

BICYCLE WITH WINGS

A New Device for a Flying Machine and How It Works.

AN EAGLE AND AN ORDINARY SAFETY

Correcting the Mistakes Made by Other Inventors.

NOW BEING BUILT

From the New York Sun.

SCAR FREYMANN is the inventor of a brand new flying machine which has several novel features, and which, from his success in experimenting with a model, bids fair to make a decided advance toward the solution of the problem of aerial navigation.

The machine is now being constructed in this city, under the inventor's supervision, and he expects that it will be finished and ready for trial in about two months.

Mr. Freyman decided to keep them secret until he should have filed plans of his invention in the patent offices in Europe and America.

Speaking broadly, Freyman's machine is a return to the principles upon which Otto Lilienthal of Berlin cut away from them two or three years ago, and contrived a machine by means of which he succeeded in flying, or rather in soaring, over considerable distances.

Lilienthal postponed for future development the application of motive power and contented himself with an aeroplane capable merely of sustaining him for a time, while the soaring depended upon the force of gravitation on one hand and the force of the wind on the other.

Lilienthal always soared against the wind, while Freyman sails with the wind, and it is this, he says, which is the most vital defect of Lilienthal's aeroplane.

The most vital defect of Lilienthal's aeroplane was the difficulty of accurately controlling the downward and upward point at which the machine would reach the earth.

Lilienthal managed the alteration of plane by throwing the weight of his body to the front or the rear end of his machine.

When approaching the earth at too sharp a grade he threw his weight back, thus tilting the forward end of the aeroplane upward.

The force of the wind raised the machine and made his ultimate descent more gradual. By this means alone Lilienthal succeeded in rising to a plane as high as that from which he started, or even higher.

It will be recalled that in starting it was necessary for him to launch his machine from a hill, and Freyman's plan is to start from the ordinary ground level. The bicycle is ridden along for a short distance, and when a certain degree of speed is attained the air pressure opens the wings and the machine begins to rise from the earth.

The mechanism being worked also by the bicycle pedals. Thus Freyman's machine differs from Lilienthal's in being fitted for motive power, to be supplied by the legs. The hands are left free to manipulate two or three levers which regulate the tilt of the wings and another which operates a tall or rubber, fixed in a vertical plane behind the rider. They are to be situated on a frame of light steel or of wood, and stoutly braced on the convex side to prevent them from flexing under the air pressure inside out by the pressure of the air.

The motor of the wings is based upon that of an eagle's.

Freyman is a sportsman, and he studied this motion while stationed in Asia Minor. The tips of the wings, all of which

work together, describe an ellipse. As they go forward they move up and slightly to an angle supposed to give just enough sustaining power to keep the machine going ahead on a level. As the wings drop back they close. They are to be situated on a frame of light steel or of wood, and stoutly braced on the convex side to prevent them from flexing under the air pressure inside out by the pressure of the air.

Freyman is a sportsman, and he studied this motion while stationed in Asia Minor. The tips of the wings, all of which

the front, the back or one of the sides. Mr. Freyman expects to get around this by having his center of gravity considerably below the spread of the wings. This, he thinks, will steady the machine, and the same purpose will be served by the opening between the wings. It may be said in support of the latter theory that Hargrave, the Australian experimenter with gliding kites, demonstrated that the stability of a kite in a high wind is increased by perforation, permitting part of the wind to pass through. Mr. Freyman proposes to take further advantage of this theory by having his wings so arranged that they may be closed together in pairs in a high wind, practically reducing the number of wings to four or five, and a wider space between for the passage of the air.

Another flaw that Freyman found in Lilienthal's apparatus lay in the fact that his arms were not free of the wings, and this, as well as the other, is to be corrected by lowering the seat of the operator.

Freyman's plans, except so far as dimensions were concerned, were fully worked out while he was in Moscow last year. He proceeded to build a small model with a view to taking further advantage of his theory and to ascertaining the spread of wings necessary to support a given weight.

His model, which was of solid wood and was each about a yard square. The mechanism was the same as shown in his present plans, except that the bicycle wheels were left off and the motor was worked by means of an electric motor, instead of by pedals. The motor generated 1-20 horse power.

