

THE FIGHT OF THE NATIONS TO CONQUER THE AIR

Times gone by there have been many fly-by-night airships that wouldn't fly by night or any other time. These schemes have been varied and wonderful, even more wonderful than the famous airship of Darius Green.

When the race was young men thought as children, and the experiments in attempting to conquer the air were either ludicrously simple or simply ludicrous. Almost any man can remember the time during his adventurous boyhood when he climbed on the old woodshed armed with grandfather's great umbrella, which he hoped would sustain him in his flight through the air. Then "what a fall was there, my countrymen," for both the boy and his hopes were dashed to the ground. In just the same way our childish full-grown forefathers took short flights into the realms of invention and shorter flights in the air. They also, like the modern boy, tried aviation without experimentation.

More Disastrous

But the attempted flights of our grown forefathers were more disastrous than those of the modern small boy. Whereas the small Darius Greens, might alight from the woodshed top with more suddenness than grace but without undergoing any more physical pain than that incident to a few bumps against the ground and a subsequent licking from the old man, our forefathers who tried to fly like birds often met with fatal accidents, most of which could have been avoided.

In many cases one experiment with a weight of but half the size of a man would have shown these would-be aeronauts that their machine would not support the weight of a man. But these pioneer aviators disdained experiments as they did the laws of nature and reason. In the record of the attempts at conquering the air the list of fatalities is long.

Supposed to Help Aviator

The records of the early experiments are as ridiculous as they are tragic. If one except the unauthentic report of the flying machine of Icarus and of the witches (who as everybody knows have flown on broom-sticks from time immemorial), the first report of a flying machine concerns the flying pigeon of Archytas, a Greek geometrician who flourished about 400 B. C.

According to the historian, Aulus Gellius, "Archytas constructed a wooden pigeon which could fly by means of mechanical power and an aura spirit." This conception of an "aura" was worthy of a modern novelist. The "aura," according to the Greeks, was a force emanating from all living things, which it surrounded like an atmosphere. A modern term for the same thing is animal magnetism, so that the flying machine was supposed to run by animal magnetism, which is not a bad idea for a man who lived many centuries before Jules Verne.

More detailed reports of this same wonderful machine declare that its buoyancy was effected by magnets, the propelling power only being an occult force. It is stated that although the machine could fly, "it could not raise itself up again if it fell."

England as well as Greece has its legend of a flying machine. King Blaudud, the father of King Lear of the Shakespearean play, was a great wizard. King Blaudud, who is supposed to have reigned about the time of the founding of Rome, built himself a flying machine and enjoyed life by sailing around in the air over his chief city of Trinovante. But although King Blaudud was a great wizard he was not a good aviator, and losing his balance one day he fell upon a temple and then and there died.

St. Peter Breaks Black Magic

Simon the magician was a bad magician and had communicated with the wicked demons. In the thirteenth year of the reign of the Emperor Nero he undertook to rise in the air toward heaven like a bird in the presence of everybody. To see the great show the people of Rome assembled in great numbers, and Simon, "through the assistance of the demons," rose in the air all right, but "St. Peter having offered up a prayer, the actions of the demons ceased and the magician was crushed in the fall and perished instantly."

A monkish tradition of the eleventh century declares that Oliver of Malmesbury, a Benedictine monk of great learning, tried his hand at flying. "Having manufactured some wings," the legend relates, "modeled after the description that Ovid has given of those of Daedulus, and having fastened them to his hands, he sprang from the top of a tower against the wind. He succeeded in sailing a distance of 125 paces, but either through the impetuosity or whirling of the wind, or through nervousness resulting from his audacious enterprise, he fell to the earth and broke his legs. Henceforth he dragged a miserable, languishing existence, attributing his misfortune to his having failed to attach a tail to his feet."

