THIS BALLOON DEALS DEATH.

A New War Device Recently Approved and Tried by the Austrian Army.

The Austrian Government has just given official indorsement to a flying machine which it declares will carry death and destruction into the camps of its enemies in time of war.

It is a simple contrivance, being in reality an aerial torpedo, supported by a small gas balloon, and equipped with an apparatus that gives it its name of flying machine.

The contrivance will sustain a weight of from forty to fifty pounds at a height of from 1,000 to 1,500 feet above the earth. Directly beneath the balloon is the flying apparatus, and under this is a cylinder, which in reality is a small torpedo. This contains also an automatic arrangement which will explode the balloon at just such a time as it is constructed to do.

Suspended just beneath this cylinder or torpedo is a small basket, and in this basket are placed a number of bombs of dynamite or some equally destructive explosive. When the balloon bursts, these dynamite bombs drop upon whatever happens to be on the earth beneath, and if they land in the midst of an enemy's camp will cause an immense amount of destruction to life. So carefully has the system of regulating the distance which the balloon will traverse been calculated that the explosion will take place within fifty feet of the spot where it is intended that it shall happen.

The Austrian commission which has been experimenting with the invention is composed of a number of officers who have made a special study of explosives, and all modern inventions linked with them. Their consideration of the matter has been slow and painstaking, and the indorsement which the Government has given, coupled with the announcement that it is officially adopted, at once places the invention in a position to receive the keenest criticism of military officials everywhere.

There have, of course, for years been many experiments along this line with inventions for which much the same claim has been made as has been set forth regarding the present one, but when the principles they were alleged to demonstrate have been reduced from theory to practice failure has inevitably resulted.

Therefore the Austrian commission began its test of what is known as the Ehrlia airship or flying machine, with the general expectation that the result would be just the same as had heretofore been achieved in tests of similar contrivances. Hence its finding possesses more importance than would otherwise be the case, and shows that the invention has withstood the most severe tests.

It often happens in case of war that a scouting party or advance guard of an army is able to penetrate a hostile country within ten miles of a city against which military operations may be directed. This, too, in these days of heavy guns that will throw tremendous distances. Should this happen when Austria was at war with any other country, says the commission in its report, it would be possible for the detachment of men who had charge of the flying machines or torpedoes to send up eight or ten or more of the airships, so regulated that they would move to a point directly over the city, explode, and let the bombs of death hurtle down upon the defenceless soldiers and townspeople.

There would positively be no way to escape this deluge of dynamite. The only hope would be to train a gun upon the flying engine of death and cause the dynamite bombs to explode before starting on their journey to earth. Even then there would be a very great risk, for the chances would be fairly even that only a portion of the masses of dynamite would rend itself in response to the visit of the shell.

All parts of the apparatus of the invention are very light, and would only require a comparatively small number of men to handle and start them on their journey of destruction. The gas that is used to inflate the balloons is stored in metal cylinders, very light, and of a weight and bulk that render it easy for one man to transport a single specimen. Thus, if it is so desired, a dozen men could easily manage to transport all the gas it would be necessary to use. Four times that number is all that would be necessary to remove the entire material for twelve of the airships to any given point.

When the desired locality is reached, the detachment could inflate the balloons, attach the flying machine, cylinders and baskets, place the dynamite in the baskets, and, securing the airships to the earth, await the order of the commanding officer to release them. Then the direction of the wind and its hourly velocity will be ascertained. For example, the rate is found to be six miles an hour at an elevation of 1,000 feet. The city, against which operations are to be directed, has several square miles of territory. The mechanism by which the explosion of the balloon is regulated is then set for the desired length of time, the flying machine apparatus arranged and also regulated, and then the entire dozen of the contrivances, are started on their destructive errand.

All these operations have taken place within ten miles of the city. With the wind at a velocity of six miles an hour, it takes one hour and forty minutes to reach the desired locality. The speed of the balloons and the moment for the explosion are different in each one of the dozen airships or flying machines. Thus, says the commission, it can be seen that before a pound of dynamite has dropped or a single explosion taken place, the airships will be noised at various points over the several sections of the city.

