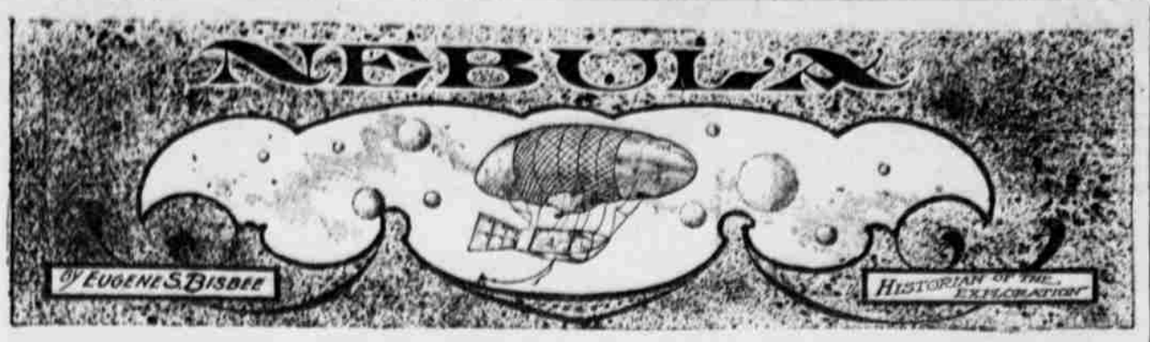


The short history of the most remarkable Aerial Exploration on record. Secured from and published with illustrations made of the trip, by courtesy of The Technical World, Chicago.

"Last fall I participated in an experience that for its wonderful phases has never been duplicated."

John Bennett reached for his pipe, filled and lighted it, and then glanced toward me as if to ask if I wished to hear what he had to divulge. He is a very remarkable man, of that rare type fast disappearing. For more than half a century he has made his home in the heart of California's majestic mountains, and like the "Poet of the Sierras," he wears a flowing patriarchal beard, and hair to match, and is himself a student and a poet by nature.

I settled myself in my chair with an appreciative nod, and John Bennett began what is truly a most remarkable story.

"I am the oldest graduate of Yale in California," he said; "and I think it was this that brought to the ranch a party of scientists from my old university. I am not at liberty to name them, for they are coming again to try another experiment, and until that has been made, the whole thing is a secret of theirs. It will not do any harm to tell as much as I intend to, however.

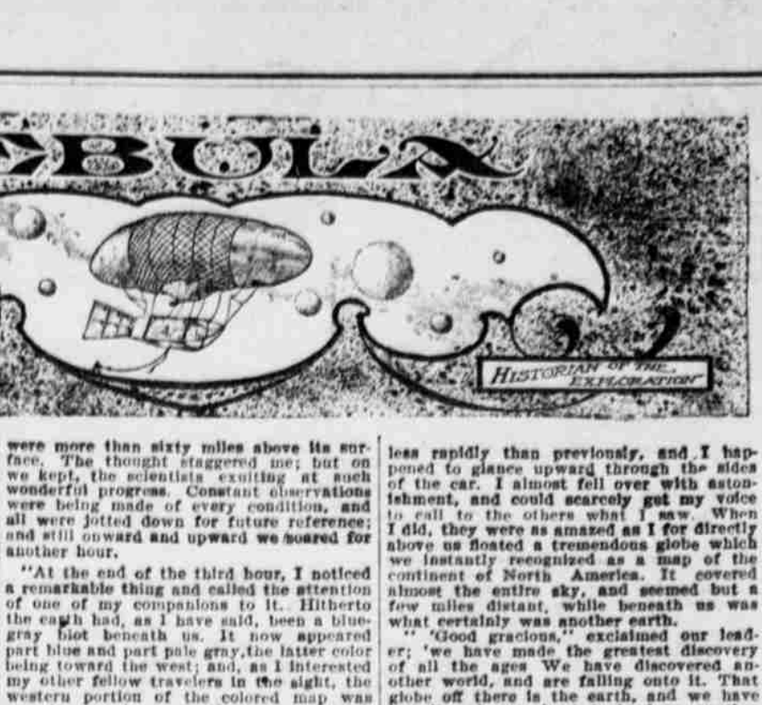
"They brought with them a dirigible balloon, and confided that they were going to make an ascent and study the topography of the Sierras so as to be able to make an accurate map of the entire range. It didn't turn out that way however, as you will see.

