DEMONSTRATES HIS AIRSHIP

Dr. J. A. Udden's Novel Machine is Tested Before Audience at Augustana College.

THEORY IS EXPLAINED

Inventor Shows That He Has Employed New Principles in Construction of the "Rotoper."

Before an audience that crowded the chapel of Augustana college last night Dr. J. A. Udden, professor of science, demonstrated by means of a model that he has designed a type of flying machine that will fly. Three trials were made, and each time the machine surpassed previous flights.

Dr. Udden's machine is called by him the "Rotopter," or rotating wings. These wings or propellors are two in number, situated on each side on top of the machine. When propelled they cut the air on a horizontal plane, thus producing the resistance against the air which causes the machine to rise. The propellors are operated in opposite directions in order to maintain an equilibrium. The propellors merely cause the machine to rise by acting against the force of gravitation, the forward motion being produced by the angle of the aeroplane in the body of the machine.

Power From Rubber.

The motive power in Dr. Udden's model is furnished by rubber bands which are twisted to produce a high tension. As long as the twisted rubbers are uncoiling the propellors are revolved. In the first experiment last night, when the string which bound the propellors was cut, the machine rose gracefully to a height of about five feet and flew off the stage into the chapel. The enthusiasm of the audience was so great that Dr. Udden was compelled to repeat the experiment a second and third time. The last flight was the most succesful of all, a greater tension having been produced in the rubber bands. The machine rose to a height of about 10 feet and moved across the stage. It remained in the air as long as the propellers rotated, and then settled to the floor.

In the lecture which preceded the experiments Dr. Udden review the history of the great efforts which have been made to solve the problem of aerial navigation. He pointed out the weak points in the different types which have been built by various inventors, and showed how his type would overcome these defects. One of the drawbacks of all aeroplanes thus far constructed has been their inability to rise of their own accord without being run a considerable distance on the ground on wheels. The additional weight of these wheels has hampered the movements of the machine in the air. The action of the horizontal propellors in Dr. Udden's machine causes it to rise of its own accord, thus doing away with this defect.

Shows Gravity Effect.

"It is a remarkable fact," said Dr. Udden, "that all experimenters have apparently overlooked the fact that the force of gravitation is caused to work in two directions by an aeroplane—both forwards and downwards. Thus if the propellors merely cause the machine to rise against the force of gravitation, it will move forward of its own accord without the necessity of propellors to force it ahead."

Another point of merit in Dr. Udden's machine is its inability to turn over. Its construction is such that the center of gravity is in the lower part of the machine, thus overcoming the tendency to capsize. A parachute arrangement is also provided which will cause the machine to fall slowly and gracefully when the propellors are stopped. Dr. Udden also showed how in a perfect model the problem of steering can be solved in an easy manner. He proposes to steer by means of a propellor or rudder constructed on a "universal joint." Such an arrangement will permit the steering apparatus to be turned in any direction or angle.

Not for General Use.

Dr. Udden stated that he could not conceive of flying machines coming into general use, for, said he, "human beings were constructed to walk on the ground." One of the big drawbacks which he believes cannot be overcome is that of cloudy and rainy weather. The flimsy texture of which machines must be constructed is necessarily made heavy and its effectiveness destroyed when it becomes wet.

"I believe, however," said Dr. Udden, "that flying machines will become about as general as automobiles; that is to say, for the use and pleasure of people of time and means. I can't conceive of their becoming of practical use except in a few cases. In my own profession, for instance, I could make good use of a flying machine on a geological expedition, for there are many places which we geologists can't reach because we can't fly."

In addition to Dr. Udden's lecture, the Adelphic society last night consisted of a pipe organ solo by Professor P. Johnson; a violin solo by Miss Gertrude Housel to pipe organ accompaniment, and vocal solos by Miss Lillian Cervin and C. Bostrom. All the musical numbers were enthusiastically received.

Will Not Continue.

Dr. Udden does not intend at present to continue his efforts to work out the problem of aerial navigation. He is convinced that his model shows the solution of the puzzle, but he does not plan to further develop the idea. Dr. Udden says that if some one interested in the problem will finance the work he will construct a machine of practical size and carry out the experiments more thoroughly. It will, of course, require quite a sum of money for this purpose.

