PSYCHOLOGY

Not Seeing Plays Tricks

➤ THE STRANGE pulsating world that awaited three scientists after they had spent six days and nights shut away from all perception of sights, sounds and feelings was described to the meeting of the Eastern Psychological Association in Philadelphia.

The six days were spent in bed in a lighted, semi-soundproof cubicle. Sounds were additionally muffled by a U-shaped foam rubber pillow and masked by the monotonous hum of the air conditioner. A transparent plastic mask allowed the men to see light but prevented them from making out the forms of any objects.

On coming out of the isolation, they were staggered by an unstable world. Walls appeared to be moving in and out and objects seemed to be changing both in size and shape. If they looked fixedly at any object for any length of time it appeared to expand and contract.

Horizontal lines seemed to curve down-

ward at the ends. And when a straight line was spun around through a complete circle, the ends seemed to lag behind so that the line looked S-shaped.

When they moved head or eyes, things they were looking at seemed to move. When they stepped toward an object or withdrew, the object seemed to go to and fro.

Colors looked much brighter than they had before the isolation.

Psychologists B. K. Doane, W. Heron and T. H. Scott of McGill University, Montreal, Canada, voluntarily served as the human guinea pigs in this unusual experiment.

During the six days that they were shut away from sights, sounds and feelings, all the investigators reported that they had vivid hullucinations.

The strange movements of everything they saw on emerging disappeared in a short time although some distortions persisted for over 24 hours.

Science News Letter, April 23, 1955

CHEMISTRY

Molybdenum Still Mystery

➤ A VERSATILE metal, still practically unknown although discovered more than 150 years ago, was described as a puzzle to chemists at the American Chemical Society meeting in Cincinnati. Six series of compounds of this unusual element are known, besides other, less orthodox kinds of associations with other elements

Molybdenum has only recently been recognized as necessary in soil for proper plant growth, Dr. E. R. Purvis of Rutgers University, New Brunswick, N. J., told the meeting. Symptoms of malformed and spotted leaves, long ago believed due to some plant disease, have now been proved to be caused by lack of molybdenum in the This element apparently helps the plant feed on nitrate compounds in the soil.

The steel industry was the chief user of molybdenum until recently, since a little of this element gives special qualities to tool steels. Corrosion-resistant properties of these special steels were described by Dr. J. Z. Briggs of Climax Molybdenum Co., New York City, while use of molybdenum coatings to protect ordinary iron articles was explained by Dr. Donald Price, also of New York.

Use of molybdenum compounds as pigments in paint, combined with both organic and inorganic chemicals, was described by two chemists of the pigment color division of the Imperial Paper and Color Corp., Glens Falls, N. Y. Manufacture of these pigments draws on new understanding of the chemistry of this unusual element.

Describing the complexities of molybdenum chemistry, Dr. D. H. Killefer, New York chemist, told the meeting that it was impossible for the eminent chemists who discovered and did the early work on molybdenum to resolve the chemical problems of the strange element, and that only now by the most modern methods of physical chemistry has a beginning been made on solving its puzzles.

Science News Letter, April 23, 1955

PSYCHOLOGY

Men Who Want to Be **Women Fear All Sex**

➤ MEN WHO want to be women and beg doctors for mutilating operations, really do not know what women are like. They have a horror of the nude female body and have avoided looking at it even when married.

These are among findings reported by Drs. Frederic G. Worden and James T. Marsh of the University of California School of Medicine, Los Angeles, in the Journal American Medical Association (April 9).

We have not yet found one subject who has a realistic idea of what a woman is like," the doctors state. "They all show an extremely shallow, immature and grossly distorted concept of what a woman is like socially, sexually, anatomically and emotionally."

The men these doctors examined have intense conflicts about sexual matters and are afraid of their own sexual impulses. They seem really to want operations with the idea that they will then become sexless.

One said he would like to be without sex but regarded himself as a woman.

The urge to be women and to wear women's clothes seems to result from the "desperate hunger" these men have for attention, recognition and acceptance and to a marked feeling of being rejected and ignored. In some of the tests they tell of wanting to have "beautiful evening gowns and dresses and being able to go to parties" and of having people notice them.

The men's backgrounds were extremely varied. Some had wealthy parents, some very poor ones. Some had brothers and sisters, others were only children. All had distorted memories of their childhood, highlighting those things that supported their ideas of having been female since birth.

Science News Letter, April 23, 1955

SCIENCE NEWS LETTER

NO. 17 VOL. 67 APRIL 23, 1955

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., NOrth 7-2255. Edited by WATSON DAVIS.
Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1955, by Science Service, Inc. Republication of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. c∰∰ 1

Member Audit Bureau of Circulation. Advertis-ing Representatives: Howland and Howland, Inc., 1 E. 54th St., New York 22, Eldorado 5-5666, and 435 N. Michigan Ave., Chicago 11, SUperior 7-6048.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees — Nominated by the American Association for the Advancement of Science: Kirtley F. Mather, Harvard University; Paul B. Sears, Yale University; Karl Lark-Horovitz, Purdue University. Nominated by the National Academy of Sciences: Edward U. Condon, Berkeley, Calif., Harlow Shapley, Harvard College Observatory; George W. Corner, Carnegie Institution of Washington. Nominated by the National Research Council: Ross G. Harrison, Yale University; Leonard Carmichael, Smithsonian Institution; Jerome Hunsaker, Massachusetts Institute of Technology. Nominated by the Journalistic Profession: Neil H. Swanson, Ruxton, Md.; O. W. Riegel, Washingtonton and Lee University; Michael A. Gorman, Flint Journal. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; John T. O'Rourke, Washington Daily News; Charles E. Scripps, Cincinnati, Ohio.

Officers — President: Leonard Carmichael; Vice President and Chairman of Executive Committee: Charles E. Scripps; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff — Director: Watson Davis. Writers: Jane Stafford Mariorie Van de Watson Davis.

tary: Watson Davis.

Staff — Director: Watson Davis. Writers: Jane Stafford, Marjorie Van de Water, Ann Ewing, Howard Simons, Edward Housman. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. Interlingua Division in New York: Alexander Gode, Hugh E. Blair, 80 E. 11th St., GRamercy 3-5410.