

Activity of Psychologists

One of the Youngest of Sciences Is of Especial Aid to the Government

Psychology, one of the youngest of the sciences, but nevertheless one equipped with standardized methods of experimental procedure, is steadily answering the call to the colors. Eminent scientists from almost every field of knowledge have been summoned to give expert advice or to render continuous service as commissioned officers in the army. So heavy has been the levy that several of the Eastern universities have been compelled to cancel all their courses in psychology; other institutions are offering only a bare minimum of courses. The University of Illinois has been more fortunate in this respect. While several of its psychologists have been called away, the work of the department is pursuing a nearly normal course.

Capt. Madison Bentley of the department of psychology has for some time been president of the Cleveland aviation board. His work consists mainly in selecting aviators and examining them for color blindness, certain spatial perceptions, dizziness and general mental capacity. Prof. G. M. Whipple has also been asked to assist in formulating suitable mental tests for the selection of drafted men and for men in special lines of training.

In addition to the recognition of necessary abilities for the service, problems concerned with the localization of sounds in the air, discrimination of projectiles by sound, and the effects of high altitudes upon the memory are being worked out. Prof. Christian Ruckmick, also of the University of Illinois, is serving upon the committee for localization of sounds coming from any point in the air, under water or in the ground. Since few people have a sensitive ear to determine the position of an enemy gun by noting the sound of the projectile in its course, apparatus is being worked out for such detection.

Work in the cantonments consists in the apprehending of mental defectives and in noting special aptitudes of the men. In this way much waste of time and money for special training can be eliminated. Psychological problems of incapacity, shell-shock and re-education occupy the attention of another committee, and collaborating with them is a group of psychologists who are studying problems of vocational guidance and advice. Still another group has already done important work in determining and devising means to arouse emotions which result in maximum service from the men.

Saving Foodstuffs

By MRS. LUTHER BURBANK
Wife of Noted Plant Scientist

Did it ever occur to you that eating, sleeping and the large consumption of certain foods is more of a habit than a necessity to sustain life? The man or woman who has been used each morning to his or her ham or bacon, with eggs, will undoubtedly consider it practical starvation if asked to forego these habits, yet there are today millions of people on the earth who eat less in two days than you and I consume in one meal, but who are among the healthiest on earth.



Mrs. Burbank.

Study history, look into the life and habits of the ancient Greeks, and you will find that the nations which used the plainest, simplest and most mungy fare were among the strongest, while those who descended to table habits bordering upon gluttony rapidly retrograded. Why? Because the mind of the glutton is a dead mind. He cannot think, his whole body is sluggish, the organs are so clogged that they are unable to function properly and the result is physical and mental decay.

Eating is a matter of habit. We in America, the great land of plenty, have been accustomed to eat what we wished. For generations it has been the same until, from simplicity of eating, we have bordered closely onto excess. This is not true of everyone. America is not a nation of gluttons, but I do maintain that, on an average, we Americans consume perhaps twice as much as is necessary to sustain life, and that this very overconsumption has been the cause of more illness, more doctors' bills and more suffering than any other one cause.

In all life we are creatures of heredity. When Mr. Burbank wishes to produce a new flower he looks back into the past ages and finds all about the ancestors of that flower. He discovers that a flower which had once been fairly hardy and able to withstand rigorous winters, has become a delicate plant which must be tenderly nourished, or it will die. This condition is brought about through centuries of pampering. It has been artificially cared for, well watered, and thoroughly fertilized with the result that nature has not been called upon to give it protection.

And so it is with us. We have been reared in a land of plenty; a land of vast crops and rich food and, we have become soft. The savage who depends on his acute sense of smell, keen vision, and fleetness of foot for his daily food is a wonderful animal. Nature provides him with all these essentials to sustain life. Take that same savage from his wild en-

vironments and daily struggle with life, place him in surroundings of plenty, and in two or three generations his descendants will have lost all of those wondrous senses their ancestor had developed. The American Indian is the most striking example of this we have today.

With these few facts before us let us now look into those little practices of saving which we all believe in trying to put into effect, but which many of us deem impossible, because habit has made us believe that we cannot live without certain things to eat and a certain quantity of each.

Kite Balloons Form Very Important Part of Naval and Military War Forces

"The observation balloon has been one of the important discoveries of the year," observes a writer in Aviation, who continues:

"Its value is indicated by the rapid growth of both personnel and craft. It is found today on every front, and almost every mile of that front, for the excellent reason that it has proved indispensable to the modern army in the field.

