable. We went higher,

until our altitude was 4,300 feet and the houses were specks upon the plain below. The paddles had not been used for some time, and no one except Mr. Cowan thought of using them. Suddenly the car gave a jolt, and on looking around for the cause it was found that Mr. Moulton had given the rudder a sudden turn. Attention was at once directed to the rudder. It had not been spoken of before by any one on board, although Mr. Moulton remarked that he had used it to direct the course of the air ship.

“We must give the wings another fair trial,” said Mr. Cowan.

We had been lazily floating along between three and four thousand feet high. The wind had died away considerably and the sun was sinking in a glare of illuminated sky in the west. Haze had long since taken the place of a clear atmosphere and we could not see very well more than twenty miles distant. One curious object noted as we approached the Yamaska River was the dry bed of a small lake and river, which, to all appearances, was an outline of the upper part of a human skeleton.

Mr. Pagé remarked:—“There is a skeleton.” The ghastly likeness caused all to shiver.

We had been soaring along past Madelaine, and at the next village we commenced to think of landing. It was a quarter-past seven o'clock and was getting dusky. The sun had set, and our balloon commenced to sink rapidly. “Try the wings,” said Mr. Cowan.

The fans were soon in motion, and the difficulty of turning the handles, added to the perceptible decrease in the velocity of the descent, showed that they were working admirably. They checked the momentum, but did not keep us from going down. A little ballast thrown overboard, however, righted matters, and we came to a halt about one thousand feet from the earth.

#### FISHING FOR AN ANCHORAGE

“We will make a landing here,” said Mr. Grimley. “Tie on the anchor.”

Meantime Mr. Cowan and Mr. Moulton had been conversing with the people below, and learned that St. Charles was the name of the village we were passing over. We came down to a point 200 feet above the earth. There was a forest directly ahead, apparently some twenty-five miles long and about seven wide. We must either strike the ground at St. Charles and land or else travel in the dark, as it was now half-past seven. Out went the anchor, and in another moment the fifteen pounds of iron were dragging along, seeking something to grasp. It ploughed over a field of potatoes, and then caught a fence.

“Hold on all!” shouted Mr. Grimley, while Mr. Cowan, from his perch, said, “It has taken the rail fence.”

There was a momentary quiver of the balloon, and at the next moment a fence rail went about thirty feet into the air. Across another field, and still the anchor did not catch, passing over the fence. It took the next fence, however, and we had a shock. The fence rail again gave way, and we dashed on toward the forest. Through part of it the anchor tore without taking a hold, and the balloon rose and was clear of the trees.

“Haul up the anchor!” shouted Mr. Grimley while he emptied a bag of ballast: “we must rise now;” and we rose quickly.

There was nothing for it now but the forest, and toward the main part of this we went. We made the best trial with the paddles while over this forest. The air being very still at one time for ten minutes we climbed 250 feet with vigorous use of the wheels. Then we adjusted them and went down about five hundred feet. We then went with the wind, and found the velocity to increase greatly again. The paddles were readjusted in order to try the balloon against the wind, and the speed was checked very greatly, while the swaying of the drag rope showed that we were making great resistance to the wind. But Mr. Grimley stopped us, as our action jolted the balloon very much, and he was afraid it might increase the rent in the netting, which had already grown very large.

#### UNCIVIL INHABITANTS

We had gone several miles through this forest of pines, and could hear the startled birds and crows screaming. The hour was nearly eight o'clock, and dusky shadows abounded everywhere. We could not tell where we were travelling and it seemed a long way out of the forest, as the wind was blowing in the direction of its greatest length. We were in the middle of it, when, noticing a clearing about two miles and a half to the north side it struck Mr. Grimley that we should try to make that point and land. St. Ours was far in our wake, and we were determined to land in that clearing if possible. We had asked the farmers in the vicinity of St. Ours whereabouts we were, but could get no definite information. We wanted to make Sorel, but none could or those who could would shout back in answer to the question “Where about are we?” the civil answer. “Come here and I will tell you!” It was disheartening, but we had the grand success of the winged ship as a counterpoise, and were in excellent spirits.

We must try and tack said Mr. Cowen, and again we manned the wheels, working them with greater force than before. The result was surprising. Mr. Moulton put his helm a-lee and away she went. We tacked two miles toward the clearing in about four minutes, but here a difficulty presented itself. The balloon being round, gradually answered her helm, until the helm had turned her completely about and we were running stern foremost. The helm was then put hard a-port and the wings commenced to take us back to the forest. No one thought of unshipping the rudder. We stopped the paddles and in a few moments were going bow on again.

“STOP, FOR GOD’S SAKE STOP!”

We commenced to work again, when the most startling affair of the voyage occurred. We were working away when Grimley cried out, “Stop, for God's sake stop!”

At that moment Mr. Harper, whose face was turned in that direction, saw what had caused Grimley's exclamation and was just then in the act of stopping. The valve rope and the “rip line” were hanging from the mouth of the balloon and both had caught in the crank on the lee side of the ship. The “rip line” is so contrived that a strong pull rips the whole side of the balloon open and collapses her. We were about eight hundred feet from the ground. The reader who sits perusing this may readily imagine what the consequences would have been. Five very white faces watched the Professor and the line, and after that the wheels were worked very cautiously. We had now actually tacked to the point at which we wanted to descend. Had we been certain of our whereabouts we would have continued our journey. It was ten minutes past eight o'clock and it was getting dark, but we wanted to make Sorel and would have gone on in the moonlight which, now that the sun had gone down, was very bright, but call as we might we could make no person hear us. We had tacked away from the direction of a village, afterward found to be Ste. Aimee, and not being able to get an answer, must either go on in ignorance or come down at a hazard. The professor decided upon the latter course. The forest we passed over was one of gigantic pines, apparently very high, and adjoining the clearing was a forest of smaller growth.