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Almost at the same moment, so nicely have speed and time been regulated, a dozen explosions will take place, and dynamite will fall all over the place. The mechanism is so arranged that about five minutes before the gas in the balloon is ignited, a trap door in the false bottom of the basket opens. The motion of the balloon causes the dynamite shells to shift into a direct position, a little to one side of the bottom of the basket. This renders the overturning of the basket the moment it is released by the explosion, an assured fact, and avoids the possibility of the bombs and basket remaining together until the earth is reached. In other words, it is so arranged that the dynamite will scatter quite a little before striking the ground.

PLAYING GOLF ON THE DECK OF A STEAMSHIP.

The ocean tourist now plays golf at sea. The game has been introduced as a pastime en voyage on board the British steamer Wazzan, in the Mediterranean, so we may not unreasonably expect another Summer to see the big ocean liners equipped with a full golf outfit and the sport utilized to banish thoughts of seasickness and replace languor with the vigor of health.

The usual golf instruments are varied somewhat in this queer adaptation of the international sport to Neptune's realm. Instead of a ball, a round disk or quoit of wood about four and a half inches in diameter is employed, and a fairly heavy walking stick, with a flat head, is used in place of the ordinary golf stick. To properly play golf at sea it is necessary for a person to have what the mariner calls sea legs, and the landsman terms golf legs. And as the sea, even at its calmest, is not at all like the traditional mill pond, the ocean golfer has to train his eye to gauge the effect of the ocean swell, as this adds both zest and variety to this most popular of outdoor games.

At first thought it might seem a difficult matter to arrange the golf links on board a steamer. But the accompanying illustration shows that idea to be an error. On board any one of the great ocean liners there is deck room sufficient for golf links. Of course, the tees cannot be of the regulation size, and a good many hazards would necessarily be risked by the players, while the difficulty of keeping to the course would be somewhat greater. Still there would be no danger of bunkers or bent grass, and so the half shot would not be so bad a play, after all.

The promenade of a steamship like the Lucania would prove very pleasant golf grounds. The holes could be made like stars or circles, flush with the deck, and the players would find this arrangement very convenient and pleasant. The course could commence, for instance, just forward of the bridge of the steamship and run well up toward the bow. There would be plenty of room to use as an improvised golf stick the ordinary walking cane, with a flat head, and as there would be no danger of the ball bounding, because there would be no ball at all, but a quoit, the passengers could sit about on steamer chairs and witness the fun.

An Improvised Golf Links on Board a Mediterranean Steamship.

The complaint has often been made by travellers when they cross the ocean that time hangs heavily on their hands; that if they do not suffer from what the French call mal de mer, they groan under the burden of that other French complaint known as ennui. Thus they find themselves between the devil and the deep sea, with two evils of which they had no choice at all.

Now then, here is where marine golf will create enthusiasm. No longer need the tourists look first in one direction and then another for a glimpse of dry land. Instead of long, tedious, monotonous days of walking the deck to scare up an appetite, the decks will ring with that jolly cry "Fore!" There will be merry contests for honors. The same bursts of laughter, that have made the golf grounds on land boisterous with jolly good humor will be heard again when the unlucky player misses the globe. There will be foursome matches and contests where there is no limit to the number of players, and it is probable that all the rules that ever were made for golf on land will have to be constructed over again for golf at sea. The essential ideas of the game can still be maintained, however. But when the grounds swing at all angles, it will be manifestly unfair to hold sailor men and sailor women down to rules that were made for those poor creatures known as landlubbers.

The doctors who have been asked concerning the advisability of golf playing on the ocean are enthusiastic. They claim it will reduce seasickness fully 50 per cent. As every one at all versed in medical science knows, seasickness is as much a disease of the nerves as it is of the stomach. If something can be contrived on shipboard, say the doctors, that will sufficiently interest persons to make them forget the unpleasant penalty Neptune enforces upon so many of his guests, the usual sickness will in many instances be avoided, because the minds of the passengers will be so greatly distracted from unusual scenes by a pastime that is at once diverting and exhilarating.

