In Science Fields

ASTROPHYSICS

Oxygen Discovered In Sun's Chromosphere

OXYGEN in the atomic state has been discovered for the first time in the chromosphere of the sun, by Harold D. Babcock and Horace W. Babcock of the Mt. Wilson Observatory. Their work was reported before the meeting of the Astronomical Society of the Pacific.

The presence of oxygen in this portion of the sun was detected by means of a spectrograph, the instrument commonly used for studying light after it has been split into its various component colors, which disclose the chemical elements in the light-source by characteristic bright and dark lines.

The oxygen line was found in the green part of the spectrum.

Science News Letter, June 30, 1934

PSYCHOLOGY

Strange Visual Defect Described to Scientists

A RARE and peculiar visual defect, causing its victim to see objects before him all blurred together into one was described to the meeting of the American Association for the Advancement of Science. The abnormality was observed in a college student by Dr. D. M. Purdy, of the University of Kansas, who said that the young man had partially overcome his defect by training in a more analytical attitude.

The student had no defect in his eyes that would account for his peculiar vision; it was undoubtedly an abnormality of brain function rather than eye function, Dr. Purdy said. When he looked at any sort of pattern fixedly, it would rapidly blur away; objects would be swallowed up by the background.

Yet the young man, called X by Dr. Purdy, was finally able to control this difficulty merely by learning to isolate mentally the details of a pattern from one another.

The odd defect is not so much a positive disability as it is the absence of the normal ability to be analytical. Modern psychologists have emphasized the fact that the normal person's field of vision is not a mosaic of separate bits of color, but larger coherent wholes. You are not aware of all the millions of tiny specks of black, white, brown, green, and so on, that appears before you; rather you see trees, chairs, people. Even when looking at the stars, most people do not see them individually but tend to group them into constellations or patterns.

Mr. X has this tendency to an abnormal degree.

Science News Letter, June 30, 1934

MEDICINE

Vitamin Lack May be Cause Of Rheumatic Diseases

ANOTHER disease has been traced to lack of vitamin C, deficiency of which is already known to produce scurvy. Dr. James F. Rinehart of the University of California Medical School, using his own and other experiments, reported to the American Association for the Advancement of Science that vitamin C deficiency may be an important factor in the cause of rheumatic fever and rheumatoid arthritis.

These are illnesses that usually attack undernourished children just when they are growing fastest. Their joints become acutely painful, swollen and reddened, and frequently heart injuries are produced which handicap the youngsters for the rest of their lives. Rheumatic fever usually comes in the spring and attacks the poor children in cities.

If the proper food containing vitamin C is not eaten, the body seems to be peculiarly susceptible to infection by the hemolytic streptococcus germ, and the combined result is disease. Experiments upon animals uphold this idea and convince Dr. Rinehart that the germ infection is not the complete cause.

The next step expected is the application of the discovery to the actual prevention and treatment of human cases.

Science News Letter, June 30, 1934

GENERAL SCIENCE

Scientific Union Support Continued

BOTH House and Senate have passed a bill authorizing the payment of the annual share of the United States in the International Council of Scientific Unions and associated unions.

Science News Letter, June 30, 1934