“Let me know when we are on the edge of the forest,” said Mr. Grimley.

He “stood by” with the anchor and let it drop. It went crashing through the trees. “Hold on all!” shouted Grimley, and we held on, but the anchor did not hold, and on we went.

“Pull on the valve rope!” shouted the professor, and Messrs. Browning and Harper held on like grim death. The anchor dragged and caught a fence. Down we swept toward the ground, and the next moment there was a crash, as we struck bow on. We rose fifty feet, and wind freshened. Then we came down, struck again, and again rose to the height of about seventy feet, clearing a fence as we did so. Still the anchor could not hold us, as we were going at about twenty-five miles an hour.

“RIPPING HER”

“I am going to rip her,” exclaimed Grimley as we got into the middle of a potato field. He pulled the rip line and down came the balloon, apparently dashing us into a fence. We struck about ten feet from it, cleared it like a steeplechaser and settled down about twelve feet on the other side. Then we swayed a little, and after waiting a few moments Professor Grimley went out and commenced to haul the balloon netting and to facilitate the escape of the gas. One by one we left the balloon, which seven minutes after we

landed was flat upon the ground, and the party was safe with the exception of a few scratches. We had been just two hours and a half in the air, as it was a quarter-past eight o'clock when we left the balloon. Strange as it may seem, we found time to be hungry while in the balloon, and had lunched upon our line sardine sandwiches and milk while passing Beloeil Mountain, where we gazed upon the shadow of our balloon — a small speck upon the hillside.

#### TREATING WITH THE NATIVES

Every member of the party was very thirsty, and no water was to be found. There was not a village to be seen, and we shouted ourselves hoarse in the attempt to get assistance. The inhabitants seemed to have become as frightened as the cattle had been and were nowhere to be seen. At length, after we had waited fifteen minutes, which seemed an hour, we heard a voice.

Mr. Pagé answered in French, and the man replied, cautiously, "How many of you are there?"

The answer was, "Only six."

After waiting a minute the owner of the voice came walking toward us, followed by several other persons. They came timidly, and were only reassured when they were told in French that we had come from Montreal. They remarked that they saw the balloon but thought it was the devil. We were very kindly treated by the simple hearted farmer, who talked of miles by the league, and who was much more like a Breton peasant than a French Canadian. We learned that we were in the outskirts of the village of Ste. Aimee, and that had we remained in the air half an hour longer we would have got within a few miles of Sorel, where we could have found a telegraph office, and whence we could be conveyed to Montreal by steamer. "Would the old man drive us to Sorel?" "No; his horses could not. He had only one." "Was there any one in the village who would drive us there?" "No; they could only drive us to Yamaska," and this they did. We might have stayed far better where we were. However, Mr. Grimley, in common with the rest of the party, returned to Ste. Aimee with Mr. Browning, while Messrs. Moulton and Harper remained in Yamaska until the next day, only to find out how much vexation and how little information could be gleaned from the average French Canadian farmer. It is hardly worthy of detail, but owing to false information and the disobliging nature of the people whom they met there, two of the party did not reach St. Hyacinthe until very late in the afternoon, and Montreal until late in the evening. This morning Messrs. Cowan and Pagé, Mr. Browning and Professor Grimley packed the balloon in the presence of several hundred farmers, who took a holiday to see the monster.

## RESULTS OF THE VOYAGE

Mr. Cowan feels very jubilant over the success of his wings, and praises the gas, which was made especially for ballooning. He says that the result of this step in aerial navigation will lead to further experiments. It is thought by Professor Grimley that a much longer rudder than the thirty-six inch one used yesterday will probably hold a balloon ship to the wind, providing the shape be altered, to that of a fish or a cigar. That a balloon can be made to tack in the air has been clearly proved by this trip, but the fact of the balloon having turned completely around seems to demonstrate that the future air ship must not be round in shape. The course taken by the balloon was zigzag, and we passed between Longueil and St. Lambert parishes after passing directly over the latter village. We then passed eastward to St. Hilaire, then northeasterly to St. Charles, St. Ours and the intermediate villages. The direction was changed quite as much by the use of the wings and fans as by the air currents, and had we followed the latter we should have struck Ste. Aimee village instead of landing three miles and more to the northwest of it.

## A PRACTICAL TRIUMPH

Mr. Cowan will be in town by the morning boat and will be congratulated on all sides. He remarked yesterday that the eyes of the scientific world were upon "The Canada" and he is overjoyed that he has been so signally successful. He was very much chagrined that he was unable to land the balloon without ripping her, as the intention had been to tie her up for the night and then go on in the morning, and further test the wings. Professor Grimley said the balloon might have been tied up over night, and that he could have taken up three, or perhaps four, persons. He had about two hundred pounds of ballast on board when he landed, besides heavy top clothing and an anchor. He could have certainly made another ascent in the morning, but was very well satisfied that all had turned out so well.

## WEIGHT OF THE BALLOON

The balloon carried 70,000 feet<sup>3</sup> of gas, and along with the six passengers, machinery and the 400 pounds of ballast which he took up weighed 2,200 pounds. He says that the next trial trip will be made from New York, and that he will improve the balloon in some particulars in consequence of the experience of his last trip. The ascension and successful use of the wings is much talked of here tonight, and the surprise is general, because the last attempt had led to ridicule, and many deemed the balloon incapable of carrying the required machinery.