

## Tea for Beer Causes Nervousness

*Physiology*

Substitution of tea for beer as the national beverage in England has probably been responsible for increased numbers of super-sensitive and neurotic people, in the opinion of the English physiologist, Prof. W. E. Dixon, who addressed the British Association for the Advancement of Science. In fact, the growing tendency in civilized nations to substitute tea and coffee for stronger beverages probably has a bearing on the increased nervous irritability among highly civilized peoples at the present time.

"England was once a drunken nation. Before the revolution the consumption of beer alone in England and Wales was 90 gallons a head per annum; now it is about a quarter of this. With this diminution of beer drinking is associated a truly enormous increase in tea and coffee drinking. To me it seems not unlikely that this substitution of tea for beer is not wholly unconnected with the tendency of highly civilized nations to become supersensitive and neurotic, for this is the groundwork upon which drug addiction is built," said

Prof. Dixon.

Prof. Dixon explained that beer is a soothing beverage, while caffeine relieves drowsiness and fatigue by direct stimulation of the brain cells. Unfortunately, it is just the super-sensitive people who drink the caffeine beverages like tea and coffee in excess.

"It is easy to understand the modern tendency in some highly civilized nations to indulge in narcotic drugs like morphine, heroin and cocaine," said Prof. Dixon.

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## New Museum of Geysers

*Geophysics*

The most complete geyser exhibit in the world has been installed in the new museum building at Old Faithful, under the supervision of Park Naturalist Dorr C. Yeager. It consists of specimens of the various types of geyser and hot springs deposits and of diagrammatic paintings showing how a geyser works, and of the evolution of a geyser through the geological ages.

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## Ergosterol in Mummy

*Physiological Chemistry*

The brain of an Egyptian mummy dating from about 500 A. D. has been examined by chemists and found to contain ergosterol, the parent substance of vitamin D. This news comes from Drs. H. King, Otto Rosenheim and T. A. Webster, working at the National Institute for Medical Research in London. They find that ergosterol is remarkably stable in animal tissues (brain, gallstones, blood, skin, eggs, etc.), although it is very unstable when separated from other substances. In the animal tissues it is protected by a closely related substance called cholesterol, which was originally thought to be pro-vitamin D.

Ergosterol has now been found in conjunction with cholesterol in a mummy brain which is about 1,400 years old. The brain was of Coptic origin, and was removed from one of the bodies found in tombs in Antinoe, Upper Egypt. No embalming process had been used, and the organs of the body were preserved in their original position, but of course shrunk and mummified under the influence of the dry atmosphere of Egypt.

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## A Life Among the Ants—Continued

overseer, or ruler, provideth her meat in the summer and gathereth her food in the harvest."

These remarks of Solomon's have furnished the nub of many a sermon and, in the early days of entomology, the source of much wrinkling of learned brows and wagging of learned beards. For the ants of northern Europe and America do not follow the praiseworthy habits of their sisters in Palestine and the Mediterranean region. Consequently, discussion over entomological passages in classical writers waxed warm, until about the middle of the eighteenth century, when some naturalist had a bright idea and predicted that ants in hot and cold countries would have different habits.

As a matter of fact, it is not for the short, mild winter that the harvesting ants gather seeds in their granaries, but for the dry season, when they can find nothing else to eat. There used to be a legend that such ants sowed their own grain and then stored their harvest away in their subterranean galleries. Recent observations show, however, that the grain patches around their formicaries are due to seeds that have sprouted and

taken root after being accidentally dropped or thrown out with other nest refuse.

The mushroom-growing ants of South America constitute another tribe that kept their food habits a secret from investigators for many years. They were known chiefly on the plantations in the tropics for their leaf-cutting propensities. They cut off pieces of leaves and carried off great quantities to their nests, choosing usually for the scene of their depredations, plants cultivated by man. It was generally believed that the leaves were used to line their nests. Eventually, indefatigable entomologists unearthed the information that the fodder they dragged off was cut up in little pieces and used to bed down their underground fungus gardens. Some species have been found unable to live without their mushroom diet while at least one species of the mushroom so cultivated proved unable to reproduce and multiply without the care and attendance of the ant-gardeners.

The weaving ants have solved the problem of making a home by utilizing the special gifts of their cocoon-spinning larvae. Every worker

seizes a larva in her jaws, and together with her squad of companions which are doing likewise, carries it to a place between two leaves, fixing its mouth to the edge of one leaf. Meanwhile another squad pulls with all its strength to draw one leaf towards the other, each worker grasping it by the one edge and hanging on to the other with all six legs at the same time. The final result is a compact nest of close and regular silken tissues woven between the leaves. The larvae are provided with relatively enormous silk glands. When the leaves are so far apart that their edges cannot be seized by the same workers, the ants form chains, each ant taking hold of the other until the first is able to hold the other end of the other edge between her six legs. Both then pull the two leaves towards each other, while the other squad of ants weaves with its larvae, if necessary, utilizing the chain of the first squad as a bridge.

This is an example almost unique in nature, Dr. Forel points out, of the use of one living creature by another as a working tool. Certainly such teamwork has few parallels.

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