

# Aerial Flight is Assured—Its Vehicle an Aeroplane

As Easily as the Sea is Navigated, Says Sir Hiram Maxim, Will the Air Be Used, in a Decade, For the Purposes of Trade and Travel.

## BALLOON FOR WAR, BUT NOT FOR WORK

Sir Hiram Maxim, in an interview in the New York Herald, says that within ten years at the outside men will be navigating the air as surely and safely as they do the land or the sea, and Professor Huntington also joins in his belief, both declaring that the aeroplane is the airship of the future. A Herald correspondent interviewed some of the leading authorities in England, and on all hands he was practically told: "If it be not now, it will come soon."

Sir Hiram Maxim said: "We shall not have any balloons in future; we shall have flying machines. The flying machine is heavier than air, just as the birds are. There are no balloons in nature."

Continuing, the famous inventor said: "In his recent lecture Colonel Fullerton advised continuing experiments with balloons. I don't agree with him. As a matter of fact, it has only been on very rare occasions that the balloon has returned to its starting point, and these results have only been obtained in France."

"Much experimenting has been done in England, but we have not attained such satisfactory results. At present several of the best engineers are engaged in studying aeronautics, and perhaps the whole science of aerial navigation may be solved any day."

"These men are being assisted in their work by clever balloon makers, but, as I have already said, I think the balloon will soon be a thing of the past. So I always advise my friends to give their attention to the flying machine."

"A few years ago the automobile was looked upon as a sort of monstrosity; now it is practically a necessity, and I really think that in ten years, at the very outside, we will be navigating the air as easily and as surely as we are now navigating the sea and even roads."

"For a balloon to lift it must have specific gravity less than air. To attain this it must be exceedingly fragile. Therefore it is useless for all practical purposes. Again, it has to be of comparatively enormous dimensions."

"Thus, you see, in a balloon you have a combination of size and fragility, which must tell against its usefulness. But with the advent of the true flying machine these drawbacks will disappear."

"So I have no hesitation whatever in saying that before many more years pass we shall do away completely with the balloon. If we are ever to fly it must be with a machine heavier than air. Many men are busily engaged in trying to invent a machine which, like a bird, will stay in the air as long as they wish and go wherever they desire to guide it."

"Wright brothers are engaged in making these machines in America and M. Santos-Dumont has spent a large fortune and, I am pleased to say, has met with a certain amount of success in his experiments. The German Emperor, too, is taking the matter up, and he will have the leading scientists in Germany at his disposal. Then Professor Langley and myself have both worked hard trying to solve the problem."

"That solution is coming, whatever people may think, and I really believe myself that within a year from now there will be a great number of machines in the air. This is certain to happen within two years at any rate."

"We cannot get away from the fact that the real flying machine has now made its appearance. M. Santos-Dumont has proved this in his recent demonstrations, and these mark the beginning of a totally new epoch in the history of the world. There are sure to be some startling developments within the next year. We are only on the threshold at present, and the immediate future is full of possibilities."

"Personally, I think that the road to success lies in the development of powerful motors. This means careful and expensive experiments, yet I feel sure that success will soon be achieved. The flying machine will be a sporting affair in the beginning, just as the automobile was."

"But in the same way it will be developed so that it can be used for practically all commercial purposes. Some persons may declare this the dream of a visionary. It is no such thing. Flying machines have come. They will be improved, and at no very distant time, ten years at most, we shall be traveling from place to place in our flying machines just as at the present day we go by train or automobile."

Professor A. K. Huntington, of King's College, London, who was one of the two British competitors in the international balloon race which ended in England, also thinks that the immediate future holds great probabilities in the development of aerial navigation. He said:

"The future is with aeroplanes. Personally I have not done much with them up to now, except having models made. Probably what has retarded progress up to now is the expense attaching to the experiments."

"The Wright brothers have been pegging away for years, and must have tried a great number of models. Some years ago they got as far as an

apparatus that would lift a man, and although they have kept the result of their trials secret, there is no doubt that they have made a great advance in the last year or two.

