

PLEASANT HOURS

A PAPER FOR OUR YOUNG FOLK.

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A Little Gentleman

I knew him for a gentleman
By signs that never fail,
His coat was rough and rather
worn,
His cheeks were thin and
pale.
A lad who had his way to
make,
With little time for play;
I knew him for a gentleman
By certain signs to-day.

He met his mother on the
street;
Off came his little cap,
My door was shut; he waited
there
Until I heard his rap.
He took the bundle from my
hand,
And when I dropped my
pen,
He sprang to pick it up for
me—
This gentleman of ten.

He did not push and crowd
along;
His voice is gently pitched;
He does not fling his books
about

As if he were bewitched.
He stands aside to let me pass;
He always shuts the door;
He runs on errands willingly,
To forge and mill and store.

He thinks of you before himself,
He serves you if he can;
For, in whatever company,
The manners make the man.
At ten or forty 'tis the same;
The manners tell the tale,
And I discern the gentleman
By signs that never fail.

TO THE NORTH POLE IN A BALLOON.

The North Pole, despite the long, ominous list of martyrs to scientific or commercial curiosity, continues to exert a fascination over many minds. This fascination Jules Verne has graphically depicted in his "Adventures of Captain

Hatteras." The problem at present discussed is whether there is land, ice or an open polar sea at the pole. An attempt is soon to be made to solve the problem by a Parisian aeronaut and a Parisian astronomer, Messrs. Besancon and Hermite, neither of whom has attained the age of thirty. The plan they propose to adopt, while original with them, is by no means new. In 1870 Silberman, and in 1874 Sivel, published studies dealing with the practicability of reaching the North Pole by balloon. In complete ignorance of these researches, Messrs. Hermite and Besancon conceived the same idea. In honour of these researches, which they later discovered, and as a tribute to the memory of an illustrious martyr to aeronautic science, they decided to call their balloon by the name of "Sivel."

The "Sivel," when inflated, will measure 16,250 yards, and have a diameter of thirty-two and one-half yards. It will be capable of carrying seventeen and one-half tons, and will have an ascensional force of three pounds to the cubic yard. The envelope will be composed of two thicknesses of Chinese silk, covered with a new, specially devised varnish, which renders it absolutely impermeable and augments the resistance of the envelope, rendering it capable of supporting, without rupture, a pressure of 6,400 pounds to the square yard.

The balloon, which is spherical in shape, will contain an immense internal balloon, so constructed as to be perfectly and permanently inflated by 3,250 cubic yards of gas always under the same pressure. This is intended to remedy, in great part, the grave inconveniences—the chief cause of balloon instability—produced by altitude changes. The "Sivel" will carry several pilot balloons to be used in studying aerial currents, and sixteen balloonets to supply, through its valves, the gas of the interior balloon of the "Sivel." The balloon's altitude will be regulated by means of a trail rope of considerable weight, which trails as a species of anchor over the ice.

Figure 2 represents the "Sivel" with its circlet of supply balloonets and its mobile anchor trailing over the ice.

The car, which is of osiers, is so strengthened by steel armatures as to be absolutely rigid. It is so arranged as to maintain in its interior a

regular temperature. A safety petroleum heater is used for the purpose. The car will be prepared for all emergencies by making it unsubmersible and furnishing it with runners for use as a sledge. It is ten feet wide by sixteen long, and will contain, besides the two explorers and their three aids, eight Esquimaux dogs, a sledge, an unsubmersible canoe, provisions, and water rendered unfreezable by a chemical procedure. The total weight of car and contents is fifteen tons. Above the car is a bridge accessible by a rope ladder.

Figure 1 represents a section of the car with its contents.

The cost is defrayed by Mr. Hermite and some English capitalists of scientific aspirations. While the idea of reaching the North Pole by balloon is not a new one, it has had its details on this occasion for the first time worked out in the above outlined plan with great care and accuracy.

CROSSING THE OCEAN BY BALLOON.

A Chicago paper has the following:

"In a few months from now a man will be able to fly over to the continent of Europe on Saturday night and return in time for business on Monday morning," said Mr. W. C. Dewey, of Grand Rapids, after witnessing the working of the Pennington air-ship at Chicago a few days ago, and subscribing largely to the stock lists. "It is really the simplest practical matter in the world," he asserted, "and if successful it will revolutionize the world even more than the railroad or telegraph has done. We are already in correspondence with the Post Office Department in Washington, and have been assured that the mails will be sent by our air-ships as soon as we can go faster than the present mail trains. The thing grows on you as you consider it. It is cheap, and that recommends it. There are no lobbies to pay, no franchises to purchase, no tunnels to dig, and no tracks to lay. The air is free."

While hundreds of partly successful attempts have been made in the direction of the solution of the problem of navigating the air, the reason the feat has never been accomplished, Mr. Pennington says, is that knowledge of electricity has not until now reached the necessary point of perfection.

