

Man's Greatest Victory Over Nature

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On the twenty-third anniversary of the world's first flight, Senator Bingham delivered an eloquent address from the floor of the Senate, in part as follows.—EDITOR.

MR. PRESIDENT, it seems to me very appropriate that to-day the Senate should have passed by unanimous consent two bills giving the medal of honor to the two heroes in our Navy who made that wonderful flight to the North Pole. This, Mr. President, is an anniversary day in American aviation. Twenty-three years ago to-day down in North Carolina the people who lived in the Kill Devil district were invited to go to Kill Devil Hill to see whether man had at last been able to achieve the conquest of the air.

For thousands of years ambitious men had watched the birds use the air as a medium of transportation and had tried various ways of imitating them. Their efforts had only aroused the laughter of their fellows. Poets had described the woes of men who attempted to acquire wings. Tens of thousands had laughed at "Darius Green and his flying machine." Wiseacres the world over told ambitious young men that man was never intended to leave the ground and assume wings until he was ready to leave the ground permanently and take his place in heaven. Poets were willing to accord to angels and even to devils swift powers of flight, but not one man in a million thought that man could fly.

So on that cold, windy day, the 17th of December, 1903, 23 years ago, when Wilbur and Orville Wright took their contraption from its tent shelter, there were only five spectators—Mr. A. D. Ethe-

ridge, Mr. W. S. Dough, Mr. W. C. Brinkley, Mr. John Ward, and Mr. John T. Daniels. There had been so many unsuccessful attempts that between skepticism and the superior attractions of sheltered houses only these five risked a waste of their time.

And yet, Mr. President, these five were spectators of the greatest victory which man had made over

nature since those heroic days when Columbus discovered America and Magellan circumnavigated the globe. As a matter of fact, both Columbus and Magellan were using instruments in their conquest which had been developed slowly over a period of hundreds of years since man first ventured to leave dry land and overcome the uncertainties of navigation. As all the world knows, Orville Wright took his place in this strange, new device which was the result of thousands of experiments in gliding and in the principles of aeronautics which had been made by him and his brother. And then for 12 seconds the first flight in the history of the



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Whose knowledge of air matters is based on experience.

world was made in which a machine carrying a man had raised itself into the air by its own power in free flight, sailed forward on a level course without reduction of speed, and landed without being wrecked.

Four flights in all were made. The fourth and last of the day was the world's record for flight; it lasted 59 seconds.

The distance traveled was 852 feet, or a little more than one-sixth of a mile. That was only 23 years ago to-day.

And, then, as though in anger that it had at last been conquered by pygmy man, a gust of wind, or

rather, in the words of the classics, let us say a breath from the lips of one of the sons of Boreas caught up the machine, while the excited spectators were discussing what they had seen, overturned it, and rendered it useless for further experiment at that time. But the triumph of the wind was short lived, for the next year a new machine, stronger and heavier, was constructed by the Wright brothers, and from that time to this progress has been steady.

THE past year in American aviation has been especially notable for a steady increase in the amount of flying, both military and commercial, and for a growing public understanding of the problems and potentialities of aircraft and a growing public willingness to accept them as normal instruments of conveyance of persons and property, for purposes of commerce and those of war.

In the airplanes themselves there has been continued improvement, especially along the line of heightened efficiency and lowered weight of power plant and of increased use of metal in wing structures. At one time airplane engines were the most expensive engines in the world, but to-day we are making airplane engines of the highest capacity and quality for only \$20 per horsepower, when many of the engines of our best automobiles cost at least \$25 or \$30 per horsepower. There has been produced in the United States and put into regular service in naval airplanes an air-cooled engine developing 400 horsepower on a weight of well under 2 pounds per horsepower. New, observation machines have come into regular use in the services, and the Navy has begun use of a new type of amphibian airplane able to land and take off at will on land, sea, or the deck of a carrier. Such is the progress that has been made during the last 23 years.

There have been no special attempts to break records or to prepare machines especially for record breaking in this country, except for some high-altitude experimentation, but increase in efficiency or reduction in weight of structure or power plant carry record-breaking potentialities. Specially built machines in France have made a number of cross-country flights of sensational length, the latest being but little short of 3,500 miles.

Compare that, Mr. President, with what happened 23 years ago to-day, when the record flight was 852 feet. The world's record for distance flown without stop over the sea made by the late Commander John Rodgers has continued unbroken.

The tactics of the use of the military airplane have continued their steady development under intensive study in the Army and Navy. The amount of flying done by the services tends upward; the Navy, for example, having flown 83,000 hours during the past year, a figure more than 30 per cent in excess of that for any previous year since the World War, and with a record of freedom from accident considerably better than in any previous period, there having been only one fatality for every 4,200 hours in the air. This flying has included a considerable amount which served both as training for service personnel and to accomplish nonmilitary ends as well. Notable in that connection has been the work of the Alaskan Aerial Survey, a naval unit which mapped 11,000 square miles of territory during the summer of 1926, during a total of some 300 hours of flight. Much of the ground flown over and photographed was not only new to the airplane but practically unexplored, and would have continued unexplored for many years to come had it not been possible to make the exploration from the air. Geographic knowledge was greatly increased as a result of the summer's work. In this one summer, the mapping covered 75 per cent of the ground that had been expected to take three years to complete.

The year has been especially notable in commercial aviation for the inauguration of the work of the Department of Commerce in laying out and lighting and marking airways, and in the regulation of aircraft for the safety of their users.

To-day, Mr. President, by happy coincidence, the new Assistant Secretary of Commerce for Aeronautics has published through the new aeronautic branch of the Department of Commerce the first issue of Domestic Air News dated Friday, December 17. I ask unanimous consent that the publication may be printed in the Record, as it is an interesting document, recording the progress which has been made in America during the past 23 years.

