

## PSYCHOLOGY

**Relying on Snap Judgments Leads to Depressions**

**D**ON'T trust too much to your first impressions!

This is the warning that can be taken from a report to the American Association for the Advancement of Science by Dr. Henry F. Dickenson, Hiwassee College, Madisonville, Tenn.

"First impression answers are too often laden with the dangers of superficial knowledge, prejudices, biases, misinformations, misconceptions, propaganda, and even hearsay," Dr. Dickenson said.

"Advertising agencies know and utilize well these human weaknesses. Comparatively few advertisements would stand up under the discriminating analysis of the intelligent consumer. Contemporary society suffers greatly at the hands of an unthinking group which holds the balance of power.

"Unanalytical thinking or snap judgments are largely responsible for "Bonanza Oil Booms," "Wall Street Crashes," "Florida Booms," lynchings, depressions, and the like, he said.

Intelligence tests given to 1450 college students revealed that although few took second thought and made corrections in their answers, still these corrections boosted their scores to an amount totaling for the group 625 intelligence quotient points, which is equivalent to the intelligence possessed by four geniuses.

*Science News Letter, January 12, 1935*

## METEOROLOGY

**Rare Blue Moon Seen In California**

**A** BLUE moon, appearing through a bank of rose-colored clouds, was observed at Santa Barbara, Calif., by Perez Simmons, entomologist, of Fresno.

Scientific basis for the traditional rareness of blue moons appears in Mr. Simmons' report of his observation (*Science*, Dec. 28).

"A search for records of this phenomenon indicates that it is rare and worth recording," he states.

A blue moon was seen on Dec. 10, 1883, and another was seen in Ireland in 1927 during a total eclipse of the sun. Other moons of unusual colors, such as blue and green, have been seen after certain violent volcanic explosions and also occasionally through smoke-laden fogs. Mr. Simmons saw this lat-

est blue moon on Sept. 15. Four witnesses whom he called agreed that it really was blue.

Mr. Simmons describes his observation as follows:

"The stage of the moon was about the end of the first quarter. At 6:15 p. m. about eight minutes after sunset, the moon was plainly visible through a bank of thin rose-colored clouds, apparently cirro-cumulus. Around the cloud bank the brightly-illuminated western sky was a brilliant deep blue.

"Two weeks later an attempt was made to remember the colors and to find their designations in Ridgway. The results of this belated comparison are that the sky was spectrum blue; the cloud bank, begonia rose; the moon, sky blue."

Blue and green suns have also been observed, Mr. Simmons points out. No satisfactory explanation of the colors has been advanced.

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## OCEANOGRAPHY

**Seismic Soundings Reveal Antarctic Ice Thickness**

**T**HICKNESS of the Antarctic ice crust that blankets the world's southernmost land is being successfully detected by seismic soundings says a radio report from Little America from the Byrd Antarctic Expedition to the National Research Council.

Thomas C. Poulter, professor of physics at Iowa Wesleyan College and senior scientist of the expedition, reports good results with the scientific work in the Antarctic, and says "we shall soon be starting back in possession of most of the data we set out to get."

Unforeseen difficulties caused a few scientific projects to be abandoned, says the dispatch, but others have assumed much greater proportions than was anticipated.

Regarding thickness of the ice, a point of great scientific interest, Prof. Poulter radios:

"I am pleased to report that the seismic soundings are coming along nicely, and that we have to date about three hundred fifty soundings distributed over eighty stations. The method is proving very satisfactory and giving the ice thickness, whether it is floated or grounded, and if floating, the thickness of the water layer, as well as something of the stratification of the underlying rock."

*Science News Letter, January 12, 1935*

**IN SCIEN**

## SEISMOLOGY

**Three Earthquakes Usher In the New Year**

**A**S THOUGH it were celebrating the beginning of the New Year, the earth's crust treated itself to three violent dances on the first three days of New Year's week.

Two of these, on Dec. 20 and 31, were located in lower California, the part of Mexico south of U. S. California. Sunday's quake was less severe and closer to the border, only about a hundred miles southward, while the New Year's Eve quake was about 150 miles southward from the border and was quite severe.

On New Year's Day there was a submarine quake centered in the Pacific in an easterly direction from the Fiji Islands and about 270 miles southwest of Apia, Samoa. The epicenter was determined by the U. S. Coast and Geodetic Survey based on seismological reports to Science Service from St. Louis University and Manila as 17 degrees south latitude and 174 degrees west longitude. The time was 8:20.9 a. m., E.S.T. Jan. 1.

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## MEDICINE

**Virus of Typhus Fever Grows in Rat Flea's Body**

**R**AT fleas spread typhus fever in America, but they are not mere mechanical carriers. The virus of the disease multiplies in the body of the flea, Dr. R. E. Dyer, of the U. S. Public Health Service's National Institute of Health, reported to the meeting of the American Association for the Advancement of Science.

The investigation which disclosed how typhus fever is spread in this country has been carried on over a period of years by the federal health service. During the course of the investigations, which Dr. Dyer described, a number of the men working on the problem contracted the disease.