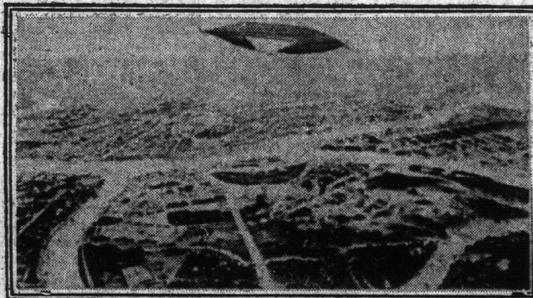
Laugh Was on the Saracen

In the history of Constantinople, by Cousin, we find a more detailed account of an attempt at flying. About 1178 a Saracen undertook to sail into the air from the tower of the hippodrome. "The Saracen," the history relates, "stood upright, clothed in a white robe, whose folds stiffened by willow wands, were to serve as sails to receive the wind. All the spectators kept their eyes intently fixed on him, and many cried: 'Fly, fly, O Saracen. Do not keep us so long in suspense while thou art weighing the wind.'"

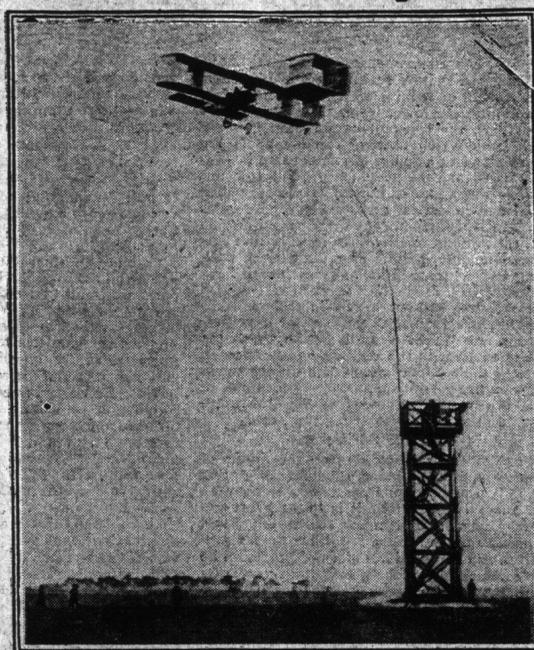
"The emperor, who was present, then attempted to dissuade him from his vain and dangerous enterprise. The Sultan of Turkey in Asia, who was then on a visit to Constanti-



ITALY'S FIRST MILITARY DIRIGIBLE BALLOON IN FLIGHT OVER ROME



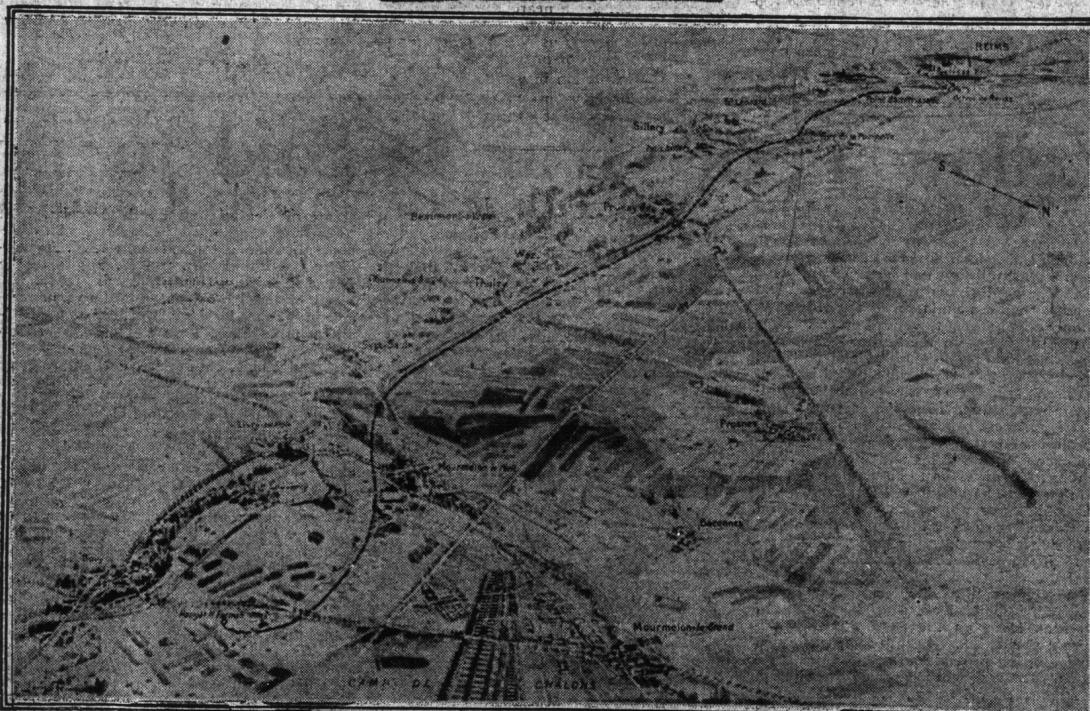
THE RUSSIAN DIRIGIBLE BALLOON "KOSSTOVITCH" MAKING A SUCCESSFUL FLIGHT OVER ST. PETERSBURG



