

EXPLOITS IN THE AIR.

Jeffries the First to Make Balloon Ascensions for Science.

THE ENGLISH CHANNEL CROSSED.

The Greatest Height Ever Soared by Airship is Seven Miles.

FIRST FATAL ACCIDENT WAS IN 1785

Ballooning at the public expense has received a serious set-back in Boston, as a result of the fatal ascension on the Fourth of July. The city fathers have, one by one, in the privacy of their castles, resolved that they never again will give their consent to any exhibition or any form of rapid transit, especially aerial, that puts human lives in jeopardy, says a writer in the Boston Herald.

Possibly their sensibilities, or those of their successors, if such be chosen, may be less acute next year, when the question of the Fourth of July programme comes up, than they are now, but if not the crowds who gather on the Common in 1893 will strain their eyes in vain for the awfully airy and its venturesome pilot.

As much as the death of the veteran aeronaut and his unfortunate assistant is to be regretted, the accident, in face of its obvious and preventable causes, ought not to be given too great weight in computing the risks of aerial navigation.

Lives Lost in All Other Ventures. A public that has learned to read the disasters that follow in the train of excursion steamers, misplaced switches and the electric motor, and still retains a liberal measure of charity for those who are dealing with the problems of transportation on land and water, ought not to be too censorious now and then a life is lost by those who are experimenting with locomotion in another element.

Aeronautics have had an interest for Bostonians for more than a century. It was a Boston man, Dr. John Jeffries, grandnephew of Dr. B. J. Jeffries, of this city, who, in January, 1785, crossed the English channel in a balloon. This was the first ascent ever made for scientific purposes.

Dr. Jeffries wished to see the following points more clearly determined: First, the power of ascending or descending at pleasure while suspended and floating in the air; second, the effect which airs or winds might be made to produce toward the purpose, and in directing the course of the balloon; third, the state and temperature of the atmosphere at different heights from the earth; fourth, by observing the varying course of the currents of air or winds at certain elevations, to throw some new light on the theory of winds in general.

Dr. Jeffries Makes His Preparations. Dr. Jeffries took with him a thermometer, a barometer, a hydrometer, a pocket electrometer, a mariner's compass and other appliances. The barometer was new, made for the purpose by Jones, of London, and graduated down to 18 inches. The refreshments included wine, one bottle of which was brought to Boston, where Queen Victoria's father helped to drink it under interesting circumstances. At the house of Kent he was visiting in Boston and attended the wedding of Nancy von Geyer, a celebrated beauty, and Mr. Rufus Greene Armory. The Duke, by virtue of his rank, was first to kiss the bride, and afterward nuptial of the wine his physician, Dr. Jeffries, had sent to honor the occasion. Afterward Dr. Jeffries' son, Dr. John Jeffries, married the daughter of Mr. Armory, the mother of the present Dr. B. J. Jeffries.

It was this Dr. Jeffries whom the Herald reporter found yesterday at No. 15 Chestnut street, where the sign, "Dr. Jeffries," has remained for more than a century. The house is full of the relics of Dr. Jeffries' eventful voyage across the channel.

"My grandfather's diary," said Dr. Jeffries, "notes that he started from Dover, England, across the channel with M. Blanchard as a companion at 1 o'clock January 7, 1785.

The First Fatal Accident the Same Year. "They had a very successful voyage, and at 3 1/2 the same afternoon landed in the wood of Guines in France, about 12 miles from the sea. A monument has since been erected to mark the spot. A banquet was given to the aeronauts in honor of the event, and 100 years later the aerial voyage was again celebrated in the same hall where Dr. Jeffries died.

It is remarkable that, following close upon this successful achievement of Dr. Jeffries, in the very same year, came the first fatal accident connected with ballooning. Plaitre de Rodier and Romaine Laine attempted to cross from France to England in a hydrogen balloon under which a basket and balloon were suspended. At the height of 3,000 feet both balloons got afire, and the aeronauts fell upon the rocks near the French coast.

These two ascensions in 1785, one conducted with care and successful, and the other without proper precautions and fatal, are an epitome of all the events that the subsequent century has seen.

It cannot be denied, however, that even with all the precautions that science and experience can suggest, ballooning is a dangerous pastime. It very generally followed, life insurance companies would find it necessary to put a balloon clause in their policies.

A Big Record of Successful Ascents. M. Blanchard, Dr. Jeffries' companion, made 66 successful ascents, one being in New York in 1796. M. Blanchard, however, was not so fortunate. She attempted an ascent alone from Paris in 1819 with some fireworks, when her balloon burst and she was dashed to pieces in the rue de Provence.

Mr. Green, the English aeronaut, presumably a relative of Trowbridge's "Darius Gorge," whose song "were of Luther or something or nothing," was in the balloon business 36 years, and during that time he made nearly 1,400 ascents, crossing the channel three times and falling into the water twice. His last journey was from London to Weiburg on the continent, a distance of 600 miles, covered in 18 hours.

