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AMATEUR BALLOONING.

"JUST AS LIKE AS NOT YOU'LL COME OUT OF THIS AFFAIR ALIVE."

IN my native town there lived an elderly man, Professor Harlow M. Spencer by name, who in middle life had followed the business of "ballooning." During the summer seasons just prior to the war, he had made ascensions from many of the large cities of New England and adjacent States, and as balloon ascensions were rare in those days, he had reaped a fair competency from the business. To my boyish eyes he was the greatest man in town. He was a glib talker, and by the hour would detail to me the pleasures and dangers of his many trips. In fact, he filled me from time to time so full of "balloon talk" that the garret of our house was the only room in which I could take any comfort. Years had rolled by, and I had reached the advanced age of twenty-seven years without having lost a particle of my boyish interest in balloon matters, when one day in June the walls of our town were covered with flaming bills announcing that the celebrated aëronaut, Professor Silas M. Brooks, a hero of one hundred and sixty-six ascensions, would make a great balloon ascension in connection with a fair and horse-trot at Canton, Connecticut, on July 4, 1885.

At last my dreams were to be realized. I had never seen a balloon, so I resolved not only to be present, but also, if possible, to be one of the passengers. From the moment of this resolution until the 4th of July I hardly took an instant's comfort. In the daytime I watched the clouds and noticed the direction and force of the wind; in dreams by night I fell out of balloons at all heights and into all manner of places; in fact, I was killed from three to five times a night for a week. Finally the morning of Saturday, July 4, 1885, dawned bright, and as the time drew near for the train to depart, I stoned the neighbors' chickens out of our garden for what I thought might be the last time, and pale and wan wended my way to the depot with a few boon companions to whom I had made known my intentions. Our trip to Canton and thence to the park was without incident, except that my courage received a severe and nearly fatal shock as we turned an angle in the road and saw a rock upon which the Salvation Army had cut the inscription, "Prepare to meet thy God."

After entering the park and making my way to the balloon inclosure, I inquired for Professor Brooks. A mild, blue-eyed gentleman sixty odd years of age, with a full beard and a kindly countenance, came towards us. "Well, boys, what is it?" inquired the professor. After a moment's silence, with a faltering voice I explained to the hero that I fain would accompany him upon his aërial voyage. "I'm sorry, young man," said he, "but this balloon will carry but one person." Afterwards we approached the subject of allowing me to go in his stead; he laughed a quiet laugh at the foolhardy proposition, but I was persistent, and offered ample security for the balloon, and also to pay him a bonus for the privilege. But he waived aside my proffered dollars, and said, "If you are bound to go, and will give security for the safe return of the apparatus to me, you may go; but it is a dangerous undertaking." The bargain was closed. The gas used was hydrogen, and it was made by decomposing fifty barrels of water contained in a large tank, and extracting the stored gas contained therein.

From the time of closing the bargain until the advertised time for the ascension, four o'clock P. M., time hung heavy upon my hands. I prevailed upon Professor Spencer, who was

present, to tell me of one or two of his pleasant day trips, some of those "ordinary day" trips when a child could handle a balloon. He gave me what comfort he could, and ended by saying, "Just as like as not you'll come out of this affair alive."