GOETHALS IN RAGE

Engineer in Charge of Construction of Panama Canal Resents Charges of Discrimination

IN GIVING CABLE CONTRACTS

Complainant Also Excited and Declares Inquiry Is Unfair, Only the Defense Being Heard.

New York, Oct. 10.—Hot denial by Colonel George W. Goethals that he had been party to discrimination in Panama canal contracts marked the inquiry yesterday before Inspector General Garlington.

Charges of discrimination and favoritism in awarding cable way contracts underlie the investigation, and exciting outbreaks and warm interchanges have not been infrequent.

Colonel Goethals, who is general director of the canal work, took the witness stand toward the end of yesterday's session.

Complainant in a Rage.

Just before he was called William A. Brothers who brought the charges had accused Spencer Miller, a representative of the Lidgerwood Manufacturing company of perjury, and followed this accusation by the charge that the inquiry was not being conducted on fair lines, saying the witnesses for the defense were the only ones given a hearing.

Brothers become highly excited and announced that he would withdraw from the hearing. He went so far as to leave the room, but returned a few minutes later.

Goethals in Denial.

When Colonel Goethals was called he said:

"I have been charged with false statements by Mr. Brothers. I am also practically charged with corrupt practices by Senator Slater, Mr. Woods and Mr. Brothers. I intend to answer these charges fully."

He went on to complain bitterly of the suddenness of the charges and lack of time and opportunity to prepare a defense.

Colonel Goethals further told of a visit to his office of Mr. Wood of the New York Cablegram and Engineering company, who said he heard it was useless for his firm to bid on any Panama contracts, as it would not be allowed to do any work on the canal.

Branded as a Lie.

Goethals said he had characterized this as a —— lie, and he would tell Wood's informant the same thing.

Senator Slater, who said he represented the New York Cable and Engineering company, then rose to state that there had never been any question of Colonel Goethal's integrity.

DIES SUDDENLY ON A TRAIN

B. H. Ridgely, Consul General to Mexico, Passes Away.

Monterey, Mexico, Oct. 10.—Benjamin H. Ridgley, United States consul general to Mexico City, died suddenly about midnight last night, in a Mexican City Pullman, while waiting for his train. Ridgley arrived here from Laredo and stopped over to take a Pullman for the capital. He was accompanied by his wife and mother.

ANOTHER POLITICAL SPEECH

Taft Closes Work in Cincinnati With Talk to Delegation From Kentucky.

Cincinnati, Oct. 10.—Judge Taft will today make a brief address to members of the Taft-Sherman club of Fort Thomas, Ky., in the assemoly room of the Sinton hotel. This was the last day for political purposes that the candidate will spend in his native city.

WOULD CHECK EXPENDITURES

Says Candidate Kern in Addressing Audience at Point Pleasant, Va.

Point Pleasant, W. Va., Oct. 10.—The democratic party is at war with the profligate expenditures of the present administration, said John W. Kern in a speech before a good sized audience of democrats here today. He is suffering from inflammation of the throat and spoke with difficulty.

IS TAKING A CENSUS

Nafional Conservation Commission Engaged in Preparing Figures on Forests.

GIVING TIMBER RESOURCES

All Available Statistics Being Secured —The Guesses Made In Advance Vary Widely.

Washington, Oct. 10.—The national conservation commission has caused the first comprehensive attempt at a census of the standing timber in the United States ever undertaken. The forest service has for several years been eager to take such a census, and the bureau of the census has expressed its willingness to cooperate, but funds have never been available. The conservation commission, however, needs the information to help complete its inventory of the country's natural resources, which it will include in its report to the president, and since that report is to be submitted on the first of next year, it needs the information at once. In consequence the work on the census has been started with a rush and is now under full headway.

It may be a slight exaggeration to speak of a census of timber, for of course it is impossible to count the individual trees in the forests; even the most ambitious plans of the forest service and the bureau of the census did not contemplate that. But a trained man can with great accuracy "cruise" a tract of forest and estimate the number of board feet in contains. Large portions of the forests of the country, including practically all the national forests, have been estimated at various times but these figures have never been brought together and no organized effort has ever been made to gather them into one total, nor to supply the deficiencies where hitherto no estimates have been made.