"Of course I am only going on what I heard, but I think they have succeeded in producing a flying machine of practical value. A great deal of scepticism has been expressed about their flying twenty-four miles. That is a very considerable achievement."

"Yet, personally, I think they have done it and now, so far as they are concerned, it simply becomes a question of working out the details."

"However, it all amounts to this: The flying machine is an accomplished fact, as several others beside the brothers Wright have arrived at good results. I think we will soon see a workable machine. You see when once you get a machine that will lift, improvements are sure—some very rapidly."

"The objection I see in the aeroplane at present is its lightness and construction, but this will be gradually overcome, I have no doubt. In order to clear any obstacles near its starting point it must be light, so that it can lift rapidly, and on this very account the machine can be easily damaged."

"This has occurred with M. Santos-Dumont. Still, when once we have got to the principle of the thing, improvements are only a question of time. There is no doubt that the dirigible balloon will be valuable for war purposes, but we can never hope to produce it at small cost, and the future rests with the aeroplane."

"There is no reason to doubt that an aeroplane can be driven against the wind, and the great thing wanted in it now is stability. In this lies the weakness of this demonstration. But, of course, one is sure to try to overcome these difficulties."

"Still, until the aeroplane is kept in the air for a longer time than M. Santos-Dumont succeeded in doing, it is not possible to say that, through some fault of its construction, the machine will not tilt. There are occasionally strong gusts of wind, and any one of these might turn the aeroplane over."

"In dealing with aeroplanes, it must be borne in mind that you are traveling near the ground and, to be successful, the machine must be built so that it will go a sufficient height from the ground to clear houses, trees and anything else that may come in the way. These difficulties will, of course, be overcome in time."

"But the solution of the aeroplane is dependent upon actual experiment. Theory helps us to see the limitations of any particular form of construction, but we do not know enough at present to say what is the best form of construction. Therefore, it is by experiment and by this method alone that we shall learn."

"Still, I think that well within the next five years a very considerable advance will have been made in this particular branch of aeronautics. Not so very long ago people scouted the idea of sending messages across the sea by wireless telegraphy. Yet it has been done, and in the same way traveling through the air will become a reality."

M. Georges Besancon, of Paris, secretary of the Aero Club, an editor of the *Aerophile*, has received a long letter from the Wright brothers, of Dayton, Ohio, explaining their experiments in the last few years.

This letter adds little to what is already known of the claims of the Wright brothers, beyond bringing out more clearly than ever the fact that considerable trouble has been met with in finding the correct way of maintaining one's balance in the air. It is this problem, in fact, with which M. Santos-Dumont is now struggling.

At the Aero Club a good deal of acception reigns concerning the claims made by the Wrights, especially with regard to the oft repeated statement that the French Government has practically purchased the apparatus.

M. Besancon said that so far as he knew the offer made by the Wrights, that they would display the apparatus to any one willing to pay a million francs (\$200,000) for its purchase in case they succeeded in flying fifty kilometres (thirty-one and one-fourth miles) in an hour, had never been withdrawn. He considered it astonishing that the offer had never been accepted, seeing that no risks were to be run.

M. Jacques Faure, hero of several sensational cross Channel balloon trips and other long distance flights, seen by a Herald correspondent concerning the Wrights, said he had never from the commencement had the slightest confidence in the statements made concerning their long distance flights. Missions had been sent over from France to investigate the statements made, and had returned with a verdict of "Not proven."

Dunchurch, near Rugby, claims that its smithy is the original forge which inspired the famous verses on "The Village Blacksmith." It is a picturesque old place, and the "spreading chestnut tree" still flourishes in front of it.



### FOR THE HOUSEWIFE

Alum.

Alum is soluble in water, and is used in laundry work to render curtains, children's dresses, pinafores and muslin hangings non-inflammable, and is usually added to the rinsing water, proportions, one pint of water to two ounces of alum.

### A Dish Washing Hint.

In washing vessels which have been used to prepare eggs in any way or to hold batter of any kind or dough, always allow a cold water spigot to run upon them first.

Hot water cooks the eggs and stiffens the floury pastes, making it doubly difficult to clean the pot, pan or kettle in question.

