

youth of Paris who have taken most seriously to aeronautics. Amid volleys after volleys of cheers from the gallery, the others rose, enjoyed their brief moment of concentrated admiration, and disappeared—M. Juchmes and two companions in the "Touring-Club," the Comte de Castillon de Saint Victor alone in his "Orient," M. Blanchet in the "Alliance," the Comte de la Valette in the "Reve," M. Hervieu with the "Nimbus," Justin Balsan in the "Zephyr," and, finally, M. Pietri in the "Aeronautic Club." The departure of so many aerial travellers made a spectacle for all Paris and its environs. The peasants round about did not do much work that afternoon. In the evening all Paris talked of nothing but ballooning.

Many enthusiasts met at the Aero-Club next day to hear the news. Where were de la Vaulx and Balsan? Soon news came. The latter had descended near Dantzig, Eastern Prussia, with 22 hours and 757 miles to his credit; the former near Wloclawek, in Polish Russia, with 21 hours, 54 minutes, and 786 miles behind him. The fact that the record of the "Cent-aure," in its flight to Sweden, had not

M. Maisson, with Mme. Maisson, in the "Lorraine," and M. Juchmes, in the "Touring-Club." These were the most daring aeronauts in France, and this was to be a supreme test of their skill and resourcefulness. Each contestant had prepared for a long voyage, and some of them dreamed even of crossing the Volgo. The Comte de la Vaulx alone had attempted to fill his balloon with hydrogen, notwithstanding the expense. With a fair quality of hydrogen the ascensional force of a balloon is equal to about one kilo (two and two-tenths pounds) for each cubic meter of its contents; while with common illuminating gas the buoyancy is only about half as great. But on this occasion the improvised hydrogen generator set up in the Park did not work at all well, and the captain of the "Cent-aure," was compelled, after some hours of endeavour, to shut off the generator and fill his ship with the common gas. Of course, these great balloon races were carefully watched by many Parisian journalists, and this day special provision for the writers of the Press had been made by the Aero-Club. Three balloons (cabotours—"coasters" held captive by stout ropes) were at their disposal, and in them the correspondents and reporters were able to make their observations and to take notes of the beginning of the race while gallantly bobbing about, far above the heads of ordinary spectators.

Next day the telegrams began coming in. It was at once seen that every one of the competitors had made an unusual voyage. When it was learned that M. Balsan had descended at Opotchka, in Russia, and that the Comte de la Vaulx had, for the second time within a fortnight, fallen in the Czar's domain, great was the joy among the throng in the Aero Club headquarters at the palatial clubhouse of the Automobile Club of Paris. The official record of the trip was made up as follows:—

quickly to a height of over 4,000 metres. A few seconds later we were delighted to sight the "Cent-aure" but a little ahead of us, and running in a course parallel to ours. This was a race, indeed. All day we were able to travel together, each of us undergoing, in proportion to our volume of gas, the alternations of dilatation and condensation. Little clouds, masking the sun, instantly reduced the volume of our spheres and compelled us to throw over ballast. When the sun came out again it warmed the great balls of gas, and so added to the volume by dilatation that several times we were compelled to let out gas in order to escape rising to a dangerous altitude. Late in the afternoon both balloons had risen to between 6,000 and 7,000 metres, which was quite as high as any of us cared to go. Before we descended to a lower level we saw the "Cent-aure" far below us, manipulating its guide-rope along the surface of the earth. Suddenly our rival shot upward rapidly, and we saw no more of him. We were now in the neighbourhood of Breslau or Posen, and we were made very sad by the disappearance of our ballast, of which only about ninety kilos remained. Night was coming again, but we were determined to stay afloat as long as possible. As we passed over the German-Russian frontier four shots were fired at us, probably by customs inspectors who thought we might be smuggling. We heard the whistle of the bullets, but, fortunately, the "Saint Louis" was not hit. Just before dark we were making splendid speed; our instrument showed seventy kilometres per hour, due east. We sighed for more ballast. But now, behind us, we could see a tempest forming, with lightning and thunder. We had only thirty kilos of ballast left, and if the rain should overtake us our balloon would absorb three times that weight of water, and we should be carried down to earth whether we wished or not, and probably in the most awkward of spots. We had no desire to descend in a forest, and so we began spying out, as best we could in the gathering storm, a clear space in which to alight. One appeared just behind a forest. M. Balsan pulled the valve rope, and despite the violence of the wind the "Saint Louis" came to the ground gently and with only five metres of dragging. Some peasants came running up, and we sent one of them for a wagon, while the others aided us in emptying the balloon of the remaining gas—only 1,300 or 1,400 metres cube were left out of the 3,000 with which we started—and by midnight we had arrived at a village. We were given milk and black bread to eat, and a hay-loft to sleep in. Next morning early, a good-natured gendarme roused us with the explanation that, as we had no passports, he was compelled to escort us to the police authorities in a nearby town. The police, amiable but firm, declined to let us go without orders from their superiors, and it was nine o'clock that night before the telegraph brought permission for us to return to Paris.