Before the balloon was full enough to go, a storm broke upon us, the wind and rain came together and beat upon the balloon, so that more than a score of men were fully occupied in keeping it from threshing itself to pieces. My courage began to come back to me in small sections, for it looked as if no one could go that day. But at 5:15 P. M. the storm had subsided, and the inflation was resumed. At six o'clock the car was attached, and Professor Brooks called for me. When everything was ready and the huge machine hung over my head like a cloud, after being assisted, in a frightened condition, into the flimsy, yielding basket which served as a car, and receiving a few parting instructions from the two venerable aëronauts as to the management of the machine, I shook hands with several thousand people whom I had never seen before, drew in a long breath, and sang out, "Let go!" They let go! Cæsar! what a sensation! It seems to me that I at that moment learned how a boiler feels when it bursts. As I looked over the edge of the car and watched that hooting crowd drop swiftly away from me, my mind was filled with a tumult of thoughts; but, as there was no motion to the car, I gradually became accustomed to the sensation and began to enjoy the magnificent view. The panorama spread out before me was bewildering. I could not at first comprehend it. Finally the gilt dome of the Capitol building at Hartford, Connecticut, caught my eye; thence following the crooked Connecticut River north, I could see Springfield, Massachusetts, and the many towns scattered along the river-banks between. Following the river south, Middletown, with its iron drawbridge, seemed quite near Hartford; farther down, Saybrook, at the mouth of the river, was plainly visible, while Long Island Sound lay near the horizon. Toward the west could be seen Waterbury, New Britain, and many smaller towns standing on the line of the New England railroad. Beneath were scores, yes, hundreds of little villages, thousands of miniature farms and lakes, and innumerable ponds and small sheets of water. Trains upon the New York and New Haven, Connecticut Western, and New Haven and Northampton railroads could be seen moving along apparently at a snail's pace. The landscape for a distance of

"THEY LET GO!"

seventy-five miles in all directions appeared as level as a floor. Mountains could not be distinguished from valleys. All was seemingly one vast prairie. I was amazed and impressed with the wonderful changing view. Overhead was that monstrous balloon, leaning slightly in the direction in which we were going, and just a little ahead of the car, the latter being suspended eighteen feet below the balloon

"HE FELL UPON IT, AND MY JOURNEY WAS ENDED."

proper, by means of thirty-four quarter-inch linen cords, which, when outlined against the distant clouds, seemed not larger than hairs. The car was simply a round willow basket four feet in diameter and thirty-one inches high.

As nearly as could be judged, I was more than a mile high, and all sounds from the earth had ceased. There was a death-like silence which was simply awful. It seemed to my overstrained nerves to forebode disaster. The ticking of the watch in my pocket sounded like a trip-hammer. I could feel the blood as it shot through the veins of my head and arms. My straw hat and the willow car snapped and cracked, being contracted by the evaporation of the moisture in them and by the fast-cooling temperature. I was compelled to breathe a little quicker than usual on account of the rarity of the atmosphere. I became sensible of a loud, monotonous hum in my ears, pitched about on middle C of the piano, which seemed to bore into my head from each side, meeting in the center with a pop; then for an instant my head would be clear, when the same experience would be repeated. By throwing out small pieces of tissue-paper I saw that the balloon was still rapidly ascending. While debating with myself as to the advisability of pulling the valve-rope (I was afraid to touch it for fear it would break) and discharging some gas, the earth was lost sight of, and the conviction was forced upon me that this must be the clouds! It made me dizzy to think of it. Above, below, and upon all sides was a dense, damp, chilly fog. Upon looking closer, large drops of rain could be seen, silently falling down out of sight into what seemed bottomless space.

I was alone, a mile from the earth, in the midst of a rain-cloud and the silence of the grave. Moreover, I had sole charge of the balloon; if it had not been for this fact I could have taken a little comfort, as I had no confidence in my ability to manage it. A rain-storm upon the earth is accompanied by noise; the patter of the rain upon the houses, trees, and walks always attends the storm; while here, although the drops were large, they could not be heard falling upon the balloon or its belongings. Silence reigned supreme. The quiet spoken of by Dr. Kane and other Arctic explorers as existing in the northern regions, was a hubbub beside this place. More tissue-paper was thrown out; seeing that it seemed to ascend, I knew that the apparatus was slowly descending, being brought down by the weight of rain upon it. Soon the earth was in view. How peaceful and quiet it looked! Immediately the whistling of railroad trains could be heard. Now mountains could be distinguished from valleys, and the cawing of frightened crows and the shouting of men could be heard. I passed immediately over Talcott Mountain tower, where there were some two hundred people enjoying the day. I could plainly hear one of them blowing a horn. As the balloon slowly descended men could be seen running from all sides towards the place of landing. Now the hum of insects could be heard, and the grapnel, with a hundred feet of rope attached, was thrown out; it soon struck the ground, and dragged lazily along through the turf and over the stones without getting a secure hold. I approached a man weighing three hundred pounds, who was sitting upon a stone wall all out of breath from running. Without the formality of an introduction I asked him to "catch on to that anchor and stop the business." With a woe-begone look upon his honest face and an ominous shake of the head he replied: "It's no use, young fellow; I can't work my bellows." But as the rope twitched along near him, he fell upon it, and my journey was ended. I had landed upon the farm of S. B. Pinney, in Bloomfield, Connecticut, sixteen miles from the starting-point, and the journey had been

