

HOW BALLOONS WILL BE USED IN WAR.

The French Naval Officers Send Up Aerial Spies from a Man-of-War and Take Bird's-Eye Photographs of Forts on Shore.

The balloon has been proved to be of great value in naval operations. A series of remarkable experiments just made at Toulon, the chief naval port of France on the Mediterranean, has convinced experts of this fact. There is now no doubt that the balloon will in future play a very important part in engagements between ships at sea and in naval operations against coast defences.

Balloons can now be sent up from the decks of ships and brought back to them after reporting the strength and situation of the enemy. If the ascent is made skillfully and under favorable circumstances it may escape the observation of the opponents.

The value of the balloon is greatly augmented by the latest developments of photography. The naval commander in whose interest the balloon is exploring can have laid before him an absolutely infallible picture of the enemy's ships or defences. Some examples of these photographs are reproduced here.

They show the defences of Toulon and the decks of several warships as seen from the balloon, and the preparations for the ascent and descent of the aerial vessel.

It is easy to apply the lesson of these experiments to our own coast. The Toulon authorities believe that these photographs could have been taken by an enemy under some circumstances without observation by the defenders of the French port on land or sea. In the same way it would be possible for a hostile fleet still out of sight to obtain exact pictures of the fortifications of Sandy Hook and of the other defences both afloat and ashore of New York Harbor.

The balloon, as the result of the Toulon experiments, is declared to be the ideal spy in naval warfare. A fleet cannot, like an army, send out a reconnoitring force to creep up under cover on the enemy and report on their strength and position. The sea affords no cover, and only the horizon hides one ship from another.

A small vessel sent out to gather information is sure to be seen in daylight, and is very liable to capture. But what makes its employment still more objectionable is that it warns the enemy of the presence of the fleet to which it belongs.

On the other hand, a balloon sent up from the deck of a vessel can of course see things miles beyond the vision of those on the surface of the ocean. Its horizon increases as it rises. It is very liable to escape detection by those whom it is observing, even when it is above them. If such a minute object in the sky, there is no great chance of its being hidden in a cloud or fog that the probability of detection is small. One can sweep with ass every inch of the sea within the vision, but to search for a speck some- where in the sky is different.

The balloon can inspect coasts and fortifications by looking down vertically upon them, which no reconnoitring cruiser can do. It is unhindered by torpedoes and other disagreeable obstacles to navigation, and at any height it is an impossible target for a gun.

The most vital secrets of a system of fortifications may be revealed to a balloon which passes over them.

Toulon possesses what the French call a part of naval aviation, with a staff of experts, maintained by the Government. These experts are continually occupied in making experiments with free and captive balloons.

The balloon is furnished with an apparatus below the car, which keeps the latter in an upright position in spite of the wind. If the ascent is made from the land the balloon is connected with the earth by a cable 1,200 feet long connected with a win- dlass. If it is sent from a ship a body of sailors hold the cable. Several war vessels are at the disposal of the aeronauts. The cable, of course, can be doubled in length or still further increased.

When a free ascent is made the officer in charge sends up beforehand small test balloons made of paper in order to learn exactly the direction of the wind. They can be seen from a great distance.

This preliminary test is made at Toulon with much scientific precaution. The direction of various winds occupying different layers of the atmosphere is noted. The aeronaut sends the results of his observations to the officer in charge of the tor- pedo boats, charged with the duty of following the big balloon when it is sent up. The aeronaut in command of the free bal- loon rises into the air current which will best carry him in the direction he has announced that he will take.

The balloon is filled in a building on the water front used by the Department of Naval Aeronautics. The empty envelope with its netting is stretched on the ground

surrounded by bags of ballast. At one side is the pipe by which the hydrogen is pumped in.

The car hangs from the roof of the shed and beneath it is suspended the system of trapezes which maintain it in a vertical position.

While the balloon is filling the sailors hold the lines attached to it and when the inflation is complete they drag it out into the open air. The aeronaut and his assistants enter the car, and then the ascent begins.

If it is to be made from the ocean the sailors hold the lines until they have reached the deck of a cruiser. Then they take hold of the main cable of the balloon, which is made fast on board.

The cruiser Sfax was employed in one of the experiments depicted here. Her deck may be seen as it appeared from the bal- loon which was attached to her. The ship can carry the balloon attached in this way for many miles. A violent storm alone would make it dangerous or impossible to keep up the connection between the two.

The balloon, still connected with the ship, can rise to a height at which it has an immensely extended view of the sea.

tance. Italy is not many miles distant from this port, and in one of the cases mentioned France would have to struggle with the combined navies of Italy and England for the possession of the Mediterranean. In that event it would make the French very uncomfortable to think of balloons from hostile warships peering at them from a distance or hovering unseen over their ships and defences.