"In a sort of superficial way I have always been interested in aerostatics and kindred sciences; and when they asked me to accompany them as guide and companion I accepted the invitation with alacrity. We went farther up into the range, and made camp. They took their machine out, and began the work of assembling the parts; and I want to say here that it was as complete a thing as ever man made. There was everything calculated to make the trip a success and every appliance to prevent accident. It's pretty cold up on top of the range above timber line, and arrangements had been made to prevent this condition from retarding the experiments. The car of the balloon was made of isinglass over a frame of aluminum. It was entirely enclosed, and was heated from an electric motor, which also propelled the machine. Hydrogen gas was used as the lifting power, supplemented by another motor, and oxygen was manufactured and supplied to the occupants of the car when the atmosphere became too rarified for comfortable breathing. Provisions were stored for the party—enough to last six men a week—and when the ascension was made it seemed that not a thing had been overlooked. All sorts of anemometers, barometers and thermometers were taken along, and everything necessary for the proper study of the conditions that might confront the party after leaving the earth.

"It was a sparkling morning when the signal was given, and we arose with a bound and were soon soaring over the tops of the snowy peaks. Never shall I forget that sight as I gazed through the sides and bottom of the transparent car. So bright was the sunshine that we were forced to draw the green silk curtains at some of the windows. Within five minutes we were looking down on toy mountains that were dropping away from us as a stone drops from the top of a tall building; and the atmosphere had become so rarefied that the oxygen tank was opened into the car, and the heating motor was started. Far off to the west, we could see the tiny valleys, and, still farther, an endless blue expanse that marked the Pacific Ocean. Many men have exulted in the view from a balloon, but few have ever had the experience of making an ascension to a height above the sea of more than two miles. Straight upward we soared; and within an hour, during which we felt not the least discomfort, we had risen so high that the earth was now a broad expanse beneath us, blue in color and showing no convolutions whatever. It seemed perfectly flat at such a distance, and the ocean had become the same color as the land.

One of the gentlemen of the party lowered a thermometer through the floor and drew it back within ten seconds, its bulb showing that the outside air was too cold for it to record the temperature. A special instrument was then sent down, and came back with the information that the rarified atmosphere we were in was eighty degrees below zero. Within the car, the thermometers registered sixty-two degrees, which was quite warm enough for comfort. In another hour we again tested the outer atmosphere, and found that it had dropped to more than one hundred below zero. By this time the earth had become a dim haze, and calculations showed that we were more than sixty miles above its surface. The thought staggered me; but on we kept, the scientists exulting at such wonderful progress. Constant observations were being made of every condition, and all were jotted down for future reference; and still onward and upward we soared for another hour.

"At the end of the third hour, I noticed a remarkable thing and called the attention of one of my companions to it. Hitherto the earth had, as I have said, been a blue-gray blot beneath us. It now appeared part blue and part pale gray, the latter color being toward the west; and, as I interested my other fellow travelers in the sight, the western portion of the colored map was seen to grow larger as the eastern portion diminished in size. None of my companions could account for the phenomenon. The entire field of our vision was changing, until now it seemed that only a portion of the old familiar blue remained, the pale gray



I COULD JUMP SEVENTY FEET.

having absorbed it. Then, as suddenly as had come the other change, there crept in from the east a dark blue shadow that rapidly swept across the plain beneath, changing the color again to its own, while the former colors moved away. There were no definite objects in sight, only the monotonous dark blue that soon covered the entire field below us.

"Not understanding the cause of the change, and becoming somewhat exercised by it, the professor in charge of the expedition concluded to descend, and accordingly operated the machinery for that purpose. Rapidly the motor did its work, and the plain below began to assume a definite form. It changed its color from blue to blue and green, with here and there a dazzling

THE CONTINENT OF NORTH AMERICA FILLED THE DOME OF THE SKY.

spot that indicated water; yet even then the territory was wholly unfamiliar to any of us, even to me who knew these mountains as you do your own home. The balloon, under the guidance of the practised hand of the operator, descended rapidly toward a plain, but of course you are familiar enough with aerostatics to know that the sensation is that of being stationary while the earth does the moving. In the air, all seems moving except the balloon itself. Well, within an hour we had fallen toward the earth in an entirely strange region. Not a thing was familiar, and we had evidently passed beyond the mountains and were above a broad plain.

Immediately beneath us now was a perfectly circular disc of variegated colors, surrounded by an ocean of bright blue, with here and there a feathery cloud. The disc seemed very small in comparison with the surrounding blue ocean, and we could none of us understand it. The balloon now fell less rapidly than previously, and I happened to glance upward through the sides of the car. I almost fell over with astonishment, and could scarcely get my voice to call to the others what I saw. When I did, they were as amazed as I for directly above us floated a tremendous globe which we instantly recognized as a map of the continent of North America. It covered almost the entire sky, and seemed but a few miles distant, while beneath us was what certainly was another earth.

"'Good gracious,' exclaimed our leader; 'we have made the greatest discovery of all the ages We have discovered another world, and are falling onto it. That globe off there is the earth, and we have lost it and are about to land on another planet!