Even more interesting is the story which the winner has to tell. Much of the narrative is found in the log-book of the "Cent-aure"—and quite a novelty is the log of this ship sailing within and above the clouds. In it the skipper confesses that his craft was filled with 1,400 meters of hydrogen and only 200 meters of illuminating gas. At the start it lifted a total weight of 1,485 kilograms, thus apportioned: Weight of balloon, car, and appurtenances, 540 kilos; passengers' weight, 145 kilos; weight of instruments and oxygen tubes (the latter for the respiration of the travellers at great altitudes), 40 kilos; sand ballast, 775 kilos; ballast in provisions, 25 kilos. At 7.20 p.m. the log contains this entry: "Fine night—used sixth sack of ballast." At 8.20: "1,500 metres altitude: course E.N.E. We are above the fog." At 8.30: "We have finished dinner. A balloon is following us." At 9.10: "1,600 meters; good equilibrium. Over large city." At midnight: "Passed to south of ponds of Bairon." At 12.10 a.m.: "Traversing the Ardennes Canal." At 1.40: "Little inhabited country." At 2.15: "The fog mist forming rapidly; we, mounting with it, see the earth no more." At 3.20: "Thick mist all around us. Used eighth sack."

A note says: "We are in a mountainous country, Bavaria, without doubt!" The entry ends with a mark of interrogation, nevertheless. "This," said de la Vaulx, descending upon the joys of ballooning, "is the charm of the whole

thing. The balloonist becomes an explorer. Say you see a young man who would like to read a little; you want adventures; you want to penetrate the unknown. But you are tied down at home by family, business, what-not. Well, you take to ballooning. At noon you have luncheon with your family. At two o'clock you ascend. Fifteen minutes later you are no longer a commonplace denizen of the easy-going town—you are an adventurer into the unknown, an explorer as surely as any who melt in Africa or freeze in the Arctic. You do not know any too well where you are at any given moment, and as for knowing where you are going or when you are to get there, why, that is all a guess. See how amusing it may be! It is principally chance and the winds. Yet you have something to say about it, too—something depends upon you, your skill, your nerve, your wisdom, your experience. You must choose where to seek your equilibrium, whether to send low or mount high, whether to mount above the clouds, and suffer with the cold, and be compelled to breathe oxygen from your tubes, or to cling by your guide-rope to the earth. Then, when you decide to come down, it is really jolly to speculate upon what country it may chance to be, what language the people speak there, and how they will receive you. There is also a bit of curiosity as to what sort of pranks the wind may play with you when you first touch the earth, whether it will suffer you to drop gently upon her bosom, or angrily drag you along from bush to stone, and from stone to forest, fence, field, burn, or charch. Ah, there is nothing like the zest that comes of this uncertainty!"

This mad race through the clouds continued all day. The two ships of the air were flying, neck and neck, over Southern Germany and Bohemia. In the early morning the rivals began a series of competitive manoeuvres—the yachtsmanship of the atmosphere ocean. When the "Cent-aure" threw out ballast and rose above the mist-clouds, the "Saint Louis" followed suit. When the "Cent-aure" let out a little gas and descended nearer earth, the "Saint Louis" lost no time in executing a similar movement. So near together were the racers at one moment, that de la



"Below we saw the 'Cent-aure' but a little ahead of us."

been surpassed was quite lost sight of in the general enthusiasm roused by the tidings that at last, "after a hundred years of effort," a French balloon, starting from Paris, had fallen into Russia. Ilymas of the Franco-Russian Alliance, almost forgotten in these days of uneasy inquiry, were revived, and sung with a little of the old-time rapture. Every-where the headlines read: "From France to Russia!" and the words caught the imagination of Paris. Even the news that de la Vaulx had been cast into a Russian prison did not dampen the ardour of his friends. "A taste of god life only adds zest to the adventure," they said; "it is something we shall have to get used to when we go ballooning to Russia, as we shall now be doing every week or two."

THE AIR LINE FROM FRANCE TO RUSSIA

was now so popular that, as has been expected, every one of the six starters in the final long distance races of October 9 privately told his friends that they might expect a telegram from him, dated St. Petersburg, two or three days later. By this time all Paris was crazy over ballooning, and a vast throng of people assembled to witness the final flight. Jacques Faure led off in his "Aero-Club" about five o'clock. He ascended slowly, drifted to the north, and then threw out a bag of ballast, and shot up to a great height, where he caught a fair wind which bore him directly eastward. "To Russia again!" cried the people. M. Balsan, in the giant "Saint Louis," and accompanied by M. Louis Godard, was second. Profiting by the example of their predecessor, they threw out ballast, caught the upper current, and were soon off toward Asia. All the other competitors followed the same method—M. Hervieu, in the "Nimbus"; Comte de la Vaulx, accompanied by de Castillon, in the now famous "Cent-aure";

First—M. le Comte Henry de la Vaulx, descending after 35 hours and 45 minutes of voyage, at Kooetcheff, in Russia; travelled a bird-flight distance of 1,925 kilometres (1,193 miles) from the point of departure. Maximum altitude, 5,700 metres (18,810 feet).

Second—M. Jacques Balsan, descending near Rodom, in Russia, after 27 hours and 25 minutes of voyage; travelled a bird-flight distance of 1,360 kilometres (843 miles) from the point of departure. Maximum altitude, 5,540 metres (21,582 feet).

M. Godard gave a most graphic narrative of this extraordinary race through the air over most of the mainland of Europe.

"During the night we were busy trying to keep our equilibrium, going neither too high nor too low, and wondering where our rivals were. At seven o'clock next morning we were over Coblenz, and had already made 500 kilometres. At eight o'clock the influence of the bright morning sun upon the volume of gas in our big balloon carried us very,



"We took alternate watches of a quarter hour each."