Such a game, too, is likely to prove very popular on board naval vessels, where time hangs proverbially heavy on the officers' hands. "Fighting Bob" Evans is said to be already an expert with the golf stick.

A CLERGYMAN ON NOSES.

Rev. Dr. Temple, of Kansas City, Tells How the Nose Indicates Character.

Rev. W. H. G. Temple, of Kansas City, is an amateur physiognomist and student of character, and he has made a specialty of noses. He delivered a lecture upon the subject a few evenings since at the Plymouth Congregational Church of Kansas City, reading from a manuscript.

"Viewed in front," said Dr. Temple, "the nose should be somewhat broader at its root—that is, where it starts from the brow—than below. The end of it should be neither hard nor fleshy, but well defined; neither pointed nor yet very broad, for all extremely formed features are bad. Viewed in profile, the distance from the line of the wing of the nose to its tip should be only one-third of its entire length.

"Those noses which stand out very much from the face as they near their terminal point, while they are low in the bridge and between the eyes, are out of proportion. Persons carrying such indexes are apt to be vivacious, but wanting in dignity and character. They are impressionable and inconstant. A young man with such a nose will be all fire and no fact. A young woman thus endowed, all coquetry and no contract.

"The sides of the nose at its root between the eyes should close well with the line of the eye bone, and should be at least half an inch in width. As regards the whole face, the distance between the eyes should be the exact length of one of them.

"Noses which arch up suddenly from their starting point between the eyes show capability of command, energy and force of character. The Iron Duke, as Wellington was called, was noted for this sort of proboscis. In his case the arch was so excessive that the nose looked like a hook on the face, and unless balanced by other prominent features would tend to show a disposition to control others rather than himself.

"Those," continued Dr. Temple, "whose nasal outline represents a concave rather than an arching tendency, whose noses are small in proportion to the rest of their features, may be persons of good, solid understanding. They will probably be rather appreciative of than producers of works of literature and art.

"They will enjoy a beautiful picture, but not know how to paint one. Straight noses give indications between these two extremes. They may belong to persons of the creative or simply of the appreciative order of mind. The form of the head and brow, especially the line of the eyebrows, will determine to which class they belong.

"Arched noses with broad backs denote strength of character. This is the famous Roman nose of history. They are types of that character which for so many years was dominant in Europe. The Grecian nose, which distinguished the most conspicuous of the ancient statues, with its noble yet softly gracious line of beauty, is quite as indicative of the perception of beauty in art and literature and of the subtility of mind which pertained to the classic Greeks.

"The creative force in the antique straight nose is given by its proportion to the rest of the face, for it is always larger in proportion to the brow, cheeks and chin than the strongly arched, broad-bridged Roman nose, thus holding all its heroic elements and adding a genial and gentle delicacy of perception denied the former.

"But a small, straight nose loses through lack of size more than it might otherwise gain from grace of form, and is apt, unless counterbalanced by any marked facial characteristics, to show a low order of intelligence. High noses that are not broad-backed are often seen in men of letters, but a high, thin-backed nose is a sign of penetration and acuteness rather than force of mind.

"Broad, fleshy-backed noses," said Dr. Temple, "indicate, if round and full at the tips, with intellectual brows, a genial temperament. An absolute snub of the most pronounced form shows coarseness of nature, but that sort of a delicate turn-up nose is significant of that feminine cleverness which generally captivates even those who suffer as victims of its wiles.

"And then the nostrils, what volumes of meaning in them! Flexible, quivering nostrils show poetic temperament; flexible and very open, passion; round nostrils, animal propensities; closed nostrils, melancholy; long wrinkles from the nose toward the mouth, pensiveness, while many such wrinkles visible on the slightest motion show cunning and sarcasm."

Dr. Temple concluded with an analysis of the noises made by noses, which he divided into the "snore," the "sneeze" and the "snuffle."

SOOTHSAYERS' SEASON NOW.