Guesses Vary Widely.

As a result, the guesses as to the amount of standing timber in the United States, range all the way from 822,682 million to 2,000 billion board feet—a difference of more than a trillion feet in the estimates of the best qualified authorities in the country.

In the opinion of the forest service, the most carefully prepared estimates yet made are those by Henry Gannett published by the Twelfth census in 1900. These placed the total stumpage at 1,390 billion feet. Mr. Gannett, it so happens, has been chosen by the president to compile all the information gathered for the commission, and with his previous acquaintance with the subject of forestry, he is at work now enlarging the knowledge of forest areas at present available.

The importance of this census lies largely in the fact that it will give an accurate basis for computing how long our timber supplies will last. Through the cooperation of the forest service and the census bureau the country's annual consumption of wood is known with tolerable accuracy, although even here there are some discrepancies, because a large amount of wood is used for posts, fuel and domestic purposes, for which no satisfactory data have yet been collected. But the concensus of opinion among those equipped to judge is that the present annual consumption is about 100 billion board feet, or something more than that. One leading authority has placed it as high as 150 billion board feet.

Exhausted in 14 Years.

Assuming a stumpage of 1,400 billion feet, an annual use of 100 billion feet, and neglecting growth in the calculation, the exhaustion of our timber supply is indicated in 14 years. Assuming the same use and stand, with an annual growth of 40 billion feet, we have a supply for 23 years. Assuming an annual use of 150 billion feet, the first supposition becomes nine years, and the second 13 years. Assuming a stand of 2,000 billion feet, a use of 100 billion feet, and neglecting growth, we have 20 years' supply. Assuming the same conditions, with an annual growth of 40 billion feet, we have 33 years' supply. With an annual use of 150 billion feet, those estimates become, respectively, 13 and 18 years.

It is apparent from these computations why the national conservation commission considers the census of timber so essential to the preparation of its inventory.

The chief difference between the methods now being employed by the conservation commission and those the bureau of the census would use are, that while the bureau would send out enumerators to make personal visits to all parts of the country, the commission is aiming at the same results through a tremendous amount of correspondents. For instance, 3,100 letters have gone out to county clerks asking for statements of forest areas in their counties. Seven thousand lumbermen and timberland owners have been asked to supply similar information. In all nearly 150,000 letters have been sent. These letters also ask for a wide variety of information besides the area and capacity of forests. They touch upon all phases not only of the lumbering and milling industries but of all others which are even indirectly dependent upon the use of wood. The purpose of the commission is not merely to learn how much wood is growing now, but how long it may be expected to last and how the supply may be prolonged by economy.

Have Handed in Reports.

All government departments and bureaus which have any information about forests, as well as many large corporations, such as land grant railroads which hold big forest tracts in some states and have cruised them carefully, have turned it over to Mr. Gannett.

The forest service naturally has the largest fund of information, and it is gathering more constantly, either independently or with the help of the census bureau. The department of war, the interior, and commerce and labor can turn over the amounts of timber standing on military, lighthouse, and other reservations. The bureau of corporations of the department of commerce and labor has sent out an extensive schedule of inquiries to its special agents which, it is hoped, will add to the present information concerning the manufacture of wood. All the states of the union are cooperating and will furnish statistics concerning state forest lands.

THE MARKETS.

Chicago, Oct. 10.—Following are the market quotations today:

Wheat.

December, 100⅝, 101¾, 100½, 101⅝
May, 103½, 104⅝, 703⅜, 104⅜.
July, 97½, 98⅝, 97⅜, 98⅝.

Corn.

December, 64⅝, 65, 64½, 64⅞.
May, 64¼, 64⅝, 64¼, 64½.
July, 63½, ——, ——, 63¾.

Oats.

December, 49, 49¼, 49, 49¼.
May, 51⅛, 51⅜, 51⅛, 51¼.
July, 47, ——, ——, 47.

Pork.

October, 13.80, 15.25, 13.65, 15.25.
January, 15.95, 15.92, 15.50, 15.67.
May, 15.70, 15.90, 15.87, 15.50.

Lard.

October, 9.70, 9.85, 9.60, 9.65.
January, 9.50, 9.50, 9.25, 9.35.
May, 9.40, 9.42, 9.20, 9.27.

