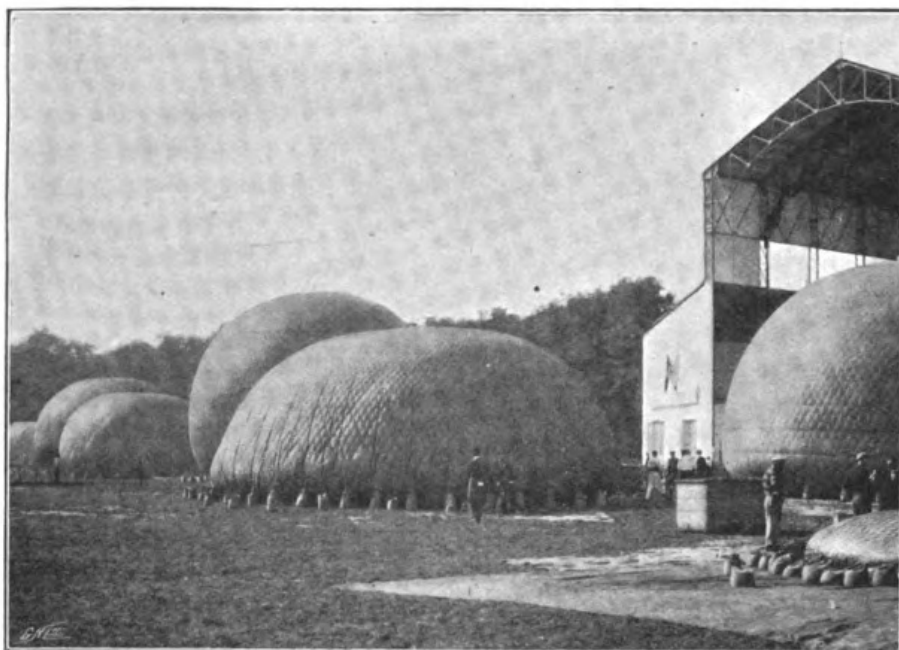


The Biggest Balloon Contest on Earth.

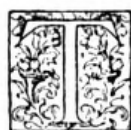
BY JACQUES BOYER.

From Photographs specially taken for THE STRAND MAGAZINE.



THE BALLOON SHED—SOME BALLOONS IN COURSE OF INFLATION.

and experimented in the grounds of the Paris Exhibition Annexe at Vincennes, with results that are likely to prove of paramount usefulness in the study of aerial migration. The contests of which I shall speak in this article relate entirely to balloons, and it is interesting to note that in connection with the 1900 Paris Exhibition the Aero Club of France has been the means of pro-