"The observation kite balloon, as at present used, was the invention of Captain von Sigsfeld and Major von Parseval of the German army, and the craft was constructed by the Parseval Airship company. The British army got its first idea of the kite balloon from the Belgians. Early in 1915 Squadron (now Wing) Commander Maitland was so much impressed by the excellent service it was giving the Belgian artillery that he laid a proposal for similar equipment before the board of admiralty. This was adopted, orders for the construction of the craft were placed and the British K-B made its first appearance in the war area in the early spring of 1915.

"As then constructed by the British, the balloon was found to be considerably more reliable than the spherical, being steadier and more airworthy, and therefore more accurate in observation.

"The great success of the first craft led to a demand for more, and the British naval authorities made experiments with them on ships at sea. More and more urgent grew the demand from both branches of the service, until today kite balloons form an important part of both naval and military forces.

"The work of these craft is too widely recognized to need repetition, further than to mention the danger to which a captive balloon is exposed from hostile airplanes. There is often not time enough to draw the balloon to the ground when an enemy machine appears, and the only protection is a friendly airplane, or the ever-ready parachute."

Cheap Fuel.

Today the question of fuel is a burning one, metaphorically as well as literally. In a series of very interesting tests recently conducted at the Ohio State university, natural gas was found to be the cheapest combustible. There are many places, however, where it is not available. A breakfast which cost one-fourth of a cent to cook with natural gas, costs nearly three and one-half cents to cook with soft coal, two and one-half cents with coal oil, over three cents with gasoline, and three cents exactly with electricity.—Popular Science Monthly.

STATE NEWS IN BRIEF.

Captain John Peterson, dean of the Columbia River pilots, died at Astoria as the result of a stroke of paralysis. He was born in Sweden in 1856, and was 62 years of age.

German has been banished from the La Grande high school curriculum by the school board, which, at the same session, increased all salaries at least 10 per cent to all teachers.

Major Hitchcock and Captain Brown, of the spruce division, aviation section of the United States Signal Corps, spent several days this week inspecting the various spruce camps near Siletz, Toledo and Waldport.

Warren's home guard is fully organized and drilling weekly. The men will be sworn in as deputy sheriffs next week by Sheriff Stanwood. Equipment is expected shortly and the company is now composed of 65 men.

Major Deich, in command of the state police, has asked Captain O. J. Hull, of Salem, to send 15 or 20 men from Salem as soon as possible to relieve men on guard duty in Portland. Enlistments are now open for the new military organization.

It is probable that at least a part of the Eastern Oregon company of the Oregon State Police will be organized in Pendleton. Commandant Jacob Marin, of the United Spanish War Veterans, is circulating the application blanks among the members of Malabon camp.

Conditions were never before more favorable for the sheep industry in Lake county than at present. Owing to the exceedingly mild winter the sheep are in as good condition as when taken from the summer range last fall, and as a consequence the quality of the wool will be excellent.

William W. Hall, formerly pitcher of the Hood River League baseball team and later a star of other Mid-Columbia teams, recently enlisted in a squadron of the Aviation Corps. In a letter to his father, William Hall, he announces that he is training as a flyer at a school at Hempstead, N. Y.

Seventy-two to four was the final count in the election affecting water users at Klamath Falls last Saturday for the adoption of a contract from the government, by which a district irrigation plan of organization will be followed instead of a water-users' association, as has been previously maintained.

It is the plan of the railroad administration to entrust, as far as possible, to the Interstate Commerce commission and state commissions duties in connection with the control of railroads, according to advices received by the Public Service commission from John Barton Payne, general counsel for the Federal board. He asks the commission to advise him as to all matters pending.

The Polk county grand jury is in session this week looking into alleged pro-German statements of number of citizens. Reports of seditious talk have been coming in fast to the county officials during the past few months and the grand jury was called for the purpose of probing these charges. Several citizens have lately been arrested and taken to Portland, from where they were sent to internment camps.

"The farmers are more scared than hurt over the possibility of a labor shortage at the time of harvesting crops," J. O. Holt, manager of the Eugene Fruit Growers' association, said Wednesday. Mr. Holt added that there is an unusually heavy demand from the East for canned string beans this year, but that he is having much difficulty in inducing farmers to plant these beans for fear that pickers will not be available.

