

## Duplicates Plane's Motion

*Aviation*

A device that simulates actual flying conditions and produces the psychological effect to the beginning airman of an airplane in motion has been developed at the Wright Field Experimental Flying Station after almost a year's tests, it was revealed today by Lieut. Albert I. Hegenberger.

As yet without a technical name but known temporarily as an "orientator" or apparatus designed to accustom the novice to the feel of the plane, the new invention is producing excellent results and when further perfected may entirely take the place of the "Ruggles" orientor, the standard device of the same general nature that is in wide use today.

At a casual glance the "orientator" looks very much like the Ruggles apparatus since it is about the same size and is used in a like frame. However, it has certain marked and revolutionary differences, Lieutenant Hegenberger explains. Whereas the former device is able to simulate the control apparatus of a plane and contains the actual cockpit, it has neither propeller nor engine. But the new "orientator" has all these things and is thus able to give all the plane's basic movements, such as an up and down lift, a left and right stability, the roar of the engine plus the attendant strong blast of air, and precisely the same loops and turns as are made by an actual plane in the air. In addition the "orientator" is equipped with a regulation aeron or moveable flat foil that serves to keep the ship from wobbling from side to side. The apparatus is electrically controlled and the bulk of it is covered with a fabric very similar to that of a plane.

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## Measures Speed of Birds

*Ornithology*

Prof. Thienemann of Rossitten, East Prussia, gives the following as the established speeds of certain birds during migration: The sparrow develops a speed of 25 miles per hour; the gray gull, the black-back gull and the Norway crow have the same speed, 31 miles per hour. The rook and the finches reach 32 miles per hour. The speediest flier is the starling, with approximately 45 miles per hour.

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Paper that will not burn is an invention of a German chemist.

## Television Prefers Red-Heads

*Radiovision*

Red-headed people are the best subjects for television, while blondes, in general, are the poorest. This curious fact was brought out by V. A. Schoenberger, Chicago radio engineer, in addressing the Federal Radio Commission, during the hearing on the advisability of allowing television transmission by stations in the broadcast band.

The broadcasting stations themselves and their public, and not the Radio Commission, are the best judges of whether television broadcasts are of interest and value, the Commission was told by Dr. Lee De Forest, radio pioneer and inventor of the vacuum tube detector and amplifier. He said that after the war-time restrictions on radio were removed in 1919, he began sound broadcasting on a small scale. He subsequently moved his station and the radio supervisor for the New York district took advantage of a technicality and suspended his license. To Dr. De Forest's protests he replied that "entertainment by radio had no place on the ether."

"The Radio Commission should not repeat this early policy of discouragement, but should give television all the encouragement possible," Dr. De Forest said.

Similar views were expressed by C. Francis Jenkins, Washington inventor, who urged that radiovision should be allowed on broadcasting wavelengths.

He stated that his own experience, in broadcasting radio movies from his Washington station, had shown that entertainment comparable with that provided by the animated cartoons of the motion picture theaters could be transmitted by radio. Further, he stated, it could be kept within the ten kilocycle width of band allotted for ordinary broadcasting stations. The importance of broadcasting on a frequency between 1500 and 550 kilocycles, that of the broadcast stations, came from the fact that millions of people are equipped with radio sets capable of tuning in these waves, and would have to buy a minimum of new equipment. Only by learning of the actual experience of the public in receiving such programs can the greatest progress be made, he said.

A diametrically opposite view was expressed to the Commission by Julius Weinberger, engineer of the Radio Corporation. He stated that successful commercial television involved the transmission of distinct images of at least two human figures, and that a crude reproduction of a single face did not come within the qualification. This requires a band of 100 kilocycles, at least, he continues, and should not be placed in the broadcast band, but in the high-frequency, or short wave, band.

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## Cleopatra Had Eyebrow Pencil

*Archaeology—Pharmacology*

The very paints with which Cleopatra goo-gooed her eyes and painted her face to make an easy mark of Antony, some three thousand years ago, are yet used in the preparation of eyebrow pencils and face pastes, Prof. Ivor Griffith told an audience at the Philadelphia College of Pharmacy and Science. Al-Kohl, the Arabian name for this three-thousand-year-old product, is the forerunner, in name at least, of the Volsteadian unutterable alcohol.

"Various reasons have been given by writers and historians for the fall of Rome," said Professor Griffith, "but no one has heretofore suggested that the perfumed baths of her later luxurious days and the enervating attentions paid to beautifying the outer instead of the inner man sapped the virility and vitality of the once business-like soldier of Rome whose courage extended the Empire of that great city to every corner of the earth."

However, the current cosmetic craze

of America, which cost \$177,000,000 in one year, is not likely to result in the downfall of this country, Prof. Griffith explained.

"For here is a real democracy of paint and cream and powder. Rich and poor alike enjoy the blessings and suffer the pangs of external decoration. Only the rich in Rome and a favored few in France could afford the joy of perfumed bath and spiced ointments, but in America these commodities, good and bad, are within the reach of every current Cleopatra."

The histories of cosmetics are entertaining, but the hysterics are much more so, Prof. Griffith pointed out, referring to the hundreds of dangerous and deceptive products purchased indiscriminately by persons ignorant of their chemical composition. Responsible manufacturers do, however, produce worthy and harmless adorning cosmetics, he stated.

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