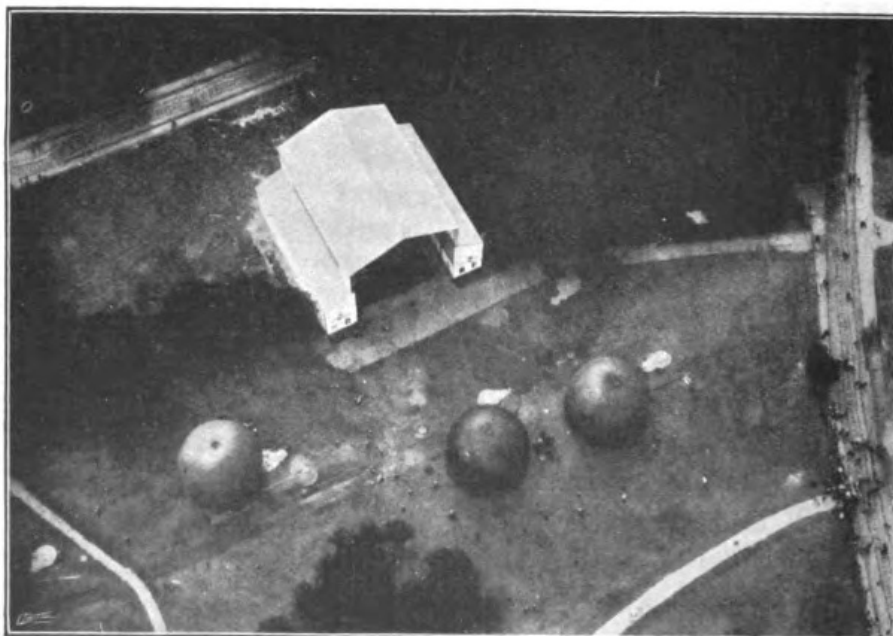


HERE is no doubt that the marked ascendancy of the love of sport in France will lead to a stronger and closer friendship between our neighbours and ourselves. If proof were needed, we have only to look at the results of the various International contests in which sportsmen of all nations have met in friendly rivalry during the Paris Exhibition of 1900. The Press of the world has acclaimed the victors of cycle races, motor-car contests, and what not, and it may be well to give here some description of a contest which in its aim is perhaps of greater importance than any other.

The desire for the solution of the flying-machine problem is becoming acute in its intensity, and the aeronauts of all nations have met

motoring and facilitating experiments in ballooning on a scale never attempted before.

A huge building was erected in the Annexe where balloons could be stored and the various necessaries could be supplied to those who were to take part in these interesting aerial contests. Our first illustration shows this structure and the balloons in course of inflation. Our second picture is a view of



THE SAME AS ABOVE TAKEN FROM ALOFT.

the same taken from a captive balloon on the 17th of June, 1900. The three pictures that follow show the various stages of preparation before ascending.

Apart from the building of this huge hall, it became necessary to honeycomb the "ballooning ground" with innumerable pipes, in order to furnish an immediate and complete supply of gas for the inflation of the competitors' respective balloons.

The contests were divided into four classes, namely, those over a minimum course to a certain point fixed beforehand, those for the highest altitude attained, those of duration, and distance contests.

At this stage a delicate point suggested itself. In contests of this kind there are two alternatives only. Were it a simple question of racing, then it would be necessary to equalize the competitors' chances as far as possible; were it a record-beating contest, however, then every competitor would be entitled to use every means in his power to secure the best

advantage. For instance, an aeronaut possessing a balloon of large dimensions would have a better chance of travelling farther or ascending higher or of remaining in the air for a longer time than his rival with a smaller balloon, the ascending power decreasing in ratio to the dead weight of the net, the car, and its occupants. Under these circumstances the simplest plan

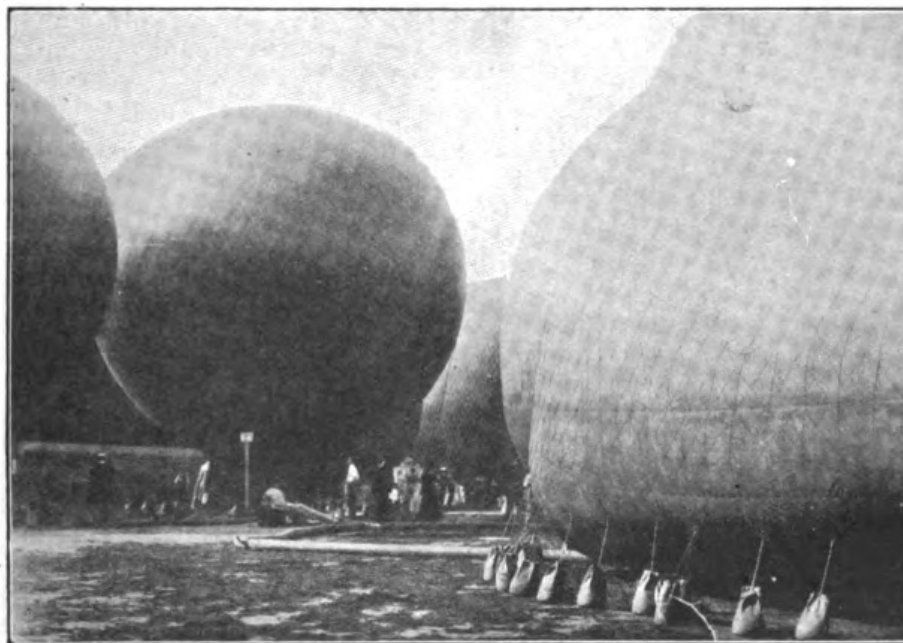
would have been to have allowed balloons of equal capacity only to take part in one and the same contest, in order to secure equality. This was found to be impracticable, however, as such limitations would have made it impossible to secure sufficient entries with any prospect of success. The only solution of any practical value consisted therefore in handicapping the balloons as shown in our next illustration. A number of sealed ballast bags were placed in each car as found necessary, in order that the

amount of ascending power and ballast to be used should be identical in each balloon, irrespective of size.