THE BALLOON IN THE STORM.

accomplished in nineteen minutes, into which was crowded a stack of experience. Mr. Pinney invited me to supper, and the assembled crowd invited me to make a speech, both of which invitations were accepted.

Upon my return home an impromptu "reception" was extended to me at the depot. I was immediately dubbed "professor," and for days my advice upon picnic weather and other purely scientific subjects was eagerly sought after. Fair women wanted my photograph, and brave men desired to know "how it seemed up overhead where neighbors were scarce." My mushroom reputation must be sustained, so I purchased a mammoth balloon which Professor Brooks had in process of

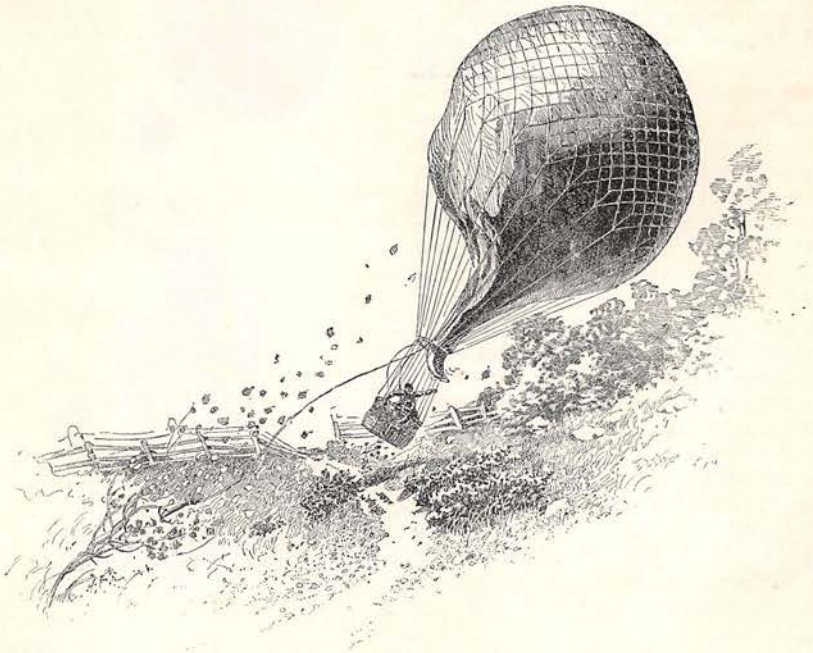
construction, stipulating that he should accompany me upon the first voyage and teach me his "trade" of an aëronaut. After which, by the aid of Mr. Doughty, a photographer of the same age as myself, and an enthusiast upon the subject, I hoped to be able to take photographs from a balloon which would convey, plainer than words can, an idea of the appearance of the earth and clouds as seen from above.