Ed Reed was instantly killed at Reedsport while unloading a car of piling. Having some difficulty in getting the piling started, Reed was obliged to get in the track of piling as they rolled to the water. Before he could clear one of the timbers struck him, pinning him down, and three others passed over him, crushing his body and mashing his head to a jelly.

A home guard company of 111 men was organized at Dallas Friday evening. Wayne Greenwood was elected captain, Roy Firseth first lieutenant, and J. R. Sibey second lieutenant. All officers will be sworn in as deputies to Sheriff Orr and the company will be called upon to perform general police duty as needed. During the summer months the company will aid in fire patrol work.

To C. T. Darley, an engineer and prominent resident of the Bonanza district, has been awarded the contract for construction of the canals and ditches of the 900-acre Yonka Valley unit of the new irrigation system which is being launched this year at Bonanza. The water will be obtained by pumping from Lost River. The pumps have been ordered and will be installed before the first of next month so that everything will be in readiness for watering this year's crops.

5500 ACRES BOUGHT

Rich Reclaimed Tract Along Columbia River Brings \$300,000—Oats and Pasturage for First Year.

Fifty-five hundred acres of choice bottom land reclaimed from the Columbia river, near Clatskanie, in Columbia county, Or., has been purchased from the Columbia Agricultural company by a syndicate composed of Lee Arnett, Portland banker; Max H. Houser, grain exporter and Federal grain administrator for the Northwest; Ralph E. Williams, of Portland and Dallas, and Donald Bell, a New York manufacturer.

The price paid for the property by the syndicate is announced at \$300,000. The deal was closed March 25, but was announced only this week.

At the same time it was announced that 3000 of the 5500 acres are to be seeded at once in oats, so that the first crop may be gathered this year. The purchasers, who have organized the Clatskanie Land company to handle the property, have put up \$50,000 to buy the necessary seed and are spending \$20,000 for farm machinery.

The remainder of the property will be devoted for the present to stock grazing. While plans in this connection have not been announced, it is understood that considerable stock is to be purchased.

The war has resulted in a great demand for oats to feed the great number of horses in the American and allied armies, and this is understood to be the reason for planting the first crop to that grain.

Later the Clatskanie Land company plans to put the land under intensive cultivation, under its own management, for the raising of potatoes and other vegetables in large quantities for the Portland market.

Willard N. Jones is already in charge of the property as manager for the company. The land is said to be one of the richest tracts in Oregon, the soil being peaty and very fertile. It is a part of 10,000 acres that have been diked and reclaimed by the Columbia Agricultural company.

Labor Scarce at Walla Walla.

Walla Walla—The farmers' union, assisted by the county agricultural agent, has started a campaign to get more farm help. There is a shortage. One farmer had to stop his plow teams, being unable to get men. An effort will be made to have clerks and others who work in the city go into the harvest fields this fall.

NORTHWEST MARKET REPORT

Wheat—Bulk basis for No. 1 grade: Hard white, \$2.05. Soft white, \$2.03. White club, \$2.01. Red Walla, \$1.98. No. 2 grade, 3c less; No. 3 grade, 6c less. Other grades handled by sample. Flour—Patents, \$10 per barrel; whole wheat, \$9.60; graham, \$9.20; barley flour, \$14.50@15.00; rye flour, \$10.75@12.75; corn meal, white, \$6.50; yellow, \$6.25 per barrel. Millfeed—Net mill prices, car lots: Bran, \$30.00 per ton; shorts, \$32; middlings, \$39; mixed cars and less than carloads, 50c more; rolled barley, \$77@79; rolled oats, \$76. Corn—Whole, \$77 per ton; cracked, \$78.

Hay—Buying prices, delivered: Eastern Oregon timothy, \$29@30 per ton; valley timothy, \$25@26; alfalfa, \$24@24.50; valley grain hay, \$22; clover, \$19@20.00; straw, \$9.00@10.

Butter—Cubes, extras, 37c; prime firsts, 37c; prints, 42c; cartons, 1c extra; butterfat, No. 1, 41c delivered.

Eggs—Ranch, current receipts, 33c@34c; candled, 34c@35c; selects, 36c per dozen.

Poultry—Hens, 28c; broilers, 40c; ducks, 32c; geese, 20c; turkeys, live, 26@27c; dressed, 37c per pound.

Veal—Fancy, 18c@19c.