The model was so arranged that the machine should rise but a short distance and then should proceed practically horizontally. The motor was of solid wood and weighed four pounds, and Mr. Freyman found by experiment that the wings would support a nine pounds additional.

Having completed his model, Mr. Freyman took it out to a level district near Moscow, where he could be unobserved, and since then he has been working on the motor. He says that it rose to a height of forty-five feet and flew for about a mile between thirty and forty feet above the earth.

Mr. Freyman based his calculations upon his experiments with the model, and prepared working plans for a machine of dimensions adapted to supporting a weight of 20 pounds, in addition to that of the machine itself, which will be eighty-five pounds. The motor will be made in America, because he believed that he would find here more intelligent mechanics, and in this respect, he says, he has not been disappointed.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

Mr. Freyman says that his machine, in addition to being fitted for motive power, has a reserve of energy. It will be lighter than Lilienthal's, and consequently greater supporting power. Lilienthal's wings, he says, were each fifteen square meters in extent, and he says that his wings will be sixty square yards. The wings will measure thirty feet from tip to tip.

IN THE CHURCHES

The number of the local Presbyterian churches was increased last Sunday afternoon by the formation of a new church that denomination in Eckington.

The church was organized by the Washington presbytery, who had charge of the matter. Rev. C. B. Ramsdell, D. D., conducted the opening service. Rev. Joseph T. Kelly, pastor of the Fourth Church, made a prayer, after which a list of persons transferred to the new church by letter was read: From the North Church, 20; Gunton Temple Memorial, 5; Western, 2; Anacostia, 1, and one by baptism and confession of faith. It was decided to call the church the Eckington Presbyterian Church, the congregation also fixing the term of its eldership at three years.

Two officers were then elected, as follows: Elder, Irwin B. Linton, and deacon, J. A. Richards, both to serve until November, 1897. The election of these officers was followed immediately by the installation of Mr. Linton and the ordination of Mr. Richards. The church was organized at a day school about six years ago, and last fall it occupied its new house of worship, erected at the intersection of Q and North C streets.

The little band of Presbyterians from which it sprang came mostly from the North Church, which church was colonized by the Rev. George R. Duncan of Harrisburg, Pa., who was transferred here to a possible settlement in Washington as pastor of Eckington Church.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

The church of the Episcopal Conception Church resumed its work last Sunday. Mr. Arthur D. Mayo is the organist and Mrs. Clara Baker-Smith the director. Among those singing in the choir are Mrs. Ralph Barnard, alto; Mr. H. O. Cook, tenor, and Miss Annie Grant, soprano.

celebrated the fifth anniversary of its organization yesterday evening. A large number of other leaguers and officers of the District organization; after a number of songs the evening was given up to social festivities.

Rev. Stowell L. Bryant, pastor of St. Paul's Methodist Episcopal Church, presided at the service. The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

The service was held at the church of the Sea-Sea, St. Paul's Church, which was closed during the summer, has been reopened for services.

MONEY FOR RAILROADS

When a Presidential Candidate Makes a Campaign Tour.

WHY THE BILLS ARE PROMPTLY PAID

Political Gatherings Bring Business to the Railway Lines.

RUNNING SPECIALS

PERHAPS THIS TRIP isn't a good thing for us?"

The above was spoken by one of the brightest officials connected with the Southern railroad to an Evening Star reporter one evening during the past week.

The speaker referred to the latest trip of Presidential Candidate Bryan through the south. Continuing, the speaker said: "This one trip alone will give our company clear fully \$25,000, and it has only lasted about a week. If we could keep him in the south for about a month it would be almost a gold mine for us."

"Does the presidential candidate or his party members really care for the special train?" inquired the reporter.

"Yes, indeed," replied the passenger agent, with a smile. "We would be too glad to carry a presidential party free for political reasons; but circumstances will not permit such a move, as the political managers refuse to take chances on anything that is likely to redound to their disadvantage."

"And the cost? It must be a pretty penny," questioned the reporter.

"The cost of a special train under the present circumstances is a small matter to any railroad company," replied the agent. "We generally figure on the ratio of twenty passengers to the car at so much per mile. At the present rate it is very desirable to carry a presidential party free for political reasons; but circumstances will not permit such a move, as the political managers refuse to take chances on anything that is likely to redound to their disadvantage."

