uneasiness, anxiety, difficulty in concentration, insomnia, irritability, headache, gastrointestinal disturbances and a generally increased awareness of and a pre-occupation with bodily processes.

Flying, even high altitude flying, is not enough by itself to cause the chronic exhaustion. Long hours of hard work and the emotional strain of flying a new and at times hazardous airplane are the factors that bring on the exhaustion in the test pilot.

"Several things can be done to prevent this chronic exhaustion state," the doctors report. "Good physical condition should be assured by frequent medical examinations and corrections of defects. At least eight hours of sleep a night should be obtained. A pilot should keep himself in good physical condition by regular exercise.

"More than two or three high alti-

tude test flights in succession should be avoided.

"The importance of hobbies in securing mental relaxation should be emphasized, and a pilot should be encouraged to cultivate some. The most satisfactory hobbies are those which are not related to one's everyday occupation and which involve making something with the hands or forming collections, so that a person can enjoy the feeling that he has created something worth having. The indiscriminate use of sedative agents by pilots in an effort to dissipate nervous tension cannot be condemned too strongly. A sedative should be taken only when it is prescribed by a physician, and while under its influence a pilot should not fly. The continued use of stimulants, such as alcohol or amphetamine sulfate, is dangerous, as either one may lead to errors of judgment."

Science News Letter, December 26, 1942

ENGINEERING

Good Camouflage or None

➤ CAMOUFLAGE has been developed into a complex art and science to conceal vital points from enemy detection, Greville Rickard, camouflage specialist of the Office of Civilian Defense, reported to the American Institute of Chemical Engineers meeting in Cincinnati.

It is much more than painting a weird design on a battleship or putting some

branches over a gun emplacement. Better no camouflage, or merely a tone-down than too much badly done, he warned. A design detected as probably camouflage makes that spot an immediate target of suspicion.

Electric light barrages, smoke, blackouts, and structural effects are some of the methods revealed by Mr. Rickard as

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Saturday, January 2, 1:30 p.m., EWT

"Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Louis I. Dublin, third vice-president and statistician of the Metropolitan Life Insurance Company, will forecast "What's Ahead in Health." Monday, January 4, 9:15 a.m., EWT; 2:30 p.m., CWT; 9:30 a.m., MWT; and 1:30 p.m., PWT

Science at Work, School of the Air of the Americas over the Columbia Broadcasting System, presented in cooperation with the National Education Association, Science Service and Science Clubs of America.

"Worlds Begin" will be the subject of the program.

under study by U. S. camouflage specialists.

"Blackout in practice has come to be a field apart, yet it is definitely a form of camouflage," Mr. Rickard said. "Masses, shapes, planting materials, straightness of line, continuity of line, regularity, symmetry, repetition, shadows, reflections, contrasts of water and land, all have degrees of visibility on all but the blackest of nights. We are assured from England that whatever serves successfully as camouflage by day, outside of color, serves well also for camouflage by moonlight. Furthermore, it is during the hours between twilight and dawn that smoke as a screen has been found of especial value in many areas."

Science News Letter, December 26, 1942

One-fifth of the 3,072 counties in the United States lack *hospital* facilities.

Chicory, which some people like to mix with coffee, can be grown wherever sugar beets are grown.

Lice, according to new experiments, prefer living on animals suffering from a Vitamin B₂ deficiency; rats fed with riboflavin had no more attraction for them.

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