

PSYCHOLOGY

Worker Needs More Leeway To Look After His Affairs

➤ MORE LEEWAY is needed for men and women to look after the necessities of life without being branded absentees. Miss Elizabeth Christman, Field Representative of the Women's Bureau of the U. S. Department of Labor, points out that although the percentage of absenteeism has increased since the war, working hours have been lengthened and simple living has become increasingly complex.

"Not only are the work days and work weeks longer; we must stand in lines more often for groceries, gasoline, ration books, or to catch a bus," Miss Christman told the recent Institute of Women's Professional Relations.

"It is as unwise to think of legislating against absenteeism as to legislate against a common cold," Miss Christman believes.

Absences for which workers may seem entirely at fault prove on further analysis to be rooted in plant conditions — long working hours, inadequate supervision, inefficient management — and community conditions.

The general public has a definite share in this whole remedial program. She feels that inadequate and bad housing should become a community responsibility. Store hours should be staggered, transportation eased, and banks and ration boards adjust their hours to harmonize with the workers' needs.

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PALEONTOLOGY

10,000-Year-Old Bones Found in California

➤ NEW EVIDENCE that man lived in California some 10,000 or more years ago and feasted upon animals long since extinct has been unearthed through excavations in central San Joaquin Valley reported (*Science*, April 9) by Dr. Gordon W. Hewes, now in Washington, D. C.

Conditions at the site near Tranquility, Fresno County, Calif., strongly suggest to Dr. Hewes that the carcasses of now extinct mammals were brought there by hunters of the group who built fires, buried its dead and made the numerous stone and bone artifacts (tools) which have been found in the deposit. The bones of the extinct American camel, horse and bison occur along with bones

of species still living in the San Joaquin Valley and these are broken in such a way that they show they had been used for food.

Four human skeletons were found in graves at the site. The human bones, as well as those of animals, were very heavily mineralized so that they are now twice the weight of ordinary dry bone and of greatly increased hardness.

Scientific interest in the site arises particularly from the human burials which seem to belong to the same level of the earth as the tools and extinct animal skeletons.

There is little likelihood of further work on the site until after the war, but Dr. Hewes points out that if the animals and human beings did live at the same early time, anthropologists will be able to establish the way the early Indian population of North America really looked, which it has not yet been possible to do.

No age in years was assigned to the site by Dr. Hewes but the animal remains found indicate that it was probably inhabited at about the time of transition from the Pleistocene geological period to what is known as the Recent, a time about 10,000 to 15,000 years ago.

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ENTOMOLOGY

Pyrethrum Ointment Is Weapon Against Lice

➤ PYRETHRUM, effective ingredient of sprays used to eradicate mosquitoes and other insects, has now been put into an ointment for delousing purposes, it is announced.

The ointment was developed by Dr. Walter K. Angevine, who tested its delousing properties on inmates of Washington, D. C., penal institutions, in collaboration with Dr. A. L. Omohundro, technical director of McKesson and Robbins, Inc. manufacturing and research laboratories.

The ointment is said to be highly effective in eradicating both the lice and their eggs without causing any skin trouble to the user or staining clothing permanently. It need only stay on the body for 15 minutes and can then be easily washed off with soap and water. It is said to be safe even for children.

Since body lice transmit European typhus fever, the new ointment is believed to be of importance as a possible aid in the fight against this disease as well as in fighting less harmful infestation.

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IN SCIEN

PUBLIC HEALTH

Meningitis Epidemic Continues Unabated

➤ THE MENINGITIS epidemic continues unabated but the nation's health is otherwise good, according to reports of communicable diseases from state health officers to the U. S. Public Health Service.

The U. S. Census Bureau has announced that provisional figures show the death rate for 1942, 10.3 per 1,000, to be the lowest on record.

Latest figure on meningitis, for the week ending April 3, showed a total of 595 cases, compared with 572 for the previous week. The total number of cases so far this year is 5,826, which is slightly over half the total of 10,551 for the entire year in 1929, the highest year on record so far.

Total accumulated deaths from all causes for the first 13 weeks of this year in 89 major cities were 130,970, which is somewhat higher than the 119,905 figures for the same period in 1942.

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MEDICINE

New Evidence Found For Cancer-Hormones Relation

➤ NEW EVIDENCE for a relation between cancer and hormones, the powerful chemicals produced by certain glands of the body, appears in a report by Dr. George W. Woolley, Dr. E. Fekete and Dr. C. C. Little, of the Roscoe B. Jackson Memorial Laboratory (*Science*, March 26).

These scientists found that cancer of the outer part of the adrenal glands, which is relatively rare in both man and laboratory animals, can be induced in a large percentage of mice of one strain by removal of the sex glands.

This discovery, added to other observations showing sex hormones have an influence in the formation of certain types of cancer, suggests, the scientists point out, that lack of proper balance between the various hormones may be one factor leading to certain forms of cancer.