No competitor was admitted who had not engineered a free balloon on three different occasions. Moreover, all the materials were carefully examined by a specially-appointed committee before the various contests took place, not to mention the medical examination of every aeronaut who entered for the high altitude contests, which, as aeronauts well know, are as a rule extremely dangerous. Owing to these precautions it is pleasing to note that in the course of 156 ascensions there is no single instance of the slightest accident to record; this will tend to show conclusively also that ballooning under proper conditions is not nearly so dangerous as it is painted.

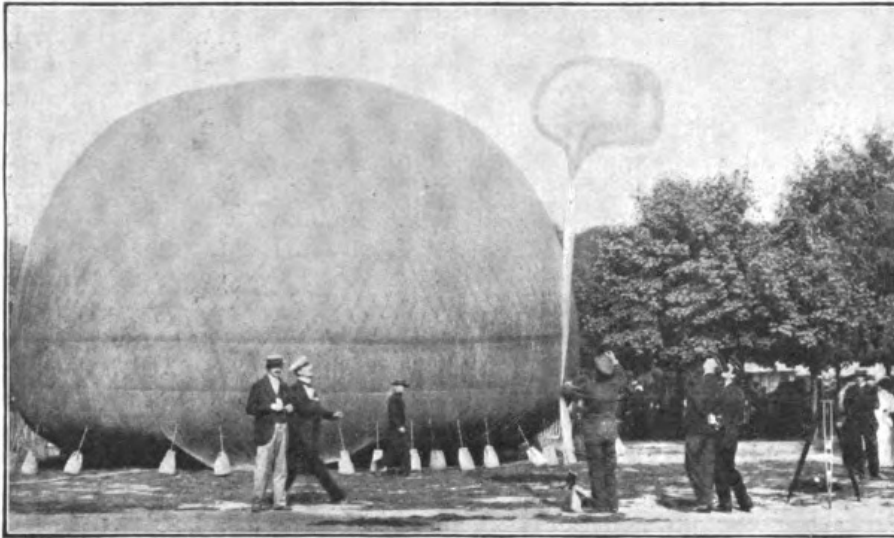
I will now proceed to give some details of the various contests as they took place under the auspices of the Aero Club.

The contest which consisted in navigating



A CLOSER VIEW OF THE INFLATING PROCESS.

a balloon over a minimum course to a given point selected beforehand proved to be one of the most interesting, for success depended entirely upon the skill of the contestants as aeronauts pure and simple. The given point, fixed before the start, depended entirely upon the direction of the wind just before the signal to start was to be given. In order to ascertain this direction miniature balloons were launched, indicating by their course the direction in which their more bulky brethren would be driven.



ASCERTAINING THE DIRECTION OF THE WIND BY MEANS OF A PILOT BALLOON.

The above picture shows the ascent of one of these "pilot balloons" as they have been called. The course of the "pilot" was followed by means of a theodolite, and by means of a chart suitably fixed to a horizontal board the line of travel became evident to a nicety. Moreover, the velocity of the wind was determined by means of aerometers.

There were in all four contests in this class. The entries were a great success, and the results obtained were most gratifying. Twelve competitors started on the 7th of July. The goal was the railway station of Anvers-sur-Oise, near Pontoise, and the time of sojourn in the air was fixed at two hours. The victors were all three members of the Aero Club; namely, M. Guffroy, the explorer, who left Vincennes at half-past three and alighted at half-past five at about 436 yards from the place appointed; Count de la Vault, who landed 872 yards away; and M. Castillon de St. Victor, who alighted a short distance away from the preceding contestant.