Ribs.

October, 9.05, 9.25, 8.82, 9.25.
January, 8.42, 8.45, 8.25, 8.30.
May, 8.47, 8.47, 8.30, 8.35.

Receipts today—Wheat 46, corn 113, oats 213, hogs 8,000, cattle 700, sheep 1,500.

Estimated receipts Monday—Wheat 27, corn 109, oats 214, hogs 25,000.

Hog market opened steady. Hogs left over 5,500. Light 5.70@6.35, good heavy 5.85@6.65, mixed and butchers 5.85@6.65, rough heavy 5.85@6.10.

Cattle market opened steady.

Sheep market opened weak.

Hogs at Omaha 3,100, cattle 200. Hogs at Kansas City 5,000, cattle 500.

Hog market closed weak to 5c lower. Light 5.65@6.35, mixed and butchers 5.80@6.60, good heavy 5.80@6.60, rough heavy 5.65@6.05.

Cattle maket closed steady. Beeves 3.40@5.35, stockers and feeders 2.60@4.60, cows and heifers 1.60@5.35.

Sheep market closed steady.

Liverpool closing cables—Wheat ⅝ lower, corn ¼ lower.

Northwestern receipts—Minneapolis, today 612, last week 813, last year 166; Duluth, today 385, last week 582, last year 388.

Bank Statement.

New York, Oct. 10.—Reserve decrease, $7,581,925; less U. S. decrease, $7,574,675; loans increase, $12,227,300; specie decrease, $5,426,800; legals decrease, $659,700; deposits increase, $5,981,700; circulation decrease, $242,200.

New York Stocks.

New York, Oct. 10.—Following are the quotations on the stock market today:

U. P. 162½, U. S. Steel preferred 109, U. S. Steel common 46, Reading 129½, Rock Island preferred 47½, Rock Island common 19½, Southern Pacific 102, Missouri Pacific 52¾, Great Northern 132, L. & N. 105, Smelters 86⅜, C. F. I. 35, Canadian Pacific 171½, Illinois Central 138, Penna 122¾, Erie 31¼, Lead 81¾, C. & O. 42, B. R. T. 48¼, B. & O. 95½, Atchison 87½, Locomotive 48¾, St. Paul 134¼, Copper 74⅜, Republic Steel preferred 79½, Southern Ry. 21¼.

LOCAL MARKET CONDITIONS.

Today's Quotations on Provisions, Live Stock, Feed and Fuel.

Rock Island, Oct. 10.—Following are the wholesale prices in the local market today:

Provisions and Produce.

Eggs—Fresh, 22c.

Live Poultry—Hens, per pound, 8c; springs, 12½c pound.

Butter—Dairy, 22c.

Lard—11c.

Vegetables — Potatoes, 60c; onions, 45c; beets, 40c; turnips, 30c.

Feed and Fuel.

Grain—Corn, 80c; oats, 47c to 50c, wheat, 85c to 90c.

Forage — Timothy hay, $9 to $10; prairie, $7.50 to $9; clover, $10 to $11; straw, $6.50.

Coal—Lump, per bushel, 14c; slack, per bushel, 7c to 8c.

Had a Close Call.

Mrs. Ada L. Croom, the widely known proprietor of the Croom hotel, Vaughn, Miss., says: "For several months I suffered with a severe cough, and consumption seemed to have its grip on me, when a friend recommended Dr. King's New Discovery. I began taking it, and three bottles effected a complete cure." The fame of this life-saving cough and cold remedy and lung and throat healer is world-wide. Sold at all drug stores; 50 cents and $1. Trial bottle free.

Rheumatism Cured in Three Days.

N. B. Langley, Madison, Wis. says: "I was almost helpless with rheumatism for about five months. Had it in my neck so I could not turn my head, and all through my body. I tried three doctors and many remedies without any relief whatever until I procured Dr. Detchon's Relief for Rheumatism. In a few hours the pain was relieved and in three days the rheumatism was completely cured and I was at work." Sold by Otto Grotjan, 1501 Second avenue, Rock Island, Gust. Schlegel & Son, 20 West Second street, Davenport.

All the news all the time — THE ARGUS.