Although this beats anything done by his American namesake of "flying machine" fame, it is still true that another American, Mr. John Wise, has done even better. In July, 1859, in company with Mr. John La Mountain and Mr. Hyde, a St. Louis newspaper reporter, he traveled 1,150 miles, from St. Louis to Henderson, N. Y., in 19 hours 20 minutes, or at an average speed of nearly a mile per minute. This balloon was of oiled silk of about 90,000 cubic feet capacity.

It is painful to record that both Mr. Wise and Mr. La Mountain, the heroes of this aerial voyage, met an unhappy fate at a subsequent venture. La Mountain was dashed in pieces. Wise rose from St. Louis in company with a reporter named Burr.

Two Famous Aeronauts Are Lost. The wind was high and favorable for a long voyage, and so they continued on, not daring to land even if they wished to do so. Night overtook them with no abatement in the gale, and they were swept along 800 miles from their starting point, until they were over the waters of Lake Michigan. The balloon was a small one, incapable of remaining up a great while, and finally it collapsed and both voyagers were drowned. Burr's body was washed ashore, but Wise, the veteran aeronaut, sank in his car.

Mr. Donaldson, who with Mr. Wise was engaged by the Daily Graphic Company of New York to make the balloon trip across the Atlantic, the latter occurred, met his end in a way very similar to that of Mr. Wise. Mr. Donaldson made his last ascent from the lake front in Chicago accompanied by a young man named Grimwood, a reporter for a Chicago paper. They floated off at a ten-mile gait directly up the

lake, and were lost to view. They were never seen alive again. A terrific storm arose that night, and both were lost. The boat of Grimwood with a torn life preserver about it, told all that will be known of their fate.

It is probable that Donaldson, like Wise and Prof. Rogers, remained with the car until it struck the water and went down. The reporters Burr and Grimwood, in both cases, like Goldsmith the other day, struck out for life away from the vehicle that had come to seem to them the engine of destruction.

Lost in the Wilds of Maine. In 1872, two experienced voyagers rose from Plymouth, N. H., and crossing the White Mountains, they found themselves at nightfall over the wilds of Maine. During the night they floated over the Canadian wilderness, and in the morning floated out over the Gulf of St. Lawrence. By good fortune a counter current set in, where they made a landing, 250 miles below Quebec.

A company of five persons from Buffalo were up 13 hours and descended safely. They floated across the State of Pennsylvania, over the Allegheny Mountains into Maryland, and finally were wafted back to New Jersey, where they landed.

Seven persons went up from Cleveland one September afternoon, and floated down Lake Erie for 150 miles. After eight hours over the lake they left it on the Canadian side and floated westward over Lake St. Clair and Lake Huron, finally landing at midnight at Port Huron.

Two voyagers from Chicago were up 19 hours, and then landed, after cruising 60 miles, in a dense wilderness. They were five days without food, but finally reached Chippewa Falls, where they could telegraph home.

The highest ascent is claimed by Cogswell, the English aeronaut, and Glaisher, the meteorologist, who went up seven miles and were almost frozen to death, as well as prostrated by the rarity of the atmosphere. Mr. Glaisher became insensible, and Cogswell lost the use of his hands and was obliged to pull the valve cord for their descent with his teeth.

Balloons Used During the Civil War. Early in our Civil War a balloon corps was organized by the United States War Department, with La Mountain, Lour and other experienced aeronauts associated. Mr. Lour first performed the feat of telegraphing 600 feet above the earth, and at the battle of Fair Oaks, which he watched from the altitude of 2,000 feet, was the first to announce the enemy's retreat to Richmond.

On one occasion, while General Fitz-John Porter was watching the enemy from a captive balloon the rope broke and he was carried to the Confederate lines. By pulling the valve string he caused the balloon to descend, when it struck another current of air that landed him in the Union lines.

The history of the ascents from Boston Common during the past ten years shows that the aeronauts have hardly an even chance of landing on terra firma. In 1883, 1888, 1889, 1891 and 1892 the voyagers have been precipitated into the water off the coast of Massachusetts, to throw some light on the theory of winds in general.

In 1883 the party landed in the harbor off Point Shirley, in 1888, with the late Prof. Rogers as aeronaut, the party were rescued off Deer Island in 1890 by Prof. Allen and Ed. O. Stickney, of the Herald were blown into the harbor near Fort Winthrop, and last year Ezra S. Allen, of Providence, and John A. Fyves, a reporter, were carried out to sea and ducked again and again, and finally rescued near Massachusetts.

A Disaster Caused by Parsimony. Under ordinary conditions, with the craft that are sailing in Boston harbor on the Fourth of July, all aeronauts say they had rather land in the water than anywhere else.

"These men in the Governor Russell," said an experienced balloonist yesterday, "were not drowned, they were smothered. They were half asphyxiated by the gas before the balloon struck the water.

"The economy was the real cause of the disaster. When the trouble was, poor 'Gus' Rogers was out of money, and the contract was awarded him so late that he found himself in a corner. He had to assign his contract in order to raise money to buy the cloth. He purchased the very poorest quality of cotton cloth, and he did not have time to oil it enough to keep the gas in.

"If he could have given it one or two more coats of oil and spread it out to dry for awhile it might have helped some, but the cloth was too thin, anyway.