The record contest in the same category took place on the 22nd July, when twelve balloons—whose passengers, by the way, included several ladies—started about the same time. The landing-point was the Church of Mormant (Seine and Marne), and, the balloons not being handicapped, the departure of the twelve competitors took place in less than half an hour. Three members of the jury started on motor-cars in order to control the various landings and to measure distances, and, let it be whispered, to warn the inhabitants of the little village of Mormant of their aerial visitants! No fewer than eleven of the balloons that

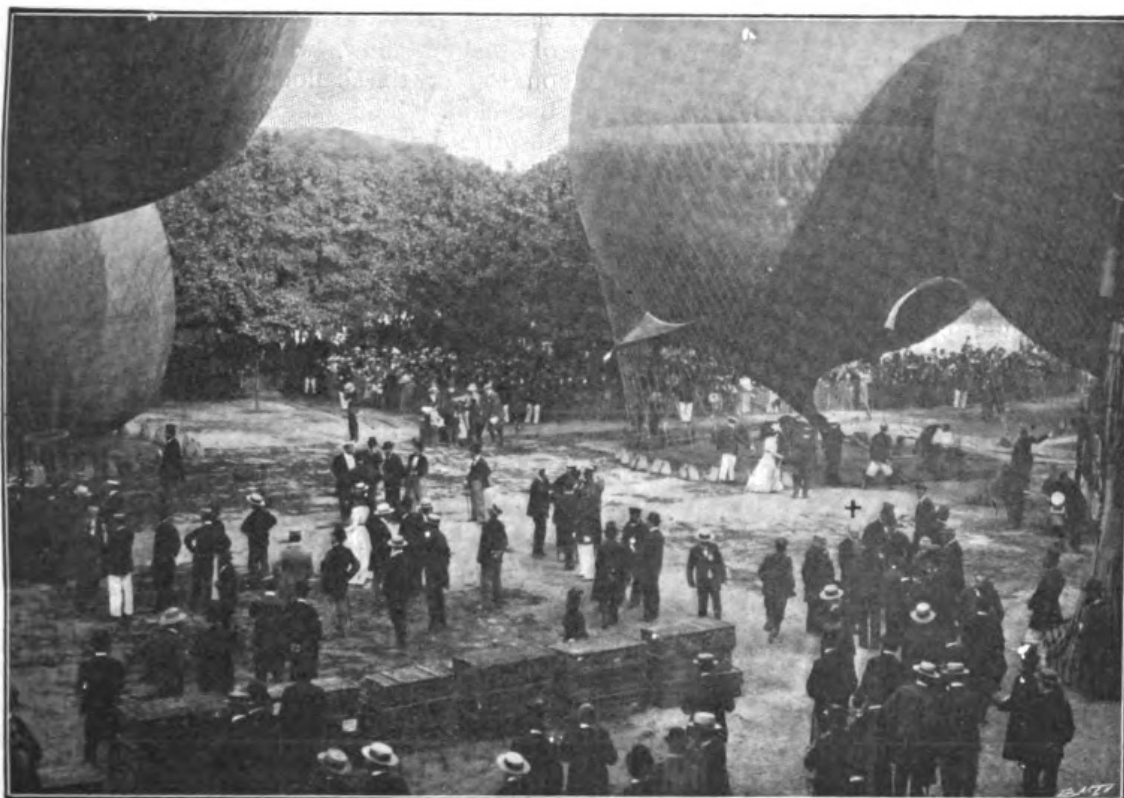
started from Vincennes alighted almost simultaneously within the area of the "green" of the Commune, amid enthusiastic cheers of the assembled crowds of country folk. The victory rested with M. de la Vault, who alighted within 1,100 yards of the church steeple in his balloon "Le Centaure," among whose passengers

were Don Jaime de Bourbon, the Archduke Leopold Salvador of Austria, and Count de Coma. The other successful competitors were M. Carton, who alighted at 1,160 yards, and M. Guffroy, at about 1,250 yards from the coveted goal.

The third contest in the same class took place on August 19th. It included a compulsory stoppage at two-thirds of the distance, and all competitors who had not landed twice were to be disqualified. The aeronauts were allowed to deposit passengers at the stopping-place, but were not allowed to remain on *terra firma* for more than an hour. This test, which was a particularly severe one, carried with it a chance of the "Grand Prix Aeronautique," because of the difficulties to be encountered. The results were an unqualified success, no fewer than twenty-two balloons taking part in the fray. The first stopping-point was fixed at the railway station called Damartin, and the final goal was fixed at Nanteuil-le-Houdoin, near Senlis on the Oise; MM. Jacques Faure, Eugène Godart, and De la Vault were the victors.