This is the season when the soothsayers who make almanacs begin to reap the pecuniary profits of their star-gazing and astrological calculations. The standard books of prophecy in England have of late years been steadily growing in popularity here, and now one may pick up almost anywhere, in town or country stores, a copy of the prophetic almanacs of Old Moore, of Zadkiel or of Raphael, the Astrologer.

They are interesting reading, and a source of joy to those who scoff. Whether their prophecies are right or wrong, these almanac prophets do not care, but, with the mingled suavity and gravity of their high profession hand us their natty vaticinations for every single month, week and day in 1897.

Zadkiel claims to give the "voice of the stars" for each month; Raphael the "voice of the heavens," while Old Moore, whose almanac costs a penny on the other side, and has a large sale among the rural English, contents himself and his readers with a column of "predictions." They all agree that next January is going to bring a peck of troubles. To the lay mind the fact that Mars will be setting in the sign of Gemini, in quartile aspect of Jupiter, seems harmless enough—a mere family arrangement—but to Raphael it portends diplomatic troubles and colliery explosions. Zadkiel is with him here, and adds that the United States will be "disturbed." Old Moore fears the Shah will "run with the hare and hunt with the hounds." So it might be well for statesmen to proceed cautiously during the first month of the year. Private life, however, will go on as usual, and private life is Raphael's special department. For the first day in the year he advises his readers to "court, marry, and ask favors in the P. M." It seems rather soon to begin this sort of thing, but, then, Raphael must know. For January 5 he gives, "Travel, deal and push thy business in the A. M." This might be understood to mean that his readers should rest in the P. M. On the 25th: "Avoid superiors and keep quiet."

Were you born in January? Because, if you were, say on January 3, here is Raphael's prediction for your luck in 1897-8: "Thou will have rather a successful year for thy money and business, yet wilt thou have many annoyances in divers ways." Which is a nice, safe outlook for some people. Young ladies whose birthdays fall on the 30th will have, during 1897, "attention from the opposite sex, and young widows will have offers of marriage." Unlikelier things have happened. If born on the 10th of January, "ye who are in employ will be in danger of losing it;" but if born on the 13th, "ye" may expect promotion. In either event it is nice to be called "ye."

Old Moore is decidedly the boldest and most definite prophet. According to him, London is to have a "terrific explosion," in February, which ought to rather cheer Tynan. In April "awful fires" in Paris are predicted, and in May, "a preposterous proposal from the United States will cause a smile among the European powers."

Zadkiel considers that the conjunction of Mars and Uranus in the month of September, will be bad for Liverpool. Presumably it will be good for New York.

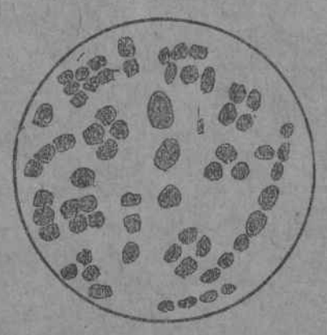
How Science Has Identified the Deadly Microbe.

These are the days of the microbe, the germ, the bacillus. Death now seeks its victims in an invisible form. The potent agencies that cause pneumonia, typhoid fever, diphtheria, consumption, lockjaw, anthrax and cholera afloat about in the air or find lodgment in the water we drink, and cannot be seen by the naked eyes.

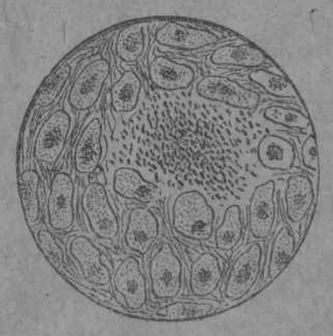
But Science looking through its powerful eye, the moocroscope, discovers and identifies these microbes. Bacteriology is new, but already it has risen to the dignity of a science, and the whole medical world now

MAGNIFIED MANY THOUSAND TIMES.