On the 29th day of July, 1885, the professor and I made the trial trip, from Winsted, Connecticut, in the new balloon, which when filled with gas lifted over twelve hundred pounds. This trip resulted in nearly spoiling the entire apparatus and frightening two persons out of the "trade." Before relating the experience of my second trip I am constrained to say a word concerning my companion. Professor Silas M. Brooks was a character. Combining the trades of farmer, mechanic, and aëronaut, he managed to meet the demands of the tax-gatherer with a fair degree of promptness, and at the age of sixty-five years was hale and hearty. As a mechanic he was phenomenal — the most ingenious I ever met. Every part of the balloon and its accouterments he was capable of making with his own hand, even the anchor-rope; and there was not a grist, cider, or cider-brandy mill for miles around that had not felt the weight of his hand. Even the scarecrows in his neighborhood were designed by him, and they were indeed frightful. They consisted, in part, of a small windmill with a ratchet attachment that made a terrible racket when the wind blew; he also had one rigged to a small water-wheel, in a brook near by, for quiet days. An Irish farmer living near averred that the professor made one for him that frightened the crows so that they brought back the corn they stole the year before. As an aëronaut he has made, I believe, more ascensions, and had more practical experience in aëronautical matters, than any other person now on the continent, the proceeds from which have not remained to him. Nature did not design the professor for a farmer. This was his weak point. He would allow the succulent potatoes to freeze in the ground while he was perfecting some contrivance that would dig them all up at once.

Professor Brooks and I left the ground at Winsted in the brand-new balloon at 12:56 P. M., four minutes before the advertised time for the ascension. We started thus early to avoid a heavy shower which was fast coming up in the south-west. The start availed us nothing, however, for by the time we had reached an altitude of eighteen hundred feet the storm was upon us. The monstrous balloon whirled around and swayed about, and we were wet through by the driving rain. Twenty pounds of sand was quickly thrown out, and we shot up through the rain-cloud like an arrow. My companion smiled as we came into the sunshine above, and assured me that it was nothing but a little "flurry" liable to occur upon any trip. We could now look down upon our recent enemy with composure, and over the edge of the cloud to the north had a magnificent view of the earth thickly dotted with towns and villages, some near enough to be recognized, while others were so far away that the houses looked like white dots upon the broad green fields. The various lakes, ponds, and smaller bodies of water shone in the sunlight like silver shields. All sounds from the earth having ceased, we sailed silently along enjoying the wonderful panorama. Soon the smell of gas caused us to look up; the diminished pressure, due to the great elevation, had caused the gas to expand to such an extent that it was passing out of the opening at the bottom of the envelope at the rate of several hundred feet a minute. My associate quickly seized the valve-rope and held the twelve-inch valve open about three seconds; this relieved the pressure upon the balloon and caused us to descend about a thousand feet. The clouds were swiftly gathering from all directions, and to all appearances we were going to have a heavy storm. At my timid suggestion that we drop down through the lower layer of clouds and make a landing, my mate turned to me and put the question, "Are you afraid?" With my heart in my throat I replied, "Oh, no! I like it." (The latter part of this answer,

"WE THREW OUR WET ARMS ABOUT EACH OTHER'S NECK AND WEPT." (SEE PAGE 677.)

at least, was not true, but I have since confessed the fact to Professor Brooks, and he himself confessed that he knew it all along.) While we were debating, we were steadily approaching an ominous black bank of clouds which was apparently six hundred feet through upon the outer edge. These clouds were continually moving in and out, seething and boiling like the ocean in a storm, while cold winds swept along their face, chilling us and causing the mercury to fall twenty degrees in as many seconds. Large blocks of cloud would break away from the main body, sometimes passing over us, sometimes under us, and then enveloping us in such darkness and rain that the balloon was scarcely visible from the car. The professor remarked that he was not pleased with the appearance of things, and began to tumble the ballast overboard; but in the occupation of giving me a fright he had delayed too long, for with a whirl we were drawn into the black-walled thunder-head, into the darkness and storm. Now began a season of terror which can be but feebly described. The rain was continuous, pouring in upon us from all sides, from above and below, being forced about by the ever-changing wind. Forked tongues of lightning opened and lighted up great gaps in the liquid gloom, each blinding flash accompanied by sharp, deafening thunder which reverberated through the dark mass with frightful distinctness. Overhead the monstrous balloon trembled, shivered, and anon shifted its position in the netting with a tearing sound which, if possible, added to our terror. At times it stood still for a moment, then, toppled over by an upper current, it would swing away, swiftly dragging the car diagonally behind — as school-boys play "snap the whip "— to be again twisted around and brought to a halt by a cross-current. This was a most sickening experience. While the massive gas-bag overhead contained all of the lifting power and struggled manfully to hold us up, it had no *lateral* strength; when a strong counter-current struck it, over it would go until it lay upon its side, with the cords between the car and balloon for a moment slack; then the car and its stooping occupants would drop the length of the cords, straining the yielding willow of which the car was composed to the last degree, and wringing the water from the cordage which attached it to the balloon. Heretofore we had knelt back to back, grasping opposite sides of the car, to preserve the equilibrium. Now, upon turning around our eyes met; his face was white, but not a word was spoken. Handing the barometer to me, he seized an open bag of ballast, weighing eighty pounds, and with the valve-cord tied about his arm, to prevent the wind from blowing it out of his reach, he stood bareheaded, with disheveled hair and set teeth, looking, in the lightning-lit scene, the very picture of determination. I called out "Three thousand feet" (we had entered the cloud five thousand feet above the level of the sea); over went half the ballast! Despite the weight of



