

DIRIGIBLES OF DEATH.

New and Terrible Devices by Which Science Is Adding New Terrors to the Coming War in the Air

NEW devices have been introduced into European armies which will make aerial warfare more terrible and complicated than any form of military science.

Airships are now painted like clouds to escape detection by the enemy. They seek cover behind clouds. They attack by night and use parachutes to light up the enemy's position, drop bombs and give false information concerning their own position.

The English army authorities have planned a wonderful dirigible balloon carrying a number of smaller craft, very much as a steamship carries its lifeboats. The small craft are fitted with searchlights and bomb chambers and swing on davits on each side of the great vessel.

The parent ship will be manoeuvred by her crew to a great height above the enemy's position, where she will be beyond effective observation and the reach of shells.

Preferably the attack will be made by night. The parent ship will release one of the small craft and steer it by wireless in the direction of the enemy's position. Then a change in the rapidity of the wireless waves will start a little electric spark on the small craft that will ignite a great acetylene searchlight. This will light up the enemy's position for a mile around and make it as clear as daylight to the watchers in the airship.

Then another change in the vibration of the wireless current and a bomb will be released by the opening of a trap door. It will fall down with devastating effect on the soldiers and fortifications below.

The men below will have a poor opportunity to aim at the attacking ship. The small craft will not indicate exactly the position of the parent ship. The searchlight spreading out over a great area will not reveal accurately the spot from which it comes.

It will be possible to steer a small craft back to the parent ship, but even should one be destroyed its loss would be insignificant. The effective range of one of these bomb-dropping craft would be about three miles. They would weigh ninety to one hundred pounds each and carry two bombs apiece. The system of steering them would be operated by means of a swivel beam attached to the front of the airship with two motors attached to it.

Another arrangement has also been perfected by which a parachute is used by the parent ship in place of a smaller craft. This has the advantage of economy, as the parachute costs much less than the small craft. The parachute is used both to carry bombs and searchlights.

This system was actually tested by the army at Farnborough, England, the other day. Twice in the darkness of the night a balloon ascended to a height of about 1,500 feet and each time it dropped a tin box some two feet long. Immediately a little parachute attached to the device opened and at the same moment there burst forth a strong and steady light which revealed the army encamped beneath it.

The parachute, like the small air boat, can be guided by wireless till it lights up actually the area which it is designed to see. Bombs may be attached to the parachute carrying the searchlight and released by wireless. When the attackers desire to effect tremendous destruction they can steer other parachutes loaded with bombs only to the lighted area.

Air navigation has now been developed into a recognised branch of military science. It is certainly the most perilous and difficult of all, but the appalling destruction and demoralization which it may inflict upon the terrestrial enemy seem to make it worth all the loss of life it must entail.

In aerial warfare there will be as many different types of vessels as in a naval fleet. A most important part of the new science is a knowledge of the clouds and how to use them as cover. Some clouds offer a practically permanent protection, while others are only temporary.

Up to a height of 4,000 feet above ground gunners trained to the work can hit an air craft. This was the experience of the Bulgarian war. At 2,000 feet, however, it is impossible to recognise the color of an airship and to distinguish between friend and foe.

Within this range there are plenty of shifting clouds in cloudy weather which may be used as cover, but they are more or less transient and airmen using them must run the risk of being discovered and exposed to artillery fire.

At 4,500 feet an airship moving slowly can observe the enemy on the ground accurately, and yet be beyond the range of ground fire.

Above 4,500 feet begin the layers of clouds which can be counted on as reliable cover, lasting until there is a decided change of weather. At 5,000 feet occur the cumulus clouds, producing rain, hail and snow. At 6,000 feet are the strato-cumulus, or fair weather clouds. From 10,000 to 16,000 feet range the cumulus-almus

own inability to see the earth when sailing above such clouds.

The airship will let down an observer in a basket through the cloud until he is able to see the earth. As he goes down he will communicate with his companions in the ship by telephone, telling them when he has dropped through the clouds far enough to see the earth, and finally what he sees on the earth. It may be necessary to drop the man in the basket two or three hundred feet. He will be quite invisible from the earth. Needless to say it will require remarkable courage and self-possession for the man in the basket to perform his duties efficiently. The aerial soldiers of opposing



New Device Tested at Farnborough, England by Which an Airship Hidden by a Cloud Lowers a Man to Report the Enemy's Positions.

clouds, accompanying thunderstorms.

At 20,000 feet lie the cirro-cumulus clouds, producing the effect known as a mackerel sky. At 30,000 feet are the cirro-stratus clouds, composed of ice-crystals. Whether aerial warfare will be carried into this frigid region is one of the interesting problems of the future.