"I confess that his explanation did not explain; but he soon made himself plainer by recalling to us that there are supposed to be many nebulous bodies afloat outside the atmosphere of the earth, a fact that all scientists accept. Some of these bodies are as small as pinheads, while others may be larger. That this last was correct was evident; yet how it had never been discovered by the earth's astronomers was a puzzle to me.

"That is a simple matter of explanation,' said our leader; 'this asteroid has never been discovered, for the same reason that many small but important things have been for years overlooked by scientists in search of greater fields to conquer. It is within less than one hundred miles of earth, while the very nearest object that has ever attracted the telescopes of our astronomers is the moon, distant a quarter of a million miles. Can you not understand that no astronomer would ever train his instrument so as to focus an object less than a hundred miles distant.

"That sounds reasonable, yet I asked him how it was that it had never been seen with the naked eye.

"'Simpler still,' he answered, 'because this little planet is less than ten miles in diameter. So small an object, with a color nearly identical with that of the earth's atmosphere, would never be noticed, and having no light of its own, could not be seen at any time. It is a mere speck in the sky, and no man can tell how long it has floated around our earth. There may be many more of them, but for the present we will confine ourselves to this one, and soon shall land and see what there is to see.'

"An aneroid barometer was then let through the trap in the floor, in order to ascertain the pressure of the atmosphere before we dared to open the car and step onto the little world we had discovered. The planet was growing larger every moment, and we were now within less than a mile of its surface. The instrument showed that the pressure was eight pounds to the square inch, which about equaled that on high mountains on the earth, so we were safe to land. The anemometer attached to the car at this time showed an entire lack of breeze, and we gently dropped to the surface of the 'Nebula,' as I had volunteered to call the discovery. As we looked upon the landscape, it seemed as if we had suddenly dropped into Southern California, and I could not possibly justify this condition of verdure with the small size of the tiny world, for such a little thing could not be expected to obstruct enough of the heat of the sun to produce such a condition. Puzzled, I myself dropped a thermometer through the trapdoor and noted its register. It was eighty degrees—a fact that further surprised me—and I said so.

"'I dare say we shall find that there are other sources of heat besides the sun,' said one of my companions; and no sooner had we opened the car door and begun to climb down the anchor rope, which had been cast out, than we discovered the correctness of his prophecy. There were boiling springs everywhere, and the verdure was magnificent.

"Tying the anchor rope about a bowlder, we began a survey of our world. But first of all, I took a good look at the earth we had left a few hours before. It was a more magnificent sight than words can ever tell It filled almost the entire dome of the sky, and the continent of North America looked exactly as it does on a raised globe such as we have in school-rooms. I could locate San Francisco as well as if I had had a map and pointer; and from that Western metropolis could trace the outline of the United States to the city of Chicago, and so on to the gateway of Europe—New York. It was wonderful. The air was not so rare as to be hard on lungs used to mountain conditions; but some of the party complained, and one suffered noseblood. There was a rippling brook near at hand, its banks lined with plant life, and I went toward it to get a drink. I felt wonderfully elated in mind and body, and ran lightly toward it, falling on my chest, and quenching my thirst with the most refreshing water I had ever drank. The stream was not more than ten feet wide, and, as far as we could see from where we stood, there was no narrower place. We wanted to cross it, and I fancied I could make the leap, old man though I am. I took a few steps backward, and then ran toward the bank and sprang into the air.

"I soared through that air like a bird, and landed at least twenty yards beyond the farther bank. My companions, as I alighted with the ease of a feather, first looked bewildered, and then broke into peals of almost unceasing laughter. For they understood the reason before I did. Do you?

"No. Well, the explanation is as simple as all the others have been, and follows a well-known natural law. The gravitation of the little planet was almost as much less than that of the earth as its size, and I weighed—had scales been provided—about ten pounds, more or less. With my muscles, it was nothing to jump seventy or eighty feet, the difficulty being to keep on the ground at all.

"Now, I suppose you are wondering how it was that the planet was not drawn to the earth by the great attraction of the latter body. It took the scientists less than five minutes to determine the reason accurately. It was because of the composition of Nebula, such ingredients having been put together in its formation as to repel the advances of the earth toward a union, but not enough to drive the little fellow altogether away from a motherly protection. He had come within a certain distance, beyond which he could not pass. My companions called me back, as they wanted to make some calculations, and I sprang back as easily as I had jumped across.

"By looking at the earth, they had discovered that we were traveling around that planet from east to west, while it turned over from west to east. The combined motions in opposite directions made our speed about two thousands miles an hour, so that we should circle the earth every twelve hours. This calculation was of the greatest importance, since we would have to time our departure accurately in order to land where we wanted to. If we allowed our balloon to ascend at the wrong time, it was just as likely that we should find ourselves over an ocean as over the land, and just as likely over Africa as over America. Figures were jotted down, and we then determined upon an exploration of our kingdom.