THE ENGLISHMAN, MR. FARMAN, WINNING A PRIZE FOR THE HIGHEST FLIGHT IN AN AEROPLANE

nople, and who also was present at the experiment, halted between dread and hope, wishing on the one hand for the Saracen's success and apprehending on the other that he would shamefully perish. The Saracen kept extending his hands to catch the wind. At last when he deemed it favorable, he rose into the air like a bird, but his flight was as unfortunate as that of Icarus, for the weight of his body having more power to draw him downward than his artificial wings had to sustain him, he fell down and broke his bones, and such was his misfortune that instead of sympathy there was only merriment over his misadventure."

Toward the end of the fourteenth century



MAN FLYING AS THE CROW FLIES: THE COURSE TAKEN BY MR. FARMAN DURING HIS FLIGHT FROM CHALONS TO RHEIMS

J. B. Dante, an Italian mathematician of Perugia, decided that he would like to try his hand at flying. His apparatus, although we have no good description of it, probably was in the form of an aeroplane, and he was wise enough to try to fly across a lake so that he would have a soft place to alight in case things should go wrong, as they sometimes are in the habit of doing.

Mathematics Easier than Flying

After flying with some small success several times he became emboldened and decided he would display his achievements before his fellow-citizens and his sovereign. On a great fete day when Perugia was celebrating the marriage of two notables Dante set sail from the top of the highest tower of the city. He sailed across the public square and "balanced himself for a long time in the air," but unfortunately, like most of these old experimenters, his machine broke and down fell Dante upon the Notre Dame church, breaking his leg in so doing. After his recovery he contented himself with the milder occupation of teaching mathematics.

Paul Guidotti was an artist-painter, sculptor, architect, and thought he was an aviator.

the nobility, were assembled around the house. With large wings attached to his hands and feet the marquis set sail from a terrace of his mansion, and by flapping with all his strength managed to reach a point in the river above the barge of a plebeian washerwoman. Here, becoming exhausted, he decided to make an early morning call upon the woman, and, alighting with too great impetuosity, another broken-leg was added to the list of the aeronauts' broken bones.

The queer part of all these experiments is the perfect confidence that each of the experimenters felt in his machine. No matter how wild the idea was each one knew that his ma-

chine was perfectly feasible. One theorist had a plan to have rowers equipped with oars just as in a boat. These oarsmen were to propel the flying machine and a large oar at the rear of the airship was to guide it.

Another similar idea was to hitch a series of balloons together with masts and sails for each. M. Petin, an honest haberdasher of Paris, had an idea similar to this of hitching balloons together. His scheme was to hitch balloons with two planes attached to them. On these planes he was going to place steam engines which would drive windmills, and these windmills would propel and guide the ship. Poor M. Petin expended a small fortune which he has amassed by years of toil in selling hats upon this machine, but strange to say it didn't work.

Drive the Birds Home, James

One of the grandest ideas ever conceived for a flying machine was that of Mme. Tessoire. In 1845 she was struck with the grand thought that if we have animals draw our carriages on land, why not have birds draw them in the air, and she not only wrote a whole book about how it could be done, but even told how the harness should be made for the birds and

just the kind of a whip the coachman or balloon man should have.