Here are some of the details shown. In one photograph may be seen the barracks and the floating hulks of the merrines and the hulks of the naval depot. Further back is the Missesty quay, at the end of which is the big armored battle ship Jauréguiberry. In a basin to the right, behind the depot, is the coal yard. Finally on the left are the canal which separates the Missesty and Castignean canals, the bakery, the abattoirs and the great foundries, which were burned down three years ago and have not yet been restored. Then there is the new quay with its dry docks built under Napoleon I. Behind the new quay are the hills on which the fashionable summer resort of Hyeres is situated. In the same direction is Mont Faron, surmounted by a fort.



TOULON HARBOR.

BASEBALL IN ENGLAND.

People Are Beginning to Realize That It Is a Great Game After All.

London, July 11.—The prospects of baseball in England have wonderfully changed since the Prince of Wales saw what was practically the first game played in England between the Boston and Philadelphia Ath- letics just over seven years ago. There was one game played here in 1874, but nobody understood it, and consequently it was voted "no good." Both of these games were failures as far as arousing any enthusiasm among the stolid Brits was concerned.

The weather was unpropitious, for the English were accompanied to the ground by one of their world famous fogs, and an occasional ghostly figure flitting to and fro was all that could be seen, and so until 1889 the game was ignored and cricket held the sway. But to-day baseball oc- cupies at least a lowly little place among the sports which have taken the fancy of the modern Brits. Cycling, golf, tennis and baseball are rapidly coming to the front, and coming there to stay.

There are now over thirty teams in Eng- land, chief among which are the Thespians, Remingtons, Devs, St. Jacob's team, or Sabits, as they are more generally called; the Crystal Palace and Civil Serv- ice, and there are also fourteen teams in Derby, the cradle of baseball in England, and one in each of the towns of Middle- borough, Stockton, Wallsend, Walker and Elswick.

Of these teams the Thespians, Remingtons, and Devs are about the oldest in London, having been founded about four years ago by resident enthusiasts in the city. Then there are the Derbys, a provin- cial team founded by Mr. Francis W. Ley and given a ground in his park on which to play.

But it was a band of music hall comedians engaged over here that kept the game going and set it on the road to popularity, along which it is now travelling so success- fully. These are Messrs. James Marco, George Durr, Harry Athol, Kelly, Ashby and R. G. Knowles. They intended to play the game for their own amusement at first, and did so, running the gamut of ridicule and jeering, which was at first levelled at them. They were then called "cranks," but to-day crowds of from five to ten thousand visit every game played and the spectators cheer a good hit or a home run scored by either side exactly as our crowds would at home.

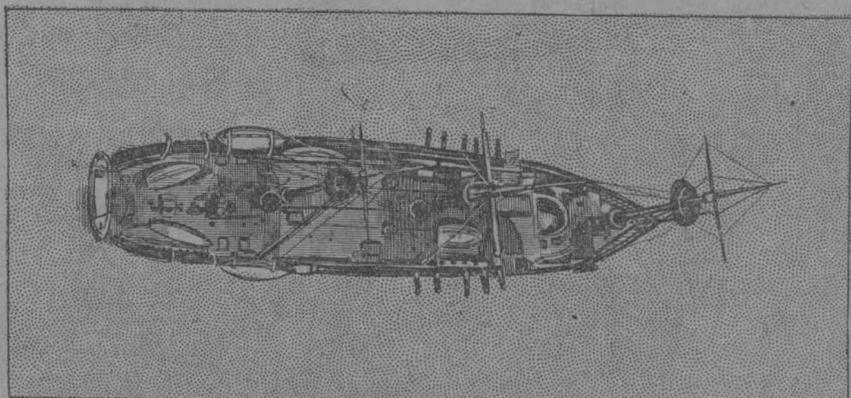
This little band of artists called them- selves the Thespian Baseball Club. The English saw them play, made up their minds to beat them at their own game and formed clubs for the purpose. They were, of course, surprised at the way they were licked, but the licking woke them up to the merits of the game, and now it is making wonderful headway in London, in the Midlands and the North, and is also spread- ing to Scotland and Ireland. The clubs already formed have senior and junior teams; championships have been formed and played for, trophies offered and fought for, until at last the game has, I think, taken a firm hold of the sporting instincts of the Englishmen.

This year baseball is expected to work wonders among the sporting public. All the crack footballers play it in the summer, and it is surprising how football and even cricket enthusiasts, who scoff at the game when they first see it, take to it after seeing a second or third game. One of the reasons for which it finds so much favor with crick- eters is the fact that they get so many more chances to distinguish themselves with the bat at baseball than cricket.