### Turpentine for the Laundry.

Turpentine is volatile in nature and has the power of dissolving varnish and grease.

It is used in laundry work in conjunction with ammonia to remove paint stains from colored clothes.

The two liquids are mixed and the stain dipped in and rubbed until it disappears. It is also used in cold water starch to make the iron pass along the fabric smoothly; proportions, four drops to one tablespoonful of starch.

The disadvantages attending the use of a large proportion are its odor, which it imparts to the linen, and it also tends to make the starch slightly yellow, which might give a yellow tint to the linen.

### Pretty Boxes.

Fancy boxes are always in demand for all sorts of offerings, and the newest wrinkle is to cover them with satin and to decorate the top with a bunch of natural looking artificial flowers, instead of those that are embroidered or painted. The box shown is of purple satin with a bunch of violets on the top, and others equally pretty are blue satin with forget-me-nots, various shades of lavender with orchids and pink or red with roses to correspond.

In the fancy work department of one of the large shops there are the prettiest kind of little pincushions made of tea strainers with twisted handles. The bowl portion is padded and covered with a bit of Dresden ribbon. A fetching little frill is placed around it and a bow of ribbon is tied on the handle.

### Benzine in Laundry Work.

Benzine is chiefly employed in the laundry for the cleansing of clothes that cannot be successfully treated with soap and water.

For example, silk garments, which lose their gloss when washed, if cleansed with benzine retain the natural gloss and stiffness.

Silk laces, kid gloves, and furs, none of which can be successfully washed, are all cleaned with benzine. The articles are usually washed in a bath of benzine, the articles are squeezed and pressed, and the dirtiest parts brushed with a soft brush, which is better than rubbing.

They are then rinsed in clean benzine, wrung, and rolled lightly in a clean cloth to remove the benzine, then hung in the air to dry until the spirit is evaporated and the smell removed.

The silk and lace are then pressed with a hot iron.

Kid gloves, if white, are improved if rubbed with French chalk.—New York Press.

### Recipes.

**Chocolate Frosting.**—Dissolve 3 cups powdered sugar with enough milk to spread easily, add 2 tablespoons of shaved chocolate. Beat well, then spread on the cake.

**Cinnamon Cake.**—A piece of butter, 1 cup of sugar, mixed together; add one beaten egg, little nutmeg, 1 cup milk, 1 1/2 cups flour, a little salt, 1 1/2 teaspoons baking powder. Sprinkle top with bread crumbs, sugar, cinnamon and nutmeg. Bake in hot oven.

**Cornstarch Cake.**—Cream one-half cup of butter, add one cup of sugar and beat light. Sift one cup of flour, one cup of cornstarch and three level teaspoons of baking powder together and add to the egg and sugar alternately with one-half cup of milk and, last add lightly the stiffly beaten whites of six eggs. Bake in a loaf and cover with a chocolate icing.

**Apple Sauce Cake.**—Cream together one cup sugar and one half cup shortening, add a little salt, one half teaspoon ground clove, a little nutmeg, one teaspoon of cinnamon and one cup of raisins. Dissolve one teaspoon of saleratus in a little warm water, then stir it into a cup of sour applesauce, beat all together, then add one and one-half cups flour (more if needed). Bake forty-five minutes.

**Ice Cream.**—Three pints milk, two eggs, one cup sugar, one-half pint thin cream, one tablespoon flavor. First make a custard of milk, eggs and sugar. This is the way I make the custard: Put milk in double boiler to scald, then pour onto the well-beaten eggs and sugar. Return to boiler again until custard thickens. Strain, let cool and freeze, adding cream and flavor when nearly frozen. This recipe will make two quarts of ice cream.

## THINGS WORTH KNOWING

A soldier in the Philippines is reported to have been cured of stuttering by being shot through the throat.

It is estimated that the apple crop in the United States this year will amount to more than 26,000,000 barrels.

In West Bridgewater, Mass., recently the first church wedding in forty-four years took place in the Unitarian church.

In the west cloister of Westminster Abbey is a gravestone to John Broughton, once champion prize fighter of England.

A New Yorker, a youth in his teens, is reported to have sued a young woman of the same city, alleging breach of promise and asking \$100,000 damages.