THE LANDING.

"THE FENCE MELTS AWAY." (SEE PAGE 679.)

rain in the cordage we began to ascend, and the barometer-pointer slowly moved around to three thousand eight hundred feet and stopped. I nodded, indicating that we were stationary, and over went the other half of the ballast, bag and all. Again the unwieldy apparatus mounted upward through the dismal storm until the pointer registered four thousand five hundred feet. Ballast to the amount of nearly three hundred pounds was thrown out, and an altitude of six thousand two hundred and fifty feet was reached. Thus, after passing up three thousand two hundred and fifty feet through the thunder-cloud and running out of ballast, there was but one alternative left, namely, to allow the balloon to settle down through the storm, having weight, in the shape of rain, added every minute (every mesh in the netting formed a little reservoir for holding the water), and take our chances of being dashed to pieces upon the land or drowned in some small body of water. We feared, too, that in again entering the thunder-clouds, and running the terrible gauntlet of lightning-flashes, the gas escaping from the balloon might be set on fire, and the perils of our already frightful situation reach their climax. The earth having been out of sight over half an hour, we had not the remotest idea of our location. Already we were swiftly descending, and as the pointer upon the barometer began slowly to revolve backward, a sickening feeling overcame me.

The awful silence was broken by the professor, who asked:

"How fast are we falling?"

After comparing the barometer and watch, I replied:

"One hundred feet every three seconds."

"And we have but just started," was his cheerful rejoinder. Every movable article in the car, except a few valuable instruments of but little weight, was thrown overboard. With an appealing expression upon his worn countenance, the professor turned to me and asked, "Is there anything else we can throw out to lighten the load?"

As a shipwrecked sailor, hopelessly lost, starved and thirsty, looks covetously upon the last drop of water, thus I, with equally greedy eyes, looked upon a pair of cowhide boots which adorned the legs of my learned associate. But, no! Banish the thought! I answered him "Nothing!" We were falling thirty-three feet per second, causing the cloth trimmings upon the sides of the car to flap violently, and the resistance offered by the air forcing great hollows into the yielding cloth of the balloon overhead, the flabby and trunklike neck of which slowly waved from side to side. As this neck rubbed with a grating noise against the varnished sides of the balloon, it seemed as if some huge elephant

"I GOT OUT IN COMPANY WITH A THERMOMETER." (SEE PAGE 679.)

was accompanying us in our nightmare descent to destruction!

Still there was no *sense* of falling. There was the certain information of the fact offered by the barometer, and we saw that the rain seemed stationary, but there was no dizzy sensation. Within three horrible minutes the earth was dimly seen through the rain. As it seemed to come swiftly towards us we became more fully impressed by our danger. It was frightful! awful! Now the wind changed, and instead of falling perpendicularly we took a diagonal course. My friend, ever full of ideas, brightened up and said eagerly, "If this lower current of air holds steady, and the entire apparatus can stand the strain of a strong anchor-hold, I think we can make a landing without getting killed." Saying which, he handed me the "rip-cord," with earnest instructions to take up all the slack and pull hard the instant he gave the order, while he carefully and skillfully recoiled the long anchor-rope, so that it should not become knotted and tangled at the last moment. Everything about the balloon, except the professor, was new; it ought to stand the strain. There was a hope. I was anxious for the trial to take place, while he, although as thoroughly frightened as myself, had a better control over his feelings.