This year it is expected that new clubs will be started in Ireland, Scotland and Wales. Wales already has two prosperous and very ambitious clubs. They mean to



Photographs from the Balloon.



THE CRUISER SFAUX.

IS WOMAN ASCENDING?

Some Questions Called Forth by a Recently Published Sensational Book.

Mr. Richard Le Gallienne, a poet of ability, noted for his admiration of the female sex, is stirred up by the reading of "The Ascent of Woman," by Mrs. Roy Devereux, a book which was recently reviewed in the Sunday Journal. These are some of the questions he asks:

Personally, I am inclined to think that, like the ancients in Revelation, woman is ascending and descending at the same time. But my purpose in this article is to raise questions, not to answer them, and so I proceed.

What does one mean by woman's "ascent"? Ascent in intellect, in morals, in social influence, in man's esteem, in general value, or simply in her own opinion?

And is the ascent toward man, or simply out of man's reach? Does it mean a broadening of humanity in woman, so that she will no longer, say, need expurgated editions of Fielding; or does it mean to assist in the continuance of the race?

How does she compare with the mothers of Sparta, the priestesses of the North, the learned women of Athens, the holy women of the Middle Ages, the brilliant women of the eighteenth century, and generally the beautiful, brave, noble and clever women of the past? How does she compare with one's own mother, or one's grand- mother, or her whom, I confess, it has always seemed to me a peculiar hardship not to be able to marry?

Does the average woman care about an enlarged freedom of life, except in so far as it affords her what, indeed, are much needed—greater facilities for flirting?

Does woman really want to go into Par- liament? Will she work when she gets there?

Does she really want to work at all? or does she merely enjoy man's pleasures, and see that the only way to share them is to begin by sharing his work?

Or does she really despise his pleasures, as she sometimes pretends?

Has woman ever been really more "spirit- ual" than man? And is her present devel- opment in the direction of sexes or soul?

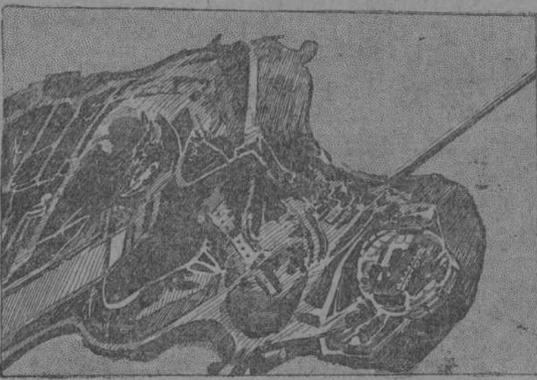
Does the ascending woman really object to marriage?—or are not her "advanced opinions" often new wiles to attract the old proposal? She is a rebel till you pro- pose—your wife forever after.

Does woman really prefer to pay her own expenses?

What does woman want next? What new reform does she feel necessary to the de- velopment of her personality?

After all, are men and women really so very different? Don't much the same hu- man ingredients go to the making of one as to the other?

Is there not a lot of nonsense talked about the Mystery of Woman?



THE FORT AT TOULON.

Its occupants can see and examine de- fences and forces which are invisible to the ship, and to which the latter is also invisible. It can at any time be hauled down close to the deck.

If the balloon is free a signal is made to one of the cruisers when the aeronaut wishes to descend. He lowers himself as near the water as possible, and the cruiser follows until the men can seize the cable. Then the balloon is hauled in, the gas let out and the cover and its net packed away in the car.

The photographs taken at Toulon are of great general interest, because they prove how the minutest information concerning coast defences can be obtained by balloons. For this reason it is worth while to de- scribe some of the objects revealed, al- though it is impossible for us to appreciate their importance as Frenchmen do. It is to be remembered that Toulon is one of the two great naval ports of France, and that in case of a European war in which she would be engaged, either with the Triple Alliance or with England, or with both, it would be a place of vital impor- tance.

Another photograph shows the big, round tower built under Francis I, the pier form- ing part of the harbor and the escarpments bristling with cannon. The suburb of Sauray is shown in another photograph.

In the photograph of two torpedo boats, which are following the balloon, may be seen the sunshades of the officers' wives, who have come out to see the ma- noeuvres.

It is other boats, however, which will receive the balloon.

Many other photographs have been taken by the aeronauts, but they give away the secrets of the fortification of Toulon to such an extent that the Government will not permit their publication. Any foreign aeronaut who attempt to make experiments in this neighborhood will be caught as quickly as possible.