Pork—Fancy, 23c@23c per pound. Sack Vegetables—Carrots, \$1.15 per sack; turnips, \$1.50; parsnips, \$1.25; beets, \$2.

Potatoes—Oregon Burbanks, 75c@ \$1 per hundred; new California, 10c per pound; sweet potatoes, 10c per pound.

Onions—Jobbing prices, 1@1c per pound.

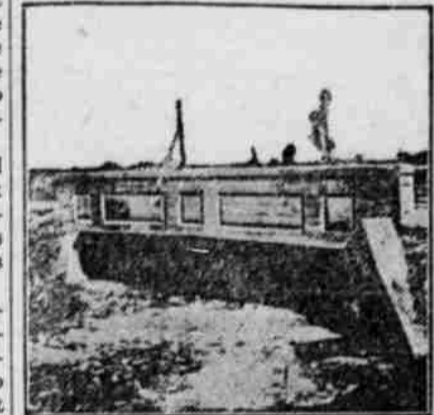
Cattle—April 16, 1918. Med. to choice steers... \$11.75@12.25 Good to med. steers... 10.75@11.75 Com. to good steers... 9.00@10.00 Choice cows and heifers... 10.00@11.00 Com. to good cows and hf... 6.00@ 9.50 Canners... 3.00@ 5.00 Bulls... 5.50@ 9.50 Calves... 7.50@12.00 Stockers and feeders... 6.50@ 9.50 Hogs—Prime mixed... \$17.60@17.75 Medium mixed... 17.35@17.50 Rough heavies... 16.35@16.50 Pigs... 15.00@16.00 Bulk... 17.60 Sheep—Prime spring lambs... \$ 20.00 Heavy lambs... 16.50@18.00 Yearlings... 15.00@15.25 Wethers... 13.00@13.50 Ewes... 12.00@12.50

ROAD BUILDING

GOOD ROADS OF THE FUTURE

Steps Should Be Taken Immediately to Provide New Highways and Keep Them in Condition.

While we have a very considerable mileage of so-called good roads in this country, it is an undoubted fact that the greater portion are not of a character to sustain successfully the heavy motor truck traffic that is now appearing on them, and which will certainly increase rapidly in the near future. To meet the new conditions steps should be at once taken to formulate



Reinforced Concrete Culvert.

a systematic plan not only to provide new roads, adapted to the new traffic, but to maintain them in operative condition. Provision should also be made for the re-building of much of the older mileage. What the nature of the construction of these new roads shall be is a matter for the engineers to solve, but there is no question but that there must be better drainage, better material and very much heavier foundations than have ordinarily prevailed in the past, especially as with smooth road surface the speed of these trucks is sure to be greatly increased. England has had her experience in this matter, for, what with heavy traffic added to lack of maintenance, on account of war necessities, there is hardly a main road in the country that is not utterly worn out, although they have been accustomed to build much more heavily than we have in the United States.—Scientific American.

GUIDE FOR ROAD ENGINEERS

Office of Public Roads and Rural Engineering Makes Public Desirable Standards.

(Prepared by the United States Department of Agriculture.) In order to assist in bringing about a greater uniformity in the highways of the country and to aid the better roads movement in some states, the office of public roads and rural engineering of the United States department of agriculture has published standard forms for specifications, standard methods of testing materials, standard forms for reporting test results, and standard methods of sampling materials. The publication of the standards was made desirable by the necessity for co-operative work by the office and the states in the carrying out of the federal aid conference participated in by representatives of the office of public roads and rural engineering and of a large number of the states. They are published as department bulletin No. 555 of the United States department of agriculture.

MORE GOOD ROADS REQUIRED

Necessary to Handle Commerce on Account of Inadequate Railroad Transportation.

Railroad transportation is inadequate to handle our commerce, and good roads must be constructed rapidly and comprehensively that truck lines running on regular schedule with stations and terminal facilities, may be established to take care of the immense productions of the land. Production beyond local needs becomes an economic loss if the things produced cannot be delivered to the factory or consumer safely and profitably.

INTERESTED IN GOOD ROADS

Mileage of Gravel and Stone Highways Increasing—Automobile of Great Assistance.

There is widespread and increasing interest in good roads in Illinois. The main traveled highways especially are wide, well graded and well dragged. The mileage of gravel and stone roads is increasing, and a good deal of hard road of a still more permanent character is being built. The advent of the automobile has done much to make good roads enthusiasts of farmers, and with their active interest the work of improvement is progressing rapidly.