We were now five hundred feet from the ground, and after passing like a shadow over a strip of woods, the heavy, four-pronged steel grapnel with its two hundred feet of untried one-inch rope was thrown out.

We watched with bated breath and feverish interest the result. It first caught in a clump of alders, and as the rope quickly tightened like a whip-cord, the bushes came out by the roots, without having made a perceptible impression upon our progress. In an instant the grapnel had passed on twenty rods and caught a three-inch maple-tree close to the ground. Thinking this would hold, my instructor called out, "Rip it!" In an instant there was a hole forty-one feet long in the balloon, and with a fearful crash the car struck the ground, stunning for a moment its two occupants. But we had not yet finished our journey, for the grapnel, after bending the maple-tree down to the ground and stripping it of every leaf and small limb, had let go. The balloon, being more than half full of gas, and assisted by the wind, lifted us clear of the ground, and, after going along at railroad speed for an eighth of a mile, dropped us again. We partly sailed and partly dragged in this manner for a long distance, grabbing frantically at every bush and tree within our reach. For an instant my companion would glance over the edge and grab at the air; then he would take his turn at being walked upon in the bottom of the swift-revolving basket. After plowing up the ground and leveling everything in our path, we brought up against a post-and-rail fence built upon a stone wall, a dozen or more lengths of which bowed out like a horse-shoe; but it held together, and we had landed *alive*.

Crawling out through the slack ropes from under the ill-smelling balloon, we threw our wet arms about each other's neck and wept. I casually remarked, as we viewed the half acre of tangled balloon wreckage and various meteorological instruments scattered about, that my researches in the interest of science would hereafter be confined to lower altitudes.

Thus terminated one of the most dangerous trips ever taken. We were in the air fifty-four minutes, during thirty-eight of which we were out of sight of the earth in the thunder-storm, and had traveled in a roundabout course about seventy miles. I did not recover from my fright for days, and was thoroughly discouraged at the prospect of accomplishing anything in the line of photography from a balloon.

The balloon was repaired and offered for sale upon "easy terms." But, as the demand for balloons seemed limited, and as we had several weeks of pleasant, "ordinary" days, my courage returned, and with Mr. Doughty, the photographer, I determined to wait for a good day and try my "hobby" of taking photographs from a balloon. As the subject deals largely in photographic matters, I leave those trips to the lucid pen of Mr. Doughty.

On the 23d of September, 1885, I made an ascension from New Milford, Connecticut, alone in the small balloon. A light wind was blowing, but the day was bright and pleasant. At three o'clock P. M. the balloon rose majestically, and, taking an easterly course, passed over the town of New Milford at an elevation of one thousand feet. As it continued to ascend, the entire length of the beautiful Housatonic valley, with its railroad, winding river, and myriads of rich farms, lay spread out beneath. What a magnificent view! Oh, ye grovelers, plodding along at a snail's pace upon the earth's surface, I pity you! I move along without a jar, without exertion, leagues to your rods. Nay, more: I drink in at one glance your entire day's journey. Far up and down the valley, on the hillside and the plain, lay the homes of the thrifty farmers surrounded by their ungathered crops. Fields of buckwheat ripe for the cradler's knife, corn in sheaves, with the gaudy pumpkins, "nuggets of the field," scattered about between, together with the orchards laden with fast-maturing fruit, made a picture of peace and plenty, while the tracts of woods with their variegated autumn leaves gave the charm of color to the landscape. As, filled with awe, I