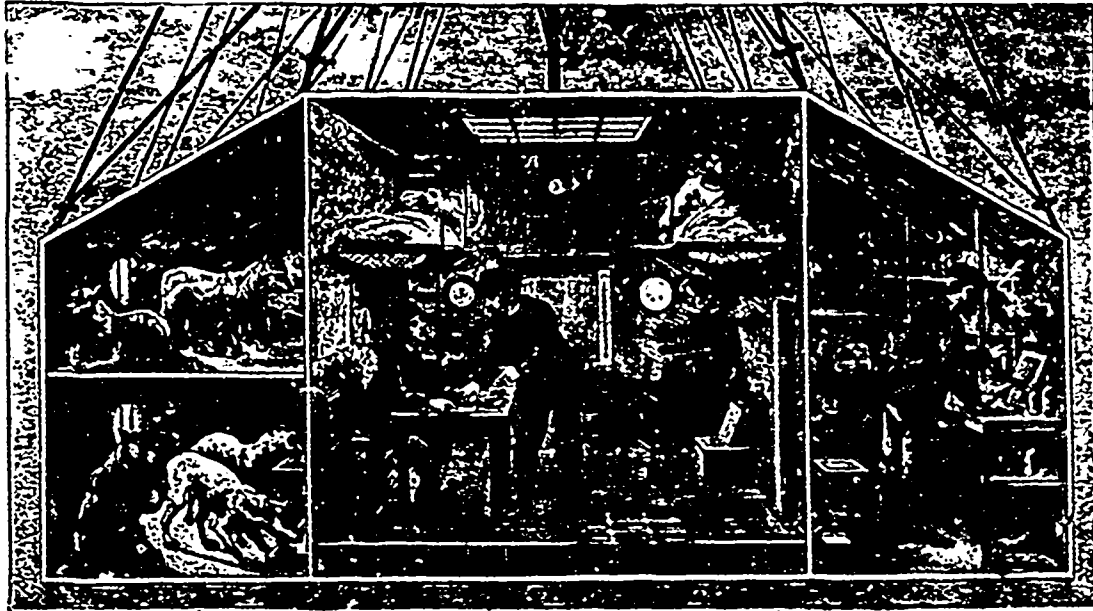
The Pennington air-ship will carry cars about the size of the present Pullmans, and will contain fifty persons each, special cars to be manufactured for quick mail and passenger service. The air-ship that is to be given a trial in a short time, will weigh about 1,350 pounds. It will be in shape very much like the hull of an ordinary sea vessel, and the crew will consist of but two men, who will, however, have the most perfect control of her. On either side, and extending the entire length, are large wings, arranged so as to be convertible into parachutes in case of accident. At the ends of these wings there are propeller wheels, by means of which the ship can be raised or lowered at will. A large propelling wheel at the bow furnishes the power by which she can be made to go either backward or forward.

The vessel proper is a huge buoyancy chamber, composed almost entirely of aluminum, and the ship that makes the

test trial will be 170 feet in length, with a diameter of 28 feet. Underneath this is a storage carrying a 100 horse-power engine, weighing 250 pounds. When every compartment is full of hydrogen, which is the buoyancy power used to elevate the vessel, the full lifting power will aggregate 5,500 pounds. The plan for carrying the hydrogen gas is an aluminum cylinder, which will act as a counter-balance, so that in fact the vessel will weigh practically nothing.

The chief factor in this final and successful (according to the inventor) solving of the problem of aerial navigation has been aluminum. The company manufacturing the ships makes its own aluminum at a cost, it is stated, of about ten cents per pound. It is also stated that the cost of the vessel will be but about \$3,500.

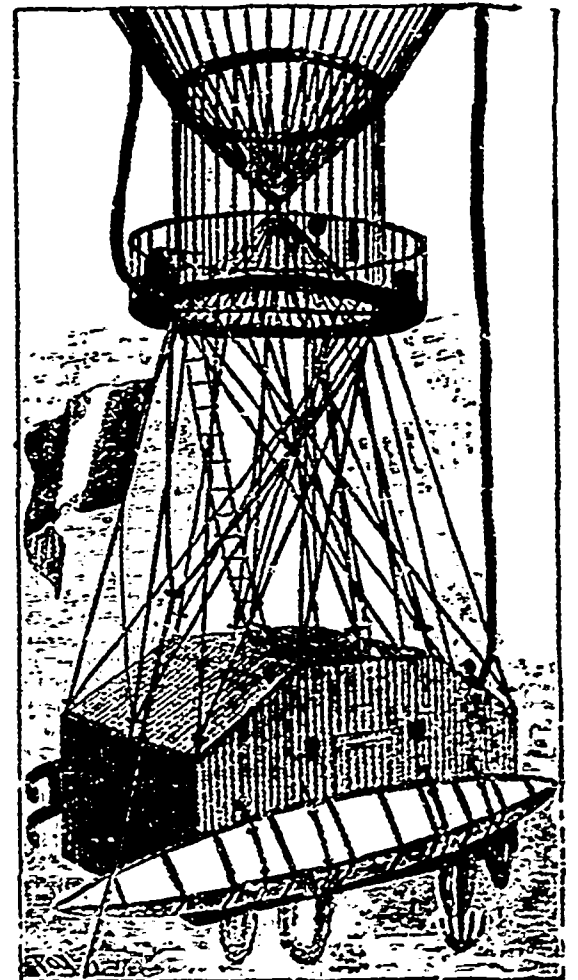
All the machinery in the new vessel is of entirely new design, and of the lightest weight possible. But even should everything break, the automatic parachutes, formed instantly by the side



INTERIOR OF BALLOON CAR.



THE "SIVEL" SURROUNDED BY "BALLOONETS."



BALLOON CAR.