The Government of Victoria, Australia, has appropriated \$25,000 for the making of roads by prisoners through the "bush" in unsettled parts of the State.

Pethick Lawrence, husband of one of the "suffragists" imprisoned in London, promised to subscribe £10 a day to the woman's suffrage fund for every day his wife remains in jail.

Japanese children begin to go to school when six years old. During the first four years they learn Japanese and Chinese; in the next four years every child has to learn English.

William Pinekney Whyte, United States Senator from Maryland, who recently celebrated his eighty-second birthday, has never been inside a saloon, never smoked and never rode in a cab.

Denmark, famous for her great exportation of butter, has 500 cows to every 1000 of her inhabitants, and if five heads are counted a family there are two and one-half cows to every family.

Up in Vermont they killed a burglar who had \$118.20 on his person, and after paying his burial expenses and erecting a monument to him, turned \$63 and the twenty cents in to the town treasury.

Major John S. Horibeck, of Charleston, S. C., is said to own the largest bearing pecan orchard in the world. He has more than sixty acres in bearing trees and his main grove consists of 550 acres.

The neatest town in the world is Brock, in Holland. So tidy are the inhabitants that they will not allow hogs in the streets. It contains a population of 2700, and the chief industry is the making of Edam cheese.

## DISTRIBUTING CENTRES.

### Cities From Which the Great Volume of Printed Matter is Sent Out.

A striking example of the great volume of printed matter which the Postoffice Department is called upon to handle from month to month is found in a report recently issued by the department.

Of printed matter, designed for general distribution, 25,000,000 pounds were shipped in one month last year by publishers at the rate of a cent a pound at the 100 largest postoffices in the United States, the total amount of such shipments having increased from 296,000,000 pounds in 1896 to 450,000,000 in 1900.

These shipments of printed matter, collected and transmitted by the Postoffice Department, constitute a very fair gauge of the distributing points of news and literature in the United States, and the relation which they bear to each other is peculiar and has little reference to population.

New York stands at the head with more than twenty-five per cent. of the whole shipments of the country. Chicago follows with about two-thirds of the shipments of New York. Then follow St. Louis, Philadelphia and Boston, in the order named, Boston's shipments seeming unduly low, and then Kansas City, Cincinnati and Augusta, Me., the shipments of Augusta seeming unduly high.

Minneapolis, San Francisco, Pittsburgh, Detroit, St. Paul, Cleveland and Milwaukee follow—all of them minor but populous cities—and then come Springfield, Ohio, and Elgin, Ill., two small places, Springfield being notable on account of its output of agricultural machinery, and Elgin on account of its manufacture of watches and its shipments of condensed milk.

Baltimore comes next, then Denver, Omaha, Des Moines, Atlanta, Lincoln, Nashville, Louisville, Indianapolis and Washington. Bangor, Me., exceeds Buffalo; Dallas, Tex., exceeds New Orleans. Brooklyn has shipments little larger than those of Waterville, Me., and Rochester, N. Y.; Williamsport, Tex., and Memphis, Tenn., have about the same shipments.

Albany, N. Y., and Providence, R. I., are far down on the list. Newark, N. J., is still further down, and Charleston, S. C., ranks below Racine, Wis. It is estimated that it would take 25,000 postal cars to carry these second-class mail matter shipments.

## Size of Heads.

The average adult head has a circumference of fully 22 inches. The average adult hat is fully 6 1/2 size. The sizes of men's hats are 6 1/2 and 6 3/4 generally. "Sevens" hats are common in Aberdeen, and the professors of our colleges generally wear 7 1/2 to 8 sizes.

Heads wearing hats of the sizes of 6 1/2 and smaller, or being less than 21 inches in circumference, can never be powerful. Between 19 and 20 inches in circumference heads are invariably very weak, and, according to this authority, "no lady should think of marrying a man with a head less than 20 inches in circumference."

People with heads under 19 inches are mentally deficient, and with heads under 18 inches "invariably idiotic."—Young Woman.