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CE FIELDS

CHEMISTRY

Rare Chemical Element Found in Dust from Flues

➤ RHENIUM, one of the latest-discovered and rarest of the chemical elements, can now be produced in America, it was announced at the meeting of the American Chemical Society in Detroit by Dr. A. D. Melaven and Dr. J. A. Bacon of the University of Tennessee.

Rhenium is present in a concentration of only a few parts per million in molybdenum ore mined for use in the steel industry in one of our western states. But in the dust that can be captured in the flues of the ore-roasting plants it has been found to be concentrated up to ten or fifteen thousand parts per million, and in soluble form at that. By simple treatment with water, followed by precipitation, a pure potassium salt of rhenium is obtainable.

Rhenium has hitherto been a monopoly of Germany, where it was discovered in 1925 and named for the River Rhine. At present it is so rare that it is used only for experimental purposes, but it is regarded as having possibilities as a chemical catalyst, as lamp filaments and for wear-resisting points in some kinds of electrical contacts.

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PUBLIC HEALTH

Squirrel That Bit Men Found to Have Rabies

➤ SQUIRRELS probably do not seem much of a health menace to you, unless you live in the far West and know that ground squirrels in that region are a reservoir of plague. A report from the New York State Health Department shows another, though perhaps rare, health menace from squirrels, that of rabies. According to this report, two cement workers on a construction camp put down their shovels one day at noon and started to eat lunch.

"The first worker reached inside a large tool chest, fumbling for his lunchbox. To his anguish, some animal suddenly seized his fingers by its teeth

and claws and held him fast. The second worker sprang to his aid and in attempting to extricate the hand of his fellow worker was bitten himself. The animal in the toolbox proved to be a common gray squirrel and was killed with a curb tool.

"The two men reported for first-aid treatment to the construction company infirmary where a nurse asked them to obtain the body of the squirrel which was submitted by the company physician to a local laboratory for examination for evidence of rabies. The results demonstrated that the animal was rabid and the two workmen were given injections of antirabic vaccine. Had the nurse been less alert, the body of the squirrel might have been discarded without examination and the men might have developed rabies."

There seem to be two health lessons from this report:

1. The importance of thinking of rabies in any case of animal bite. Though dogs are by far the most frequent source of this disease, cats, cattle, horses, sheep, swine and other animals, including squirrels, can have and give it.

2. The fact that squirrels, which belong to the rat family, are apparently not the safest companions or neighbors.

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GENERAL SCIENCE

New Honor Award Is Specifically for Women

➤ A NEW DISTINCTION specifically for women, the \$2500 Achievement Award of the American Association of University Women, was conferred April 13 on Dr. Florence Seibert, associate professor at Phipps Institute in Philadelphia. Dr. Seibert is internationally famous for her research on the chemistry of tuberculosis.

Dr. Seibert, whose work has already brought her a number of coveted prizes, was chosen as the first recipient of the A. A. U. W. award "not for the recognition already received, but for the work done, for the work in hand."

This award was made possible through a fund raised by the Northwest Central Region of the Association. Nominations were asked from more than 200 leading women in college administration. It was agreed by the committee that the first recipient should be a woman who by her capacity and achievements should not only merit such recognition, but set the standard for qualifications.

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PUBLIC HEALTH

Protein Allergy Attacks Workers in Castor Plants

➤ A NEW DANGER to the health of workers in an important war industry was disclosed before the meeting of the American Chemical Society in Detroit by two U. S. Department of Agriculture research men, Dr. Joseph R. Spies and Dr. E. J. Coulson.

This industry is the extraction of castor oil, now needed in huge quantities for filling the recoil cylinders of heavy guns, supplying an essential ingredient for nylon, mixing with paints and other important uses.

But workers handling the pomace or pulp left after the oil has been extracted sometimes develop asthma and other allergic symptoms.

Castor bean pomace has long been known to contain ricin, a protein poison that rivals cobra venom in deadliness. But pomace extracts from which the last trace of ricin has been removed were still capable of causing allergic reactions. This newly discovered allergy-producing protein has not yet been given a name, but only a set of initials; CB-1A. Something closely resembling it in chemical and physiological properties has also been isolated from cottonseed.

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CHEMISTRY

Thermoplastics Will Serve Future Electronic World

➤ "THERMOPLASTICS, like their thermosetting cousins, perform many necessary functions in electrical equipment, and the technical apparatus of the electronic world of tomorrow will be served both by the material with which we are familiar, and by newer and better ones," declared H. K. Nason, of the Monsanto Chemical Company, at a meeting in Pittsfield, Mass., of the American Institute of Electrical Engineers.

These plastics are now serving many useful purposes in electronics, he continued, but much work is being done in industrial and other laboratories to develop a thermoplastic that will meet the full needs in the electronics field. This requires material which can be used in situations where high temperatures are encountered, and plastics that will not "creep," better known as cold-flow. The progress being made will not be reported upon until after the war.

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