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# CE FIELDS

## PLANT PATHOLOGY

### Man Gains in Fight On Wheat Rust

**M**AN, aided by the elements, seems to be gaining on at least one front of his wide war against innumerable plant disease fungi. Black stem rust of wheat and other grains, one of the costliest of all plant diseases in terms of destruction wrought to growing food, has been decreasing in severity during the past 15 years, Drs. M. N. Levine and E. C. Stakman, of the U. S. Department of Agriculture, told the American Phytopathological Society.

Black stem rust is a fungus that thrives best in at least moderately moist weather, so that the past several years of drought which the grain belt has experienced may have had something to do with the improved situation. However, Dr. Levine pointed out, the severity of the disease has been less even in seasons favorable for its spread. It would seem only fair, therefore, to credit some share in the improvement to man's own efforts, first in eradicating some 20 million barberry bushes, carriers of the disease, and second in breeding new, rust-resistant strains of wheat, oats and other grains.

*Science News Letter, January 12, 1935*

## PSYCHOLOGY

### Just As Many "Geniuses" Among Girls As Boys

**T**HE popular belief that men are mentally superior to women, and that the number of "geniuses" or the extremely intelligent is greater among boys than among girls, was dispelled by a report by Prof. Paul A. Witty director of the psycho-educational clinic at Northwestern University, speaking before the American Association for the Advancement of Science.

The popular misconception has been given support, Prof. Witty pointed out, by observation of the outstanding proportional achievement of men in music, art, science, and literature, and also by studies that have been previously made of small numbers of gifted children.

It fails, however, when large numbers of boys and girls are studied with the unprejudiced eye of scientific mental measurement.

Altogether, 14,149 boys and 13,493 girls were included in Prof. Witty's study. These were all students in secondary schools.

The ratio of gifted boys to gifted girls is not 2 to 1, as has been previously claimed, but is almost exactly 1 to 1, Prof. Witty found.

The average intelligence for each of the four classes in the secondary school, is practically the same, and is just a little above what is considered the average for the entire population. Evidently the less intelligent as well as the gifted survive equally well in the educational race through the high school.

From all these thousands of boys and girls, however, only 47 boys and 48 girls were found to have intelligence quotients (mental age compared with chronological age) of 140 and above, thus falling in the group of "geniuses." A much larger number,—250 boys and 244 girls—have IQ's between 130 and 139.

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## ANTHROPOLOGY

### Will Search for Traces Of Ancient Man in Oregon

**T**HOROUGH search for traces of prehistoric man is to be made near Benham Falls, in the Deschutes section of Oregon, says Dr. L. S. Cressman, professor of anthropology at the University of Oregon.

A grant of funds for this purpose has been made by the Carnegie Corporation to the University, and work will begin as soon as snow has melted from the ground, in the spring.

Clues indicating that some of America's earliest settlers may have passed that way were discovered recently, when workmen digging at an irrigation dam project found three objects, apparently tools, buried in a hard gravel layer. The gravel lay several feet below the volcanic topsoil which has covered the region for centuries.

Dr. Cressman and other scientists from the university came to investigate the site and advocated further exploration. Age of the ancient tools, according to preliminary calculations by Dr. Warren D. Smith, geologist, may be 10,000 years.

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## PSYCHOLOGY

### Cure Your Scares By Repeating Experience

**A** SCIENTIFIC basis for the aviator's tradition that he must fly immediately after "cracking up" if he is to keep his nerve has been found in experiments conducted at the Harvard Psychological laboratories.

The best way to conquer fear, according to Dr. Carl E. Smith, is for the person frightened to place himself immediately under the same conditions which produced the original scare and see for himself that nothing happens.

He stresses the need for undergoing these same conditions as soon as possible, for a delay of even 24 hours tends to fix the fright permanently, and gives increased fright when the conditions are encountered again. Prompt repetition of the original conditions, however, causes considerably less anxiety and the fear can usually be eradicated within a short time.

In this research on the mental reactions accompanying fear, Dr. Smith found that the electrical resistance of the skin of a subject was noticeably changed when the subject was afraid. This discovery correlates with the principle which resulted in the construction of one type of the so-called "lie-detector."

Attaching his subjects to a delicate instrument to measure this change in the resistance of the skin, Dr. Smith prepared to frighten them under a definite set of conditions and then re-establish these conditions to measure the fear.

A list of words was read and the subject given a small, but unpleasant electrical shock at the word "cat." Half of the subjects were dismissed for 24 hours, while the other half were forced at once to go through the experiment a second time.

In this repetition the same list of words was read, but no shock given, although all other conditions were maintained the same. Those taking the tests immediately showed mild anxiety at the mention of the key-word "cat," and although a few showed fear, the phobia passed quickly in most cases.

Those returning 24 hours later exhibited considerable fear throughout the experiment, and although reassured that the shock would not be repeated, the fear remained strongly fixed.

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