"At this point I did some figuring myself. It seemed reasonable to me to suppose that, if I could jump seventy feet with little effort, I could run just so many times faster here than I could on the earth. And I proved it I pointed out to the others a clump of trees about a mile away, and then, asking them to time me, started. My work surprised me beyond expectations, for I leaped into the air about thirty feet at each bound, alighted easily some sixty feet beyond, and took another bound, as simply as if on the earth, yet with an ease that gave me not the slightest weariness. I ran back and found that I had made the two miles in a fraction under three minutes!

"'At that rate,' said I, 'I can run around this ball at the rate of forty-five miles an hour; and if your calculations are correct, and it is eight miles in diameter, it must be about twenty-five miles in circumference. I can, therefore, if I don't get winded, circle it in less than forty minutes, and I'm going to do it.'

"Two of the party volunteered to accompany me, and off we started at a good clip, the stop watches being out at the word 'Go!' None of us seemed to mind the exertion, if floating lightly in the air can be called exertion; and we ran along through the forests and across the plains with the ease and grace of greyhounds. For half an hour we did not slacken our pace; but there appeared before us a deep gulley, at the bottom of which was a stream. Here we came to a standstill The gulch was quite fifty feet deep and nearly a hundred wide at the top; and as far as we could see, there was no better crossing in sight. Elated at our work, and feeling certain we could make the leap, we all ran at it together. Every bound we took was better than the previous one; and when we reached the edge of the arroya, we sprang into the air like

SOARING OVER SNOWY PEAKS.

birds and landed on the opposite side fully ten feet beyond the edge. After this the going was simple, and we made the trip safely, having circumambulated the globe in thirty-seven minutes.

"I am not going to tire you with all the details of the stay on Nebula. Let it suffice to say that we had to wait there twelve hours for the United States to get back to us. In the meantime food was cooked and served. Then, when California was just rounding the edge of the earth from the west, we lifted anchor and started our motor, bidding but a temporary farewell to our little world, for we all fully determined that this should not be our only trip there. The journey back was the reverse of the conditions in coming away from home; and by operating the powerful machinery, we were enabled to make our landing within a very short distance of the spot we had left but little more than half a day before. But it was moonlight, and the night was beautiful in the mountains. We camped where we landed, and came down to the ranch next morning."

He stopped abruptly and relighted his pipe. I waited for him to continue.

"What do you think of it," he asked.

"I think it the most remarkable tale I ever heard," I replied.

"And perhaps you would like to look at our little world, he asked.

I was instantly alert, and rose quickly from my chair.

"Come along, then," he said, leading the way.

Into the garret we went, where he dug out of a corner a fine hand telescope, which he carried to the dormer window on the east side. Swinging it into a position 60 degrees, he peered carefully into it, then adjusted it again, screwed it tightly onto a swivel, and bade me take a careful look. I was more than amazed, for before me in the heavens was a globe of dim light, upon which I could, with care, trace and outlines of what seemed to be land and water. For but a moment I looked, and then he took the instrument away from me and turned it from the little planet.

"Now find it," he commanded.

I tried with all my might to locate it, but nothing revealed itself but the stars and the moon.

"That's the reason it has never been discovered," he said; "because astronomers have always been looking for things farther away."

A Few Afterthoughts.

The recent campaign effectually dispels the illusion that there is any "silent vote."

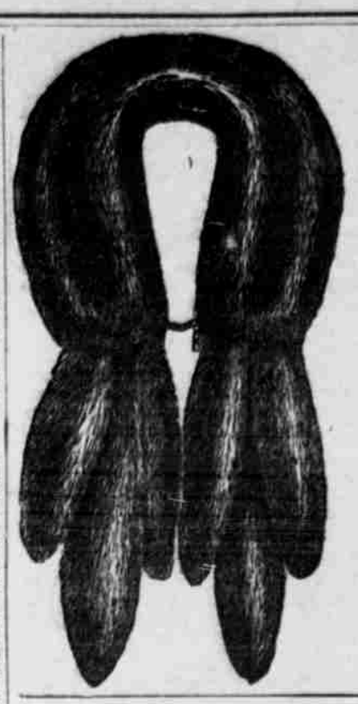
The cough lozenge man is glad that the uncomfortable hot weather is over.

The beef trust controls the supply of sole leather, and it is said that in consequence, the kicks of the consumer do not hurt.

The Cleveland woman who was arrested for putting a love potion in her husband's coffee should have used some coffee instead.

Oscar, not the king of Sweden, but the chef of the Waldorf-Astoria, says that one meal a day is enough for the average man. Doubtless at W. A. prices.

The Panama Canal has reached the stage of a splendid coat of arms and a commendable motto. This is a good deal further than the French got.



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For a time he drifted around without occupation, but later received employment as a lumber hand, with a compensation of $1.50 a day. It is now announced that he has been successful in obtaining a position in Cairo, Ill., where he will receive $4 a day.

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