"Prof. Rogers had a good net, but that was all. It is a wonder the balloon did not burst before it left the Common.

"Just before it started said to Prof. Rogers: 'At your old tricks, I see—going off with no life preservers.'

"What do I want of life preservers," he replied, 'I'm an old sailor and can swim.'

The Balloon Becomes a Parachute. The valve of a balloon is at the top of the bag. When Prof. Rogers pushed the escape cord, the valve opened, and the neck of the bag, the material being so thin, was sucked up until it finally closed the aperture in the valve, and the balloon became a parachute and dropped into the water. Instead of floating clear, as a balloon should do, it closed down over the basket, while the gas from the rent on the side almost smothered its occupants. Rogers and Goldsmith got out, but Penton was smothered before he was rescued.

"Rogers, no doubt, was too badly affected by the gas to swim. If it hadn't been for that he would probably have been rescued. It was the gas, too, that explains Goldsmith's great exhaustion."

WITH NON-UNION MEN. The Crum Creek Company of Chester Start Their Works. The puddling departments at the works of the Crum Creek Iron and Steel Company, near Chester, Pa., have resumed work with non-union men. The firm pays \$2 a ton for wrought scrap and \$5 for cast scrap, a half-wrought. Among the non-union men are a number of the old hands. At present there is only one turn in every 24 hours. It is expected that the night turn will be put to work very soon.

Opposed to a Bankruptcy Bill. WASHINGTON, July 21.—Messrs. Buchanan, of Virginia; Culbertson, of Texas; Bynum, of Indiana, and Goodnight, of Kentucky, four of the strongest Democratic members of the Judiciary Committee, have united in a minority report presented to the House to-day protesting against the passage of the Torrey bankruptcy bill. The minority oppose the passage of any national bankruptcy law.

NEARLY every household uses a stimulant of some kind. None better known or more highly recommended than Klein's "Silver Age" and Duquesne's Eye Whiskies. Physicians and chemists have vouched for the truth of this over their signatures. Testimonials are shown in Max Klein's window, Federal street, Allegheny. Send to him for catalogue and price list of all kinds of liquors.

Embroideries at Half Price. Edgings, narrow, medium and wide widths, 3c, formerly 7c and 8c; 5c, formerly 9c and 10c; 7c, formerly 11c and 12c; 9c, formerly 13c and 14c; 11c, formerly 15c and 16c; 13c, formerly 17c and 18c; 15c, formerly 19c and 20c; 17c, formerly 21c and 22c; 19c, formerly 23c and 24c; 21c, formerly 25c and 26c; 23c, formerly 27c and 28c; 25c, formerly 29c and 30c; 27c, formerly 31c and 32c; 29c, formerly 33c and 34c; 31c, formerly 35c and 36c; 33c, formerly 37c and 38c; 35c, formerly 39c and 40c; 37c, formerly 41c and 42c; 39c, formerly 43c and 44c; 41c, formerly 45c and 46c; 43c, formerly 47c and 48c; 45c, formerly 49c and 50c; 47c, formerly 51c and 52c; 49c, formerly 53c and 54c; 51c, formerly 55c and 56c; 53c, formerly 57c and 58c; 55c, formerly 59c and 60c; 57c, formerly 61c and 62c; 59c, formerly 63c and 64c; 61c, formerly 65c and 66c; 63c, formerly 67c and 68c; 65c, formerly 69c and 70c; 67c, formerly 71c and 72c; 69c, formerly 73c and 74c; 71c, formerly 75c and 76c; 73c, formerly 77c and 78c; 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6.37c, formerly 6.41c and 6.42c; 6.39c, formerly 6.43c and 6.44c; 6.41c, formerly 6.45c and 6.46c; 6.43c, formerly 6.47c and 6.48c; 6.45c, formerly 6.49c and 6.50c; 6.47c, formerly 6.51c and 6.52c; 6.49c, formerly 6.53c and 6.54c; 6.51c, formerly 6.55c and 6.56c; 6.53c, formerly 6.57c and 6.58c; 6.55c, formerly 6.59c and 6.60c; 6.57c, formerly 6.61c and 6.62c; 6.59c, formerly 6.63c and 6.64c; 6.61c, formerly 6.65c and 6.66c; 6.63c, formerly 6.67c and 6.68c; 6.65c, formerly 6.69c and 6.70c; 6.67c, formerly 6.71c and 6.72c; 6.69c, formerly 6.73c and 6.74c; 6.71c, formerly 6.75c and 6.76c; 6.73c, formerly 6.77c and 6.78c; 6.75c, formerly 6.79c and 6.80c; 6.77c, formerly 6.81c and 6.82c; 6.79c, formerly 6.83c and 6.84c; 6.81c, formerly 6.85c and 6.86c; 6.83c, formerly 6.87c and 6.88c; 6.85c, formerly 6.89c and 6.90c; 6.87c, formerly 6.91c and 6.92c; 6.89c, formerly 6.93c and 6.94c; 6.91c, formerly 6.95c and 6.96c; 6.93c, formerly 6.97c and 6.98c; 6.95c, formerly 6.99c and 7.00c; 6.97c, formerly 7.01c and 7.02c; 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