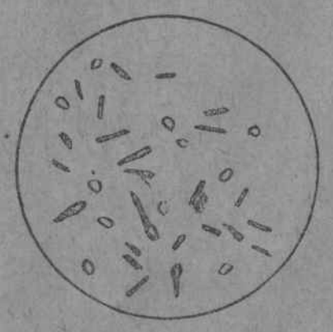
CHOLERA



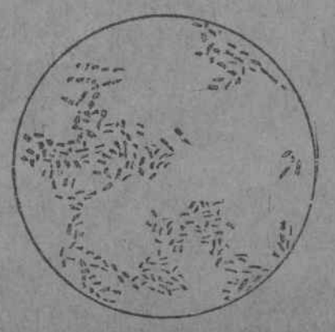
PNEUMONIA



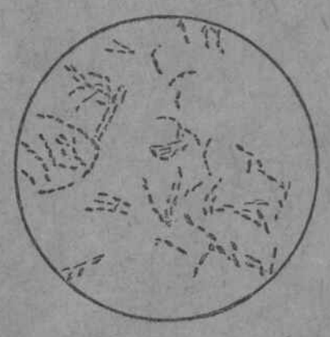
TYPHOID FEVER



ANTHRAX



DIPHTHERIA.



CONSUMPTION

waits upon the revelations of its professors. Up to the present time a comparatively small number of fatal disease have been directly traced to a microbe.

But ten or a dozen maladies that kill are known to have a germ which has been recognized and classified, and which any bacteriologist can identify on sight. So successfully has this work been accomplished during the sixteen years that bacteriology has been in existence, and so steadily is the work of experiment and research being conducted at the present time in all countries that there is hardly a doubt many mysterious ailments, whose origin now is hidden, will soon be traced to a germ.

Indeed, there are many eminent men of science who claim that every disease has its germ. It is said that a microbe is at the bottom of every form of ailment, and that diagnosis, which at the present time consists of a sort of guesswork, will in time resolve itself into an exact science, which will recognize the microbe in a drop of blood and put the nature of the disease beyond dispute by a photograph.

When that time comes there will no longer be any doubt as to the nature of the disease which may afflict a patient. With a small book containing pictures of the various microbes in his pocket, and armed merely with a lancet and a microscope, the physician will be enabled to determine with precision whether his patient suffers from appendicitis or peritonitis, and in the latter event the suffering and danger of an operation may be avoided.

By striking directly at the germ the physician can select the drugs which go straight to the seat of the disease, and thus effect its destruction in the shortest time. At the same time, by topping a patient of a drop of blood from time to time the bacteriologist may know with accuracy precisely how the patient is progressing, and the latter need hardly be asked to describe his symptoms, for the microscope will do so much more accurately.

These are only a few of the benefits resulting from the science of microbes, which is becoming more and more important with the passage of time. Pasteur is called the father of bacteriology. It was in 1880 that he published his memoir upon fowl cholera, which he quickly followed by disclosures regarding the attenuation of the virus of anthrax.

Pasteur had previously devoted several years to the study of an infectious disease of silkworms which threatened to destroy the silk industry of France. In the course of this work he demonstrated the causal relation of a parasitic micro-organism to an infectious malady. Pasteur's disclosures excited widespread comment.

Soon afterward Dr. George M. Sternberg, Surgeon-General of the United States Army, discovered a pathogenic micrococcus which he named after Pasteur, which is now recognized as the bacillus of pneumonia. In 1882 Koch announced the discovery of the tubercle bacillus, or consumption microbe, and in the same year Pasteur published his first communication regarding rabies, while Loffler and Schutz, in Germany, recognized the bacillus of glanders.

The comma bacillus, or microbe of cholera, was identified by Koch in 1884. It takes its name from its resemblance to a comma.

In the same year Loffler discovered the bacillus of diphtheria. The tetanus bacillus, or microbe of lockjaw, was discovered in 1884 by Nicolaier, a student in the laboratory of Professor Flugge, of Gottingen. Professor Kitasato, a Japanese investigator, now recognized as one of the leading bacteriologists, made further researches regarding this microbe and demonstrated that it was in fact the tetanus bacillus.

After numerous unsuccessful researches by bacteriologists, a bacillus was finally discovered in 1892 by Professor Pfeiffer of Berlin and recognized as the cause of influenza. The bacillus of typhoid fever was first observed by Eberth, but was not fully identified until 1884, by Gaffky.