noiselessly float along, the chilly air admonishes me of the proximity of the clouds; the mercury in the thermometer, which registered eighty-four degrees as I left earth, has now, at an altitude of four thousand feet, fallen to seventy-three degrees. Anon the earth is lost to view, and the entire apparatus is enveloped in a cold, clammy mist, known to those below as a cumulus cloud. The mercury continues to fall until forty-five is reached. My jaunty beaver hat, which had been waved so gracefully to the New Milford girls, was unceremoniously pulled down over my ears, and a handkerchief did weak service as a muffler. A few pounds of ballast was thrown over to shorten the stay in the cloud, and, after passing up through six hundred feet of the cold, damp fog, I emerged into the sunshine. Continuing upwards one thousand feet above the cloud-level and six thousand feet from the earth, the mercury has gone up to ninety-two degrees,—*eight degrees warmer than upon the earth's surface at the same moment.* This result was owing to the reflection of the sun from the clouds one thousand feet below. The heat is intense, it rises around and about me in visible waves; the lower part of the balloon, known as the neck, heretofore closed, is now fully extended by the expanding gas, which, invisible while within the envelope, is now seen slowly curling out of the neck like white smoke. My former protections from the cold are removed, and I stand in my shirt-sleeves. Extending below in all directions as far as the eye can reach is an endless landscape of beautiful white clouds, piled up here and there into vast foggy chains of mountains, with chasms and valleys between that would make a chamois hunter dizzy to contemplate. In a few short moments the misty mountains have melted away, only to be reconstructed elsewhere by the chilly breezes that blow over their surface. Speak not to me, ye loiterers upon the footstool, of Alpine scenery! *Here* people of the most sedentary habits, without exertion, can see scenery manufactured. Again one is reminded of an immense mass of ice irresistibly borne along upon some unseen current. Here a huge field, hesitating for a moment, is then whirled around as if by some hidden snag; there, huge, irregular blocks are piled up, as if against some immovable obstruction, and for the moment the current passes smoothly around; the obstacle being overcome, the misty cakes lazily resume their position in the silent stream as it flows on its way to some cloud-ocean in the dim distance. Seeing the earth through an aperture in the clouds ahead, I reluctantly pulled the valve-cord; while I keenly enjoyed the scenery above the clouds, I feared that an adverse current might carry me over Long Island Sound, which had been visible but a short distance to the south before I passed above the clouds. The balloon slowly descended; when directly over the open place indicated, the valve was opened wide for a space of four seconds, and the return journey through the cloud-level was accomplished without having come in disagreeable contact with the clouds themselves. After descending below the layer of atmosphere cooled by the clouds, ballast was discharged until the barometer indicated that the balloon had ceased to descend. I should say that when one half mile from the earth there is no perceptible motion, unless there be a cloud near, or some object for comparison; whether the balloon be going up or down is known to the occupant of the car only by the barometer or the casting overboard of feathers or thin paper.

The view now at hand is the busy Naugatuck Valley. Waterbury lies immediately beneath, with its monstrous factories, and following the crooked Naugatuck railroad north (apparently about eighteen inches) the tall chimneys of the rolling-mills at Thomaston are seen, while farther north may be beheld old Litchfield with its broad streets and white liberty pole, dear to the hearts of many a "city boarder." South of Waterbury are seen Birmingham, Ansonia, Naugatuck, and a dozen other manufacturing places, filled with the hum of industry and overhung with smoke. Truly this is the valley of tall chimneys, whirring machinery, and business energy. How different from the peaceful Housatonic! As we glide along due east, the city of Meriden appears directly in our path, and farther along Middletown; while upon the left the gilded dome of the Capitol at Hartford is the most prominent landmark, and New Britain the largest city between. To the south lies New Haven, with its tall church-spires and red-walled East Rock, and the many cities and towns along the edge of the Sound are connected with those of the interior by a network of railroads, upon the rails of which may be descried numerous trains of cars rumbling and tooting along at what seemed from my position a surprisingly slow pace. Immediately beneath are countless villages, the inhabitants of which run eagerly after some colored circulars thrown to them. Approaching the valley of the Connecticut, a most enchanting view meets my vision; from far above Hartford down to the Sound the grand old Connecticut River looks like quicksilver in the afternoon sunshine. The busy little tugs, wheezing up and down the river, with their long line of barges, a steamer now and then, and the numberless reels for holding the fishermen's