**FITS, St. Vitus Dance, Nervous Diseases permanently cured by Dr. Kline's Great Nerve Restorer.** \$2 trial bottle and treatise free. Dr. H. R. Kline, Ld., 981 Arch St., Phila., Pa.

President Butterfield will be inaugurated President of Amherst College, October 18.

**Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 25c a bottle.**

The Duke of Abruzzi has named the three highest peaks of Mount Ruwenzori after Queen Margherita, Queen Alexandra and King Leopold.

### To Cure a Cold in One Day

Take **Loxative Bromo Quinine Tablets**. Druggists refund money if it fails to cure. E. W. Grove's signature is on each box. 25c.

### The Curriculum.

No sooner is the football season ended at the colleges than innumerable other "seasons" begin. Basketball, hockey and divers other leagues remain to claim the time of the collegians. When do they study? As a young Chinese said of Harvard: "It is an athletic club and the members read books when it rains."—Springfield Republican.

### \$100 Reward, \$100.

The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages, and that is Catarrh. Hall's Catarrh Cure is the only positive cure now known to the medical fraternity. Catarrh being a constitutional disease, requires a constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease, and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers that they offer One Hundred Dollars for any case that it fails to cure. Send for list of testimonials. Address: F. J. Cheney & Co., Toledo, O. Sold by Druggists 75c. Take Hall's Family Pills for constipation.

### Sailors' Odyssey.

The old French fishing town of Fecamp was on Saturday the scene of the closing act in a stirring of the sea. The cod fishing boat *Christophe Colomb* left Fecamp seven months ago and had never since been heard of. Quite three months ago the vessel was given up beyond hope as lost with all on board, and the first keen pangs of the families supposed to be bereaved of their breadwinners had begun to be dulled, when on Friday the captain of the British ship *Gazelle* reported at Guernsey having passed the *Christophe Colomb* dismantled and in an altogether pitiable condition both as to vessel and crew of 30 men, who had been reduced to living on the dried cod forming the cargo. The *Gazelle* had given them all the bread, meat and water she had on board, but the captain of the *Christophe Colomb* refused to be taken in tow, and yesterday reached Fecamp in safety, where every gaunt skeleton on board was received as one returned from the grave.—London Globe.

### A Great Outside Remedy.

Most pains are of local origin—a "crick" in the back, a twinge of rheumatism, a soreness all over arising from a cold—are all cured by outside applications. The quickest, safest and most certain method is Alcock's Plaster, known the world over as a universal remedy for pain. They never fail, they set promptly, they are clean and cheap. You can go right ahead with your work while the healing process goes on. Sixty years' use has given them a great reputation.

### The Silent Cure.

To the list of cures—air, water, milk and grape—the "Gaulois" adds the "silence cure," for those who are compelled to do much talking or to bear with much noise. Mme. Jeanne Giraud, inspector of the maternity schools, of Paris, has, in her instructions to the teachers, recommended to them this treatment: "There is too much noise and talking going on in our schools," she writes. "As a setoff you should have days of absolute silence, without speaking or being spoken to."

## A Bold Step.

To overcome the well-grounded and reasonable objections of the more intelligent to the use of secret, medicinal compounds, Dr. R. V. Pierce, of Buffalo, N. Y., some time ago, decided to make a bold departure from the usual course pursued by the makers of put-up medicines for domestic use, and so has published broadcast and openly to the whole world, a full and complete list of all the ingredients entering into the composition of his widely celebrated medicines. Thus he has taken his numerous patrons and patients into his full confidence. Thus too he has removed his medicines from among secret nostrums of doubtful merit, and made them remedies of known composition.

By this bold step Dr. Pierce has shown that his formulas are of such excellence that he is not afraid to subject them to the strictest scrutiny.