"Getting Up a Crowd." "Now, analyze the last trip, say Mr. Bryan started for Indianapolis from Chicago. We know that four days ahead of time he will be in the former city. Large posters are immediately struck off advertising the fact that Mr. Bryan will speak in Indianapolis on a certain day, and that our road will carry passengers from any point to any other point at the rate of one fare for the round trip."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

"The one drawback to a large city like Indianapolis is that too many roads on a different route would be sure to get in a case where one would like to eat the watermelon alone, although the report would be a big one."

CHLORIDUM DISCOVERY FOR CONSUMPTION

Remarkable Results From the "Home" Treatment.

Chloridum Discovery for Consumption.

Remarkable Results From the "Home" Treatment.

In addition to the many cures reported who took Chloridum, remarkable results by the "home" treatment have been reported also.

Call or send for literature, symptoms, etc., for those desiring "home" treatment. Hours: Monday, Wednesday and Friday, 9 to 12 and 6 to 8.

DR. SHADE IN CHARGE. 1232 14th St., Washington, D. C.

of practical common sense, and yet she did many foolish things. She made many warm friends and she antagonized friends whom she could not afford to lose.

"Another thing railroad managers have to take into consideration is that they are connected with the big roads, is to anticipate political gatherings, size up the crowd he expects to turn out and then have the necessary cars to accommodate the masses."

"In the second class go the names of Harrison, Reed, Hobart, Hill, Sewall, Watson, Taylor, Sherman and Stevenson.

"From the time a special is switched on to our road containing a passenger of as much importance as Mr. Bryan, it is a case of breathing hard with the officials in charge of the running of trains until that same special has been turned switched on to another road.

"The same applies to the many excursion trains that are run on our roads. Take, for instance, the excursions to Canton, numbering several sections of a train, the cars of which are packed with passengers. They must make good time, run close together, so as to land the passengers in a bunch, and yet be strictly secure from accident.

"A very noticeable feature of these excursions is that the passengers don't kick on the accommodation afforded. Everything is taken in good humor. When the demand for cars is so great, as a matter of course, everything that will hold a person is pressed into service, and as a result we have many special trains run for our cars to help us out.

"When you asked me whether the Bryan trip was paid for it made me smile. If all our bills were met promptly by the roads, this sort of a meeting would have very little trouble meeting running expenses of all kinds, but, as I have been remarked, these good things do not come our way often."

"Danger of Railroad Friendship." "There is not a railroad in the country that would not be pleased if an opportunity materialized whereby it could grant a favor to any of the political parties. Every reader of the newspapers knows how railroads are legislated against, and for this reason the corporations would like to be in the good graces of all the parties, but the Bureau would represent the whole of the political organizations fighting us."

"For instance, say we were to carry Mr. Bryan and his party through the south for the summer, it would be like to buy the railroads, but our bills for transportation go into that party's hands and are paid as quickly as though it was an ordinary bill."

"Now, to go back to generalities, place your finger on that railroad map of the United States and then make a guess on those upon whom she had no claim. She was a curious admixture of sentiment and assurance. She was an indefatigable worker, quick, and ready with her pen and her tongue. She was blessed with a good deal

of practical common sense, and yet she did many foolish things. She made many warm friends and she antagonized friends whom she could not afford to lose.

"Another thing railroad managers have to take into consideration is that they are connected with the big roads, is to anticipate political gatherings, size up the crowd he expects to turn out and then have the necessary cars to accommodate the masses."

"In the second class go the names of Harrison, Reed, Hobart, Hill, Sewall, Watson, Taylor, Sherman and Stevenson.

"From the time a special is switched on to our road containing a passenger of as much importance as Mr. Bryan, it is a case of breathing hard with the officials in charge of the running of trains until that same special has been turned switched on to another road.

"The same applies to the many excursion trains that are run on our roads. Take, for instance, the excursions to Canton, numbering several sections of a train, the cars of which are packed with passengers. They must make good time, run close together, so as to land the passengers in a bunch, and yet be strictly secure from accident.