Obermeier discovered the bacillus of relapsing fever, Koch that of traumatic diseases, and Davaine identified the microbe of anthrax. Several other disease germs have been recognized and bacteriologists are now searching for other microbes which there is every reason to believe exist.

The microbes are so small that they have to be magnified by a thousand diameters to be easily apparent, and the work of cultivating them in tubes, feeding them on gelatine and eliminating foreign bodies is long and tedious. The comma bacillus and the microbe of tuberculosis are the most celebrated germs, and their identification has done much to curb the destructiveness of the cholera and consumption.

YALE BOYS IN PAWN.

This will be a memorable week in college history at Yale. The collegians made preparations to go home for the holidays, and with this end in view have been provided with pocket money from home. But this year, when the cash was counted, few of the livelier element in the college had enough "in his clothes" to take him outside the college town.

Yale bet heavily on the football game with Princeton, only to lose. The sports in the Elm City college have had a bad year betting on the blue, and many of them are financially ready for a receivership.

The result was what might have been expected. Solomon Levi got it all.

The result has been that the second-hand clothing man has done a pushing business. Everything from a meerschaum pipe, and from a dress suit to a gold chair, was marched off to this convenient "Uncle." And to-day the sons of Yale are bare of jewels and gems, of purple and fine linen, of gewgaws and bric-a-brac, and "Old Clo's" has for sale a fine assortment of things wearable. The case is exactly stated in the words of the famous song, originally sung at Harvard, but now popular with Yale songsters, as follows:

"My name is Solomon Levi, my store's on Salem street;
That's where you buy your coats and vests and everything that's neat.
I've second-hand nickerettes, and everything that's fine.
For all the boys, they trade with me, at a hundred and forty-nine.

CHORUS.

"Oh, Solomon Levi; Levi, tra la la la!
Poor Sheeny Levi; tra la la la la la la.

"And if a bummer comes along to my store on Salem street
And tries to hang me up for coats and vests so very neat,
I kick the bummer right out of my store and on him sets my pup,
For I wont sell clothing to any man who
What collections of banjos and guitars, paintings, trunks and dress suits "Old Solomon" hangs up in his pawnshop can hardly be counted. In fact, such articles become drugs in the market in any good college town where the pace is fierce and furious, where pretty girls must be courted, where carriages must be had, where tutors must be secretly employed to help the laggard on with his exams, and where the taking of a degree depends upon the student's freedom from debt. When a really exciting game of football come off the misery endured is awful.

This year the "committee on ways and means" were unusually clever. Dentists have absolutely flourished, and many a scion of a prominent family had a good sound tooth bored out and filled again, so that the yielder of the forceps might lend him $40 and send a bill to father for "$50 for dentistry." And one very obliging photographer took a picture of a poor sophomore with bandaged face and swollen lips. A close observer might have suspected that an old-fashioned "Jackson ball" of striped candy had been pressed into the cheek of the young man. But it is gravely asserted that the governor came to time with a generous check for dental repairs.

A THREE DAYS' DANCE.

The Longest Ball on Record, with Constant Relays of Musicians and Dancers.

What promises to be the longest ball on record will soon be held at Brighton, England, in the cause of charity. It is said it will last, continuously, for three days and three nights. Just how this will be managed has not yet been learned. It is possible, however, that it can be kept going by a careful arrangement of relays of musicians and dancers who will reel off the waltzes, mazurkas and schottisches one after the other. Probably a short interval will be allowed in the daytime for rest, and then the programme resumed with increased ardor.

The entertainment is to be given in the Town Hall, and the institution to be benefited by it is a dispensary for the relief of the sick poor. There is a long list of titled people among the patronesses, and it is presumed that many members of the nobility named will grace the occasion by their presence. The Duchess of Teck is the greatest "altesse" on the list, which also includes the Countess of Munster, Baroness de Worms, Lady Ellis, Lady Pocock, and several score of the untitled gentry of the place. The Lord Lieutenant of the county, the Marquis of Abergavenny, is the nominal head of the affair, but whether the authorship of the idea is his is not stated.