Not only does the wrapper of every bottle of Dr. Pierce's Golden Medical Discovery, the famous medicine for weak stomach, torpid liver or biliousness and all catarrhal diseases wherever located, have printed upon it in plain English, a full and complete list of all the ingredients composing it, but a small book has been compiled from numerous standard medical works, of all the different schools of practice, containing very numerous extracts from the writings of leading practitioners of medicine, endorsing in the strongest possible terms, each and every ingredient contained in Dr. Pierce's medicines. One of these little books will be mailed free to any one sending address on postal card or by letter, to Dr. R. V. Pierce, Buffalo, N. Y., and requesting the same. From this little book it will be learned that Dr. Pierce's medicines contain no alcohol, narcotics, mineral agents or other poisonous or injurious agents and that they are made from native, medicinal roots of great value, also that some of the most valuable ingredients contained in Dr. Pierce's Favorite Prescription for weak, nervous, over-worked, "run-down," nervous and debilitated women, were employed, long years ago by the Indians for similar ailments affecting their squaws. In fact, one of the most valuable medicinal plants entering into the composition of Dr. Pierce's Favorite Prescription was known to the Indians as "Squaw-Weed." Our knowledge of the uses of not a few of our most valuable native medicinal plants was gained from the Indians.

As made up by improved and exact processes the "Favorite Prescription" is a most efficient remedy for regulating all the womanly functions, correcting displacements, as prolapsus, anteversion and retroversion, overcoming painful periods, toning up the nerves and bringing about a perfect state of health. Sold by all dealers in medicines.

### When Lincoln Was Lawyer.

In his "Lincoln, the Lawyer," Frederick Trevor Hill writes: "In his 23 years at the bar Lincoln had no less than 172 cases before the highest court of Illinois, a record unsurpassed by his contemporaries; he appeared before the United States Circuit and district courts with great frequency; he was the most indefatigable attendant at the Eighth circuit and tried more cases than any other member of that bar; he was attorney for the Illinois Central Railroad, the greatest corporation in the state, and one which doubtless has his choice of legal talent; he was also counsel for the Rock Island Railroad, and other corporations and individuals with important legal interests at stake; he was sought as legal arbitrator in the great corporation litigations of Illinois and he tried some of the most notable cases recorded in the courts of that state."

## RUNNING SORES ON LIMBS.

Little Girl's Obstinate Case of Eczema—Mother Says: "Cuticura Remedies a Household Standby."

"Last year, after having my little girl treated by a very prominent physician for an obstinate case of eczema, I resorted to the Cuticura Remedies, and was so well pleased with the almost instantaneous relief afforded that we discarded the physician's prescription and relied entirely on the Cuticura Soap, Cuticura Ointment and Cuticura Pills. When we commenced with the Cuticura Remedies her feet and limbs were covered with running sores. In about six weeks we had her completely well, and there has been no recurrence of the trouble. We find that the Cuticura Remedies are a valuable household standby, living as we do twelve miles from a doctor, and where it costs from twenty to twenty-five dollars to come up to the mountain. Mrs. Lizzie Vincent Thomas, Fairmount, Walden's Ridge, Tenn., Oct. 13, 1905."

### The Great Lakes Fleet.

A hardy breed of men, doing their duty as they find it, the sailors of the Great Lakes are more in demand to man the new fleets that are building every year. While the shipyards of the sea coast were waiting over the dearth of business the shipyards of the lakes booked orders for 31 steel vessels for the season of 1906, in size from 6,000 to 12,000 tons capacity, with a total value of \$14,000,000.—Outing.

### Piles Cured in 6 to 14 Days.

Pazo Ointment is guaranteed to cure any case of Itching, Blind, Bleeding or Protruding Piles in 6 to 14 days or money refunded. 50c.

### Humming birds range from Cape Horn to as far north as Sitka.

If afflicted with weak eyes, use

**Thompson's Eye Water**

P. N. U. 62, 1906.

## Chickens Earn Money!

### If You Know How to Handle Them Properly.

Whether you raise Chickens for fun or profit, you want to do it intelligently and get the best results. The way to do this is to profit by the experience of others. We offer a book telling all you need to know on the subject—a book written by a man who made his living for 25 years in raising Poultry, and in that time necessarily had to experiment and spent much money to learn the best way to conduct the business—for the small sum of 25 cents in postage stamps.

It tells you how to Detect and Cure Diseases, how to Feed for Eggs, and also for Market, which Fowls to Save for Breeding Purposes and indeed about everything you must know on the subject to make a success.

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