nets which line the bank, give this valley a maritime aspect. While the Housatonic farmer would talk of trading a "beef creetur" with you, and the Naugatuck Valley manufacturer would speak of the money that could be made out of his patent rat-trap, we would expect the veracious dweller upon the river-bank to expatiate upon the unprecedented "run o' shad" in '85. To avoid such a risk we cross the river at Middletown, seeing and hearing the little river-steamer *Silver Star* as she whistles for the drawbridge which spans the river at this point. Fearing that the wind might change, and that I should be unable to reach Norwich, which lay due east about twenty-five miles, and seeing that the stretch of country ahead was covered with woods and lacking in railroads, I concluded to land. As I neared the earth the wind changed, and I was surprised and chagrined at the speed of the lower current of air.

The shadow of the balloon seemed to fly over the earth's surface. As it skipped over valleys, woods, and pastures like a ghost, a feeling of discontent began to assert itself. As we scooted along just high enough to clear obstructions, valve-rope in one hand and bag of ballast in the other, I could not help thinking "something was going to happen." Places soft enough to land upon from a balloon which is tearing along a mile a minute are scarce in Connecticut. While over a tract of woods on high ground, in East Hampton, the valve was opened in hopes of being able to make a landing in the valley on the other side, out of the wind. As the machine settled down the side of the mountain, the car became engaged with the limb of a large chestnut-tree. The momentum was too much for the limb; it snapped off close to the tree, at which place it was certainly ten inches through, and the journey down was continued. The grapnel with one hundred feet of rope was thrown out. It caught in and tore down three lengths of a six-rail fence. I passed the time of day with a terrified farmer, who was at work in the lot, and, dropping a fifteen-pound bag of ballast, rose up over the hill into New London county. I shall never forget the picture of horror depicted upon that farmer's countenance, as he saw his fence melt away, and looked up at me whooping along over his head.

After two other unsuccessful attempts to make a safe landing the ballast gave out. Unless the anchor should catch a secure hold at the next attempt, I might hear something "drop." As I neared the earth the anchor was thrown out again. I should explain that the anchor, or grapnel, is drawn into the car after every unsuccessful attempt, to avoid the danger of its being caught in the tops of trees; for if the anchor with a hundred feet of rope attached becomes securely hooked into the top of a tall tree during a gale of wind, there will be trouble.

It was gratifying to see the anchor finally take strong hold. Knowing that it would not pull out when the slack was taken up, I pulled the rip-cord, making a hole twenty-two feet long in the balloon; but when the balloon reached the end of the slack rope the speed was too great, and the heavy hickory hoop overhead, to which the anchor-rope is always attached, parted, causing the ropes which attached the car to the balloon to pull upon one side only; the car was bottom side up in a minute, twenty-six feet from the ground. I got out, and, in company with a thermometer and a porous-plaster advertisement that some one had thrown into the car at the outset, started out to make a landing. I struck into the top of a white birch-tree, broke it off, and fell from limb to limb until I landed on the ground, with no bones broken. The balloon could go but a short distance with the great rent in its side, so I secured the services of a kind farmer living near, and soon the balloon and its owner were on their way to Goodspeeds Landing on the river. I landed in Colchester at 4:28 P. M., having covered seventy-four miles in eighty-eight minutes, averaging nearly fifty miles an hour.

Alfred E. Moore.

BALLOON EXPERIENCES OF A TIMID PHOTOGRAPHER.

MY FIRST ASCENSION.

ALTHOUGH I had always wished (as who has not?) to taste the pleasures of a balloon ascension, yet, when in July, 1885, Mr. A. E. Moore confided to me that he was having a large balloon built, and asked my opinion concerning the possibility of photographing from it, nothing was further from my thoughts than that I should ever realize my aspirations.

Later Mr. Moore consulted me about the construction of some parts, but still I had no suspicion that I was destined to be his companion in two ascensions.