

psychology, is only a small and unimportant part of German psychological warfare, this survey indicates.

The psychology of combat has received the attention of German psychologists. They discuss fatigue in combat, panic, and anxiety, and how to control these conditions.

Problems of leadership and the psychology of military life also have sections of this survey devoted to them.

An English translation of all 600 articles and books has been prepared. A

brief biography of each author and his present status in Germany is included if available. And abstracts of 200 books and articles of greatest significance for American problems have been prepared.

Cooperating with Mr. Farago in the preparation of this survey are Prof. Gordon W. Allport, Prof. E. G. Boring, Dr. S. S. Stevens, and Dr. J. G. Beebe-Center, all of Harvard University; Prof. Kimball Young of Queens College and Dr. Floyd Ruch of the University of Southern California.

Science News Letter, June 7, 1941

dents given the vitamin A treatment ranged from a slight red-green confusion to large error scores over a wide range of color when tested by a revised form of the Nela test of color vision. Some made as many as 21 errors out of a possible 24.

Science News Letter, June 7, 1941

WILDLIFE

Beavers Make Reservoirs For Livestock in West

BEAVERS building dams in upper watersheds of a soil conservation district in Utah are welcomed by stockmen, because they provide places where cattle can be watered, without human labor or expense. The same beavers were berated as pests a few months ago, when they were living farther down, in irrigated country, and playing hob with the irrigation canals. Wildlife management workers trapped them out, moved them to the uplands, and released them on streams where their labors would be beneficial instead of trouble-making.

Science News Letter, June 7, 1941

PSYCHOLOGY

Hint That Color Blindness Can Be Remedied By Vitamin A

Experiment With Eight Color-Blind Students Indicates Errors Can Be Reduced After Only 12-Day Treatment

FIRST hint of a possible "cure" or at least partial cure of color blindness, hereditary defect for which scientists have hitherto always believed nothing could be done, now comes from experiments with vitamin A treatment reported by Dr. Robert D. Loken, of the psychology department of the University of California at Los Angeles.

A group of eight color-blind college students made only half as many errors, on the average, in seeing colors after 12 days of vitamin A treatment as they did before treatment, Dr. Loken discovered.

"Before vitamin A dosage the total score for the eight subjects was 88, or an average of 11 errors," Dr. Loken reports. "After the dosage the score was 34 for the entire group, a reduction of six errors per person."

Vitamin A is the vitamin needed to prevent night blindness. This is apparently the first report of its use in treating color blindness. In the California experiments each student took 12 capsules containing 25,000 units of vitamin A, one capsule each day. This is more than four times the amount recommended as the daily requirement of an adequate diet.

Vitamin A cannot yet be considered a cure for color blindness. Dr. Loken pointed out that his is only a preliminary experiment and that many other factors must be investigated.

"There is no implication," he declared, "that all or any cases now unfit for industrial purposes because of color-vision deficiency might benefit sufficiently from

vitamin dosage to bring them up to the 'normal' level of color discrimination."

The color blindness of the college stu-



TALKING WITH LIGHT

Sidney Cooper, 17-year-old Stuyvesant High School student, talks into the microphone. His voice modulates light beam of flashlight held by Jordan Prince, 15, of College of City of New York. The photoelectric cell at right transforms beam into sound heard by Walter Kublin, 16, also student at City College. The three boys are members of the Experimental Electronics Society and are demonstrating their work at a joint meeting of the American Institute Science and Engineering Clubs and the New York Electrical Society.



GIRL SCIENTIST

Mary Briscoe, 15-year-old Chem Squad member from Girls' Commercial High School, Brooklyn, N. Y., demonstrates the use of sulfamic acid on cloth for fireproofing. She took part in demonstrations by boys and girls at a joint meeting of the American Institute Science and Engineering Clubs and New York Electrical Society on May 28.

ACRICULTURE

Enormous Surplus of Wheat Powerful Aid After Conflict

Unprecedented Accumulation of 400 Million Bushels
Will Be Augmented by About 850 Million This Year

MOUNTAINS of wheat, bushels in absolutely astronomic number, are heaped up in America's grain elevators and storage bins, as another huge new harvest awaits the reapers, with heads already well filled at the southwestern end of the Wheat Belt. This unprecedented accumulation of basic foodstuff is one of the country's severest economic problems, and in any but an abnormal time would be an unmitigated headache.

As it is, however, there are some redeeming features about this glut of grain, so huge that all the mouths in the country could not eat it up in less than three years, even if not another bushel were added. At least, that is how Vice President Wallace, who as Secre-

tary of Agriculture struggled for eight years with the problem, feels about it. He has this to say:

"In times like these, it gives us a comfortable feeling to know that the new wheat crop, plus the carry-over, will provide us with the largest supplies in history. While we also have a very large carry-over of corn, there is always a possibility that unusually dry weather in July and August may damage the growing crop, and in case of need surplus wheat can be substituted for corn in the animal diet. The proteins of the two grains supplement each other."

The potential economic headache in the wheat surplus lies in the fact that without Government support this enormous mass of grain would force prices

down to levels ruinous to farmers. The new bill just enacted by Congress and signed by the President, which supports the price by loans on wheat produced under AAA contract terms to the extent of 85% of "parity," is intended to keep the farmer's purchasing power abreast of the city man's.

Criticism has been leveled at this advance in the Government loan rate on wheat, and even some of the staunchest supporters of the AAA system have had twinges of doubt whether the increase should have been as great. Advocates of the new act, however, declare that the expected rise, from around \$1 to about \$1.14 a bushel, can legitimately be held responsible for a cost increase of less than a quarter of a cent per pound loaf of bread. If the price of bread goes up more than that, they claim, the rest of the boost must be looked for elsewhere—in the pay envelopes of labor, or in the profits of the processor, or in that vague category styled "general overhead."

However, regardless of controversy over the price of wheat, the quantities of wheat now in sight are simply overwhelming. The carry-over, as of July 1 of this year, is estimated at 400 million bushels—more than twice what it was three years ago. To this will be added the crop now nodding toward harvest, which is expected to roll up to as much as 850 million bushels. Thus, on July 1 there will be in this country about one and a quarter billion bushels of wheat.

Nor is that all. Canada has a much larger carry-over than we have; it amounts to 565 million bushels. Argentina has a 160 million bushel carry-over, and Australia 73 million bushels. Add in the American carry-over and you have a total of nearly one and one-fifth billion bushels of wheat now on hand in these four major exporting countries alone.

The current crop now growing in Canada, and next season's crops being seeded in Southern Hemisphere wheat-fields, are not figured in. Omitted also are the Old World wheat harvests, which because of war conditions are both unknown and uncertain quantities.

The very climate itself has conspired to increase the golden flood pouring through the grain chutes. Fall-sown wheat came through the winter in good shape, and despite drought in the East this spring has matured a good crop. All up and down the Plains region, where a few years ago drought and dust storms blasted the crop, there have been heavy snows followed by abundant rains, so that spring wheat in the Northwest and