The bird she picked out to be her driving pony was the great vulture whose wings sometimes measure fourteen feet from tip to tip. In describing the harness she says: "The bird would be held at a proper distance from the car by a trace which would start from a collar around its neck, passing under its wings and through a ring attached to a surcingle going around its body. The reins would lead from its beak, being fastened to a ring inserted through both sides of the beak in order that it should readily feel the hand of the aerial coachman. The reins would also pass under the wings through the trace rings attached to the surcingle. The whole harness ought to be supple, light, and strong. The aeronaut, reins in hand, would have a long whip with which to cut the vulture in case he took a wrong direction or exhibited a propensity to light on trees or house-tops."

Thus we have explicit directions not only how to hitch up our aerial horse but how to drive it. It is queer that, being a woman, Mme. Tessoire did not go further and explain all of the etiquette of aerial driving.

Swede's Idea from Migratory Birds

After pointing out the manner of taming vultures Mme. Tessoire adds: "My confidence in vultures arises from what I saw of one in Portugal, in the fort of Calscalls, about twenty leagues from Lisbon. It had been brought there when young, but in all its strength and beauty; it was perfectly obedient to the officer who owned it. The vulture would fetch and carry like a dog, and at intervals it took leave of absence and returned of its own accord, sometimes at the end of eight days. As it was always seen to direct its flight to the sea it was conjectured that it went to Africa, whence it had been originally brought."

A Swedish naturalist who was studying the migration of birds conceived almost as brilliant an idea. After numerous observations he failed to find in the migratory feathered species a power of flight and organization sufficient to account for their journeys from one country to another in search of the temperature and climate they required. He therefore decided that if they could not fly so far from one country to another, perhaps they simply flew up into the air which moved with less rapidity than the earth.

There they would remain for a time until their instinct—for that was the only way he could account for their knowing enough, then they would descend in an oblique line to alight in the country they sought.

These birds simply flew up into the air, and—as we all know the earth moved beneath them—waited until the country they were looking for came around, then they flew down. Starting with this theory, the idea was evolved that one might do the same thing in an airship. All one had to do was to get far enough up in the air and wait.

From the earliest times even up until the most recent these wild ideas have been common. Men have thought that they could fly and have paid for this mistaken idea in broken bones, broken heads, broken fortunes, and even with their lives. Probably in the future they will continue to pay a high price for their attempts at flying. Even when the flying machine is perfected, in trying out the model of 1934, which probably will differ from the model of 1933 in that it has a new spark plug, the aerial chauffeur at the factory will run a risk.

NEW THE BRONTES

It will probably surprise a good many people to learn that one of the curates whom Charlotte Bronte immortalized in "Shirley" is still alive and well. The Rev. James Chesterton Bradley, now living at Richmond, at the age of 90, was the original of the "Rev. David Sweeting," in the novel referred to, says Great Thoughts.

"The parish where I went to my first curacy, Oakworth, bordered on the Bronte parish of Haworth," he says, "so I frequently saw all the sisters and their father and brother, and had many talks with them."

Mr. Bradley used often to go to Haworth parsonage "for the change and company," and there he met the other curates which Charlotte Bronte has so well described. Concerning the sisters she says:

"All the three sisters were very shy, but perhaps Emily and Anne were worse than Charlotte in that respect. The latter, as I remember her, was a lively talker when once drawn out, a girl of about the ordinary stature, or, perhaps, below it, with features neither very dark nor fair, but with striking, expressive eyes and mouth. She had a particular way of suddenly lifting her eyes and looking straight at you with a quick, searching glance while you spoke to her."

Charlotte Bronte always struck Mr. Bradley as "a young lady with deep prejudices and of strong will."

Mr. Bradley describes the Rev. Patrick Bronte as "not at all a bad sort in most things. But for temper! I really think he had the vilest temper I've ever seen in a man." He repeats the pistol story, which we believe the latest biographer of Charlotte ridicules, and adds: "I have known him so wild with anger at the merest thing that ran counter to his wish that he would take up the rug from before the fire and throw it on the flames!"

The son he describes as "dreadful"—"a good hearted fellow when sober and right, but too often drinking and wrong to be of any use to those girls in that lonely parsonage."