In consequence of the important results of these ascensions the aeronauts of the navy demand the installation of apparatus for inflating balloons on war ships, and many naval officers believe the step could be desirable. This would be effected a still further complication of the wonder- ful piece of mechanism, the modern war ship.

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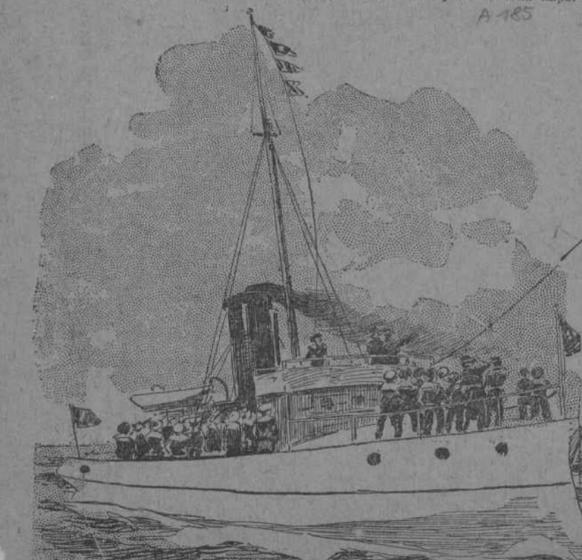
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THE BALLOON RETURNING TO THE FRENCH GUN BOAT.

THE CLASS OF "NAUGHTY-NAUGHT."

Question--How Shall the Next Freshman Class in Our Colleges Be Designated?

Here's an interesting problem in phonet- ics, college slang and propriety all com- bined. What shall we call the incoming class of freshmen in the American col- leges? They will be graduated in 1900, and according to custom they should be desig- nated as the "class of '00."

But, as the Sunday Journal has pointed out, "'00" is not likely to be adopted either in writing or in speech, for it lacks the requirements of a class numeral, w- hich, when sung or shouted, should be a sonorous, far-reaching quality, wh- ich shall enable the classmen to make th- eir presence or their achievements known in a emphatic manner, and there's nothing of phatic, phonetically or verbally, about "'00."

A happy thought came to a Johns Ho- pkins '98 man, who, on reading the Sunday Journal's article attempting, but vainly, to coin some class designation which should fill the bill, now suggests that the next freshman class shall be known as the "class of naughty-naught!" This is a typically collegiate way out of it, and never would have occurred but for an undergraduate. It ought to be a "go." Here is the '98 Johns Hopkins man's letter:

To the Editor of the Journal:
The story in the Sunday Journal of June 21 in reference to the name by which the incoming freshman classes of our American colleges would be designated attracted a great deal of notice among college men in Maryland, particularly in Baltimore.

Although it is true that "'00" is both un- attractive to the eye and difficult to pro- nounce in true college brevity, nevertheless I should propose that "naughty-naught" be the appellation applied to the prospective freshmen. It strikes me that there is no clearer solution to the question which is already being agitated among the students of Johns Hopkins University.

Your writer suggested that it would be difficult to find a rhyme for "'00." Not so, however, if the term suggested is used. For instance, for a toad song at the class ban- quet:

"Here's to naughty-naught, drink her down, drink her down!
Here's to naughty-naught; drink her down, drink her down!
Here's to naughty-naught, who's won all battles fought,
Drink her down to naughty-naught, drink her down!"

Yours Very Truly,
ALBERT C. DIEFFENBACH,
'98 Johns Hopkins.

318 East Lafayette avenue, Baltimore.

If any other college undergraduate has a better suggestion, let him send it to this paper. The noble class of 1900 cannot be allowed to come into existence without a fitting appellation for strictly colloquial use.

THE GREENROOM ENTRY.

French Courts Hold That It is a Privilege of Very High Value.

The French have an intensely practical way of setting a pecuniary value on every- thing and exacting payment. It is learned from a recent decision that the privilege of going behind the scenes at the opera is one for which a large sum of money may be collected. Thus the Government sub- sidy may be greatly augmented.

It would be admitted in any country that the privilege mentioned is an expensive one, but the idea would hardly occur of making a fixed charge. In any other coun- try but France the profits would be left to the wearers of gaudy and pink fashions.

This is how the decision came to be ren- dered: A gentleman had bought a life pass to the Grand Opera from M. Barbier, the librettist, and at once claimed admission to the green-room. This was refused by the administration, who argued that the official privilege accorded to the librettist did not pass to his assignee. Not that they have any puritanical objections to the buy- ing and selling of such rights. They won their case, because the purchaser had not paid enough for his ticket. His 3,000 francs only covered the performances; for the privilege of chatting to the danseuses was an equal, and perhaps as a host, the price would be five times as much.