The last contest in this class became a matter of extreme interest, inasmuch as all the members of the Aeronautical Congress and M. Picard, Commissioner-General of the Exhibition, were present to witness the departure, as shown in the next illustration. Each competitor was entitled to select beforehand the particular spot at which he hoped to land. The Count de la Valette proved himself the victor on that occasion. He alighted within about 870 yards of the place which he had previously designated.

The contest for the highest altitudes attained followed next. Though not requiring



M. PICARD (x), COMMISSIONER-GENERAL OF THE EXHIBITION, INSPECTING A BALLOON BEFORE DEPARTURE.

so much skill in aerial navigation proper, it became equally exciting to spectators and competitors alike, owing to the dangers to which very high ascensions often lead. The ascension of "The Zenith" in 1874, when Crose, Spinelli, and Sivel met their deaths at an altitude of 27,950ft., came back to the minds of many, and made these ascensions a matter of wonder and excitement to those who had never been up in a balloon before.

The rarefied air which is encountered at high altitudes causes great suffering, as is well known. In order to mitigate this effect the aeronauts took with them bags of oxygen gas in order to minimize the danger. The record for altitudes in the areas of balloons belongs to a German savant, M. Berson, himself connected with the Meteorological Institute of Berlin; he reached an altitude of 29,746ft., that is to say 744ft. higher than the highest peak the Himalayan Mountains can boast of. In London M. Berson succeeded in reaching an altitude of 27,040ft. in 1828, though thirty-six years before Glaisher had reached the amazing height of 28,795ft. The contest at Vincennes did not produce a record, however, as MM. Balsan and Louis Godard, the victors, only reached an altitude of 27,355ft. In this contest, which took place on the

23rd of September, M. Juchmès was second with 22,155ft., and the Count de la Vaulx third with 21,999ft.

Count de la Vaulx has kindly allowed us to take a peep at his diary, from which we gather some interesting particulars. No sooner had he and his companion in peril, M. Maison, attained an altitude of 13,000ft. when the cork of a champagne bottle went with a bang, without a moment's warning.

M. de la Vaulx at once started to inhale the oxygen from his bag in order to keep up his strength, though his companion did not use it until they had reached 18,525ft., when he felt a strange weakness in the legs. No sooner did he have recourse to the oxygen bag, however, than he recovered the complete use of his limbs and was able to manipulate the ballast as required.

M. de la Vaulx's diary here says: "At 4.55 we are at 19,500ft.; I feel well and am bewildered by the magnificent view beneath me. I tell Maison to throw more ballast overboard; he throws a bag accordingly, and falls back unconscious on the floor of the car. I introduce the mouthpiece of the oxygen bag as far as I can into his throat, and he revives little by little. I was just in time; he soon feels well, but does not let go of his oxygen bag again; he is wise."

From 5.20 to 5.30 the plucky aeronauts

remained practically stationary between 23,400ft. and 23,925ft. The diary adds: "We do not suffer in any way, we do not feel sick or even giddy; the oxygen bags do their work beautifully, and we still have from 320lb. to 360lb. of ballast, but in order not to infringe the rules of the contest (namely, not to descend at a rate of more than 1,093 yards in five seconds) we are beginning our descent."

The altitude record contests were not without their excitements. For example, on the 24th of June Count de la Vaulx decided to spend the night in mid-air in order to profit by the early rays of the sun to reach the higher altitudes. At dawn he still had 500lb. of ballast which he intended to make use of, when he and his party were suddenly overtaken by a snow blizzard. The balloon having gathered a quantity of snow upon its upper surface, the aeronaut was compelled to throw the whole of his reserve ballast overboard. An hour later the snow melted suddenly, and "L'Aero Club," becoming accordingly lightened, shot upwards with incredible speed, leaving the sea of clouds far below.

The travellers had then recourse to the

valve, but at the first pull a glacial douche of melted snow, which had accumulated on top of the balloon, drenched them to the skin. The balloon, delivered of this surprise burden, shot up once more, but another recourse to the valve secured a safe descent in a field near Emden, in Hanover, quite 372½ miles from Paris, the journey having lasted fifteen hours.

