



HIGH-SPEED AERIAL CAMERA—To enable photo pilots to sweep in, take their pictures and fly out more quickly than at present, a new high-speed aerial camera, the Cax-12, has been developed by the Fairchild Camera and Instrument Company for the Navy. Here, Comdr. Murlin W. Alley, director of the photographic division of the Navy's Bureau of Aeronautics, holds the magazine, which uses 70 mm film, while Fred P. Wilcox, Fairchild's vice-president, holds the lens cone and points to the unique speed shutter which is his invention. The camera controls are on the table.

CHEMISTRY

Mixtures for Fabrics

► IN THE future, our suits and dresses, our stockings and underwear will be made out of complicated mixtures of natural and synthetic fibers.

This is the opinion of Dr. Milton Harris, one of the nation's leading fabrics researchers, given in Chicago, when he was there to address a symposium on "Looking Ahead With the Chemical Industry," a feature of the Seventh National Chemical Exposition.

The next few years will see a slowing down in the introduction by the chemical industry of new synthetic fabrics, Dr. Harris said. Rather, the industry will explore new uses for the fabrics already invented and experiment with "alloys" of several kinds of synthetic and natural fibers.

Dr. Harris himself was wearing a pair of socks made of an experimental blend of cashmere and nylon. They have all the softness of cashmere, he said, yet they will wear ten times longer than pure cashmere socks. For years, he pointed out, the wool and cotton industries thought addition of other fibers "diluted" their product. Actually, they added to the value of the natural fibers. Up to now, blending of fibers has

been merely an art, Dr. Harris said. Now it is getting to be a science with controlled experiments being conducted.

Literally thousands of new fabrics are sitting on the shelves of the chemists, Dr. Harris said, most of them only slightly different from those already commercially available. One large chemical company alone has thought up in the past two years about 600 types and modifications of fabrics.

Asked about the theoretical chances of producing a fabric that would never wear out, never stain, never wrinkle, such as the fictitious fabric of the "white suit" of a recent movie, Dr. Harris said such a "fabric" would not be a fabric at all, but some kind of an inert material. These are the qualities of something like a diamond, he said, not a cloth.

Yet, if women would consent to wear nylon stockings about four times thicker than the sheer stockings presently in style, he declared, they would almost never wear out. Of course, he pointed out, women will not wear such coarse stockings.

The exposition was held in connection with the Centennial of Engineering.

Science News Letter, September 27, 1952

GEOLOGY

Land Once Bridged South America and Africa

► A BROAD land bridge probably once joined South Africa and South America, Dr. Kenneth Caster of the University of Cincinnati told the International Geologic Congress meeting in Algiers, North Africa.

That the two continents have always been separate, though connected, contradicts the widely-held theory of "continental drift," which holds that the two land masses were once only one, then slowly drifted apart.

Dr. Caster reached the separate-but-once-joined conclusion on the basis of the "astounding" similarity in certain geological features that require connecting their histories which are "very similar, if not identical." At their nearest point, the two continents are now about 1,800 miles apart.

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CHEMISTRY

Plants Tear Down Sugar In Storing Sun's Energy

► HOW PLANTS build up complicated sugars only to tear them down again in the process of photosynthesis was told by Dr. Melvin Calvin of the University of California to the American Chemical Society meeting in Atlantic City.

Phosphorus provides the clue to the way plants build water, oxygen and carbon dioxide into sugar and starch. This is not a straightforward chemical synthesis, but is accomplished by a round-about process which Dr. Calvin and his associates are following by use of the radioactive forms of these key elements.

Sugar containing phosphorus and seven carbon atoms, instead of the six in ordinary plant sugars, is built up and broken down, these researches show, in a cycle that constantly renews a supply of chemical groups ready to combine with carbon dioxide from the air with the aid of energy drawn from sunlight.

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OCEANOGRAPHY

2-Mile Undersea Peak Discovered in Pacific

► AN UNDERWATER mountain peak rising more than two miles (12,192 feet) from the ocean floor was discovered during the 14,580-mile Pacific cruise of the research vessel, Horizon, recently returned to La Jolla, Calif. The new seamount is 1,200 miles west of Acapulco, Mexico.

Fishes that live a quarter mile deep below the sea's surface, below where sunlight reaches, were dredged up. These included extraordinary numbers of young lantern fish. Another discovery was floating pieces of pebble-sized volcanic pumice inhabited by minute marine creatures. (See p. 195.)

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