

American Autogiro

Aeronautics

America's first autogiro, that strange-looking craft that the Spaniard, de la Cierva, has invented, paid a courtesy call to Langley Field, Va., when the Fourth Annual Aircraft Engineering Research Conference of the National Advisory Committee for Aeronautics was held there on May 14.

In the cover photograph (at the left) Orville Wright, the first man to fly, is talking to H. F. Pitcairn, American airplane manufacturer and pilot of the first of this new breed of aircraft to fly in America. Incidentally in flying from Philadelphia to Langley Field, via Washington, a distance record for the autogiro was set.

The autogiro is not a true airplane. It is not a helicopter. It has been called a flying windmill. Instead of the conventional wings of an airplane, there are four narrow wings at right angles to each other that revolve in a nearly horizontal plane on a vertical axis. This revolving rotor structure is not connected in any way with the engine and is turned by the force of the autogiro's movement through the air. The revolving wings provide the lift that keeps the autogiro aloft.

Climbing steeply and descending nearly vertically without disaster are advantages claimed for the autogiro. It does not stall in same manner as the ordinary airplane. It is aerodynamically stable at lower speeds and does not have as high top speeds as the usual airplane.

The first of the autogiros was built in 1919 and since then some forty machines have been built and flown. The inventor, Senor Juan de la Cierva, is expected to visit America for the first time in a few months.

For a discussion of the principles underlying the new sorts of heavier-than-air craft, including the autogiro, see the SCIENCE NEWS-LETTER for March 24, 1928, page 179.

Science News-Letter, May 25, 1929

Coal deposits that appear to be the most important in North Africa have been discovered in Morocco.

It is estimated that farmers in 1927 averaged \$1,290 net income, as compared with \$1,133 in 1926.

Young bats, past babyhood, are "hung up" by their hooked claws while their mother goes out to hunt for food at night.

Storing of Memories Important

Psychology

A new science—memory dietetics—would be far from an absurd proposal, according to Dr. John M. Fletcher, director of psychological study at the behavior clinic recently opened at Tulane University.

Memories that a child stores in his mind and that leave him in a state of mental and emotional indigestion are one of the most serious problems that the clinic has to deal with.

"Here comes into the clinic a child who is showing conduct disorders of various sorts, selfishness, stealing, truancy," said Dr. Fletcher. "Here is another with an obsession that is undermining his health and leading toward mental disease. Another has a chronic speech defect that points to a hampered career of suffering. Behind them all there is likely to be found an accumulation of pathogenic memories.

"The child can no more get rid

of an experience by forgetting it than he can get rid of something unwholesome by swallowing it. Memories, like food, are absorbed or assimilated. Some food cannot be satisfactorily digested. Likewise, we cannot adjust ourselves to some memories.

"That memories may relate to the cause and nature of disease is a discovery of modern psycho-pathology, which may be found equally as important as the germ theory of physical disease. The child guidance clinics are an outgrowth and a practical application of this discovery, in that they assume a definite causation for a child's maladjustment to his surroundings, and they attempt to trace the conditions to these specific causes with a view to ultimate relief."

Science News-Letter, May 25, 1929

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