The duration contests were prolific in adventures of many kinds. It was decided that no ascension should take place were the wind to blow towards the sea, though on two occasions the wind veered round suddenly and carried some of the competitors in the wrong direction, when progress had to be prematurely stopped. On one occasion, when a westerly gale was blowing, the starts were fraught with danger. Some of the descents were most exciting—for instance, that of the balloon owned by Count Castillon de St. Victor, which was dragged for a considerable distance over the woods in the Department of Calvados. M. de la Vaulx returned to *terra firma* at Guingamp, in Brittany, at 2 a.m. in pitch darkness. According to his

log-book it appears that his balloon was travelling at the time at the rate of 62 miles an hour. Our illustration shows the position of the balloon as it grounded. The air-bag, which is on the other side of the trees, and therefore is not visible in the photograph, was very much injured, though it is pleasing to hear that the intrepid travellers were in no way hurt.

The third and last contest for this class, which took place on the 16th of September, calls for special notice, as the seven competitors all started from Vincennes at eight o'clock at night. Huge electric searchlights followed the various balloons in their nocturnal flight, and enabled the excited spectators to catch a last glimpse of them before they were swallowed up in the blackness of the night. M. Balsan won the contest on that occasion, succeeding in keeping his balloon, the "St. Louis," in mid-air thirty-five hours altogether, thus beating M.



REMAINS OF THE BALLOON WHICH WAS WRECKED IN PITCH DARKNESS WHILE TRAVELLING AT THE RATE OF 62 MILES AN HOUR.

de la Vaulx's record of thirty hours, though the latter was not slow in recovering his advantage, as will be seen.

The long-distance contests created, perhaps, the greatest excitement of all. Never have such results in ballooning been attained before—even beating the former record of MM. Castillon de St. Victor and Mallet, who travelled continuously for a distance of 826 miles.

The first race, however, did not turn out a success. The wind veered round to the west and compelled the competitors to end their intended long-distance journey very abruptly. The second race, which, by the way, included a balloon photography competition, was a success.

On the 30th of September an east wind gave the competitors their chance. The Count de la Vaulx alighted after a journey of twenty-one hours and forty-five minutes at Brzescknywoski, near Wloewek, Varsovy, that is about 768 miles from Vincennes; M. Balsan

alighted at the mouth of the River Leba, near Dantzig, after a twenty-two hours' journey, 759 miles from Vincennes; and M. Jacques Faure arrived at Mamlitz, near Bramberg, 734½ miles from Vincennes, after a journey of twenty hours seventeen minutes.

M. de la Vaulx has thus succeeded in being the first to cross over Germany into Russia from France. The "Centaure" under his management behaved exceeding well, and the aeronaut had no less than 200lb. of ballast to spare when he made his descent;

thus he could have gone farther if it had not been for the fact that beyond a certain limit he would not have been granted a passport by the local Russian authorities without first communicating with St. Petersburg; this would have taken some days, a delay that would have debarred the plucky traveller from taking part in the last contest, which was to take place in Paris on the 9th of

October. To commemorate this remarkable achievement the committee of the Aero Club have awarded M. de la Vaulx their gold medal.

At the autumn meeting which marked the close of the aeronautical contests of the Paris Exhibition there remained only six competitors, the victors in the various contests which had taken place before Count Castillon de St. Victor withdrew from the contests in order to accompany his friend De la Vaulx on October 9th.

The final contest was one between Count de la Vaulx, who carried off the first prize, and M.

Jacques Balsan. Count de la Vaulx succeeded in beating both the "time" and "distance" records in one voyage, since he and his companion reached Korostychel, a small town in the Province of Kiev, on the banks of the Dnieper, after 35hrs. 45min. in the air, covering a distance of 1,194 miles without a stop. On the other hand, MM. Balsan and Louis Godard alighted at Opotehka (Russia) after a journey of 27hrs. 15min., having covered a distance of 844½ miles.



COUNT CASTILLON DE ST. VICTOR ON BOARD THE "CENTAURE," IN WHICH HE WON THE "GRAND PRIX DE L'AERONAUTIQUE."