Nimbus rain clouds at a height of about 8,000 feet will afford the most perfect protection for airships wishing to conceal from the enemy entirely that they are operating in the neighborhood. An ingenious arrangement has been planned whereby the airmen can overcome their



"The fighters in the big airship will steer by wireless a parachute bearing a search-light until it lights up the enemy's position on earth and then they will rain down bombs upon their helpless victims."

A skillful air strategist will note the whereabouts of a distant aerial opponent and then fly above a black rain cloud until he has the enemy beneath him. Then he will come crashing down through the cloud sides will have terrifying and deadly encounters with one another. Here again the knowledge and use of clouds will be of vital importance.

upon the unsuspecting foe. Sometimes aerial opponents will run against one another unexpectedly in thick cloud masses and then will come a horrible combat, for each can send the other to certain death.

HOW THE STARS PROVE THAT JAPAN CAN NEVER WHIP AMERICA

By Prof. William H. Maccabee.

ACCORDING to the revised and modern teachings of the science of planetary influence, Japan would never benefit by going to war with Uncle Sam, even should Japan win, which is doubtful. That she could, and might, inflict serious loss of life and property and cause no little annoyance is reasonable to suppose.

But that some sort of trouble is in store for both countries, particularly the United States, is very evident, owing to the transit of Saturn through the sign Gemini, which is the ruling sign of this country. Mars (the god of war) entered the ruling sign of the United States on July 29 and was in transit with the evil Saturn, and came to a conjunction with the latter on August 24. This was ominous, and the conditions of the time show it. They remained so until Mars left the ruling sign—Gemini—on September 15.

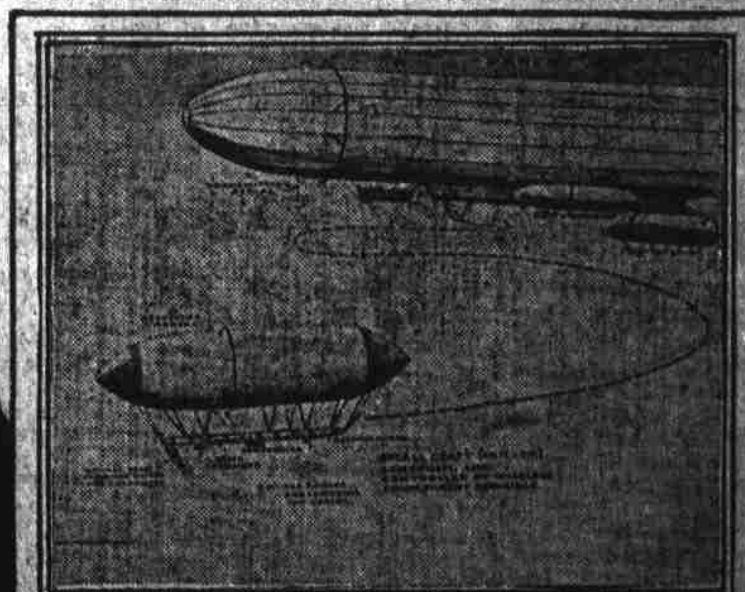
In December Mars will retrograde in the sign over the opposition place of the moon in the Mikado's nativity and will operate its evil influence until early in February, 1914. These evil directions will be detrimental to the Japs and will bring about some sort of trouble and more war talk.

The planet Mercury is the ruling planet of the United States; the planet Venus rules Japan. Both these planets are "friendly disposed," according to astrological phraseology, and although Mercury is convertible, changeable—that is, with the good it partakes of good; with the

evil, vice versa—the influences of both are always friendly.

The sign on the seventh house in the horoscope of the United States is Sagittary. This is Jupiter's domain, and indicates success and fortune to America in all its dealings with foreign countries—whether they be friend or foe. And this is further vouched for by the stronger testimony of Pisces—also Jupiter's domain—on the midheaven. But in the horoscope of Japan the influences are in no wise as fortunate as in those of the United States. The Japs' horoscope has Aries and its ruler, Mars, in its seventh house—house of enemies. Aries rules England, Germany and, according to this testimony of astral influence, Japan would be more likely to start a row with either or both of those countries upon the slightest pretext, or vice versa; and the sign Cancer on the midheaven, the house of the moon, indicates ill success for Japan in most of its dealing with foreign countries. The moon's influence causes restlessness, discontent, constant desire for change and excitement, rash and useless undertakings, etc., which is to say that there is never any means of knowing what the wily and discontented Jap may attempt. As a nation they are believers in the occult. Hence, knowing the preponderance of favorable planetary influences in the horoscope of Uncle Sam, as against the lesser fortunate astral influence in their own country's natal figure, they may never get any nearer to a war than a threat.

No other country on the face of the globe has so fortunate a horoscope as the United States.



A New Type of Airship That Carries Smaller Bomb-Laden Craft That Are Steered by Wireless.