

PSYCHOLOGY

What Is Happiness?

Enjoyment of work, good health and love are elements of happiness as seen by Danish and American students.

► WHAT is happiness—to you?

If you place enjoyment of your work, good health and love at the top of the list of factors on which your own happiness is based, you will be in agreement not only with American college students but also with a group of Danish students recently surveyed.

The Danish study, just published in this country in the *JOURNAL OF SOCIAL PSYCHOLOGY*, was made by Dr. Holger Iisager at the International People's College. The Danish college is at Helsingor, celebrated as the Elsinore of Shakespeare's Hamlet.

For the Danes, these three most important elements of happiness are followed closely by good fellowship, a clear conscience and freedom. Perhaps, the author comments, the stress on freedom may be due to the fact that these students have only recently emerged from the oppression of the German occupation, when many kinds of freedom that were formerly taken as much for granted as the air we breathe were abolished.

Liquor, power, politics, money and prestige are put at the bottom of the list of things contributing to happiness by the students. Even religion holds a relatively un-

important place in spite of the fact that clear conscience is in the lead.

A majority of those surveyed consider themselves happy, in general. Comparison of the happy with those who feel that they are often unhappy showed that the happy put more stress on clear conscience while the unhappy need economic independence and travels for their well-being.

Although the students were permitted to add to the list given them to check any further elements of happiness that they considered important, very few felt the need to add to it. One said he felt happiness to depend on "a good armchair, a good pipe of tobacco, and good book and flaming fireplace."

Science News Letter, February 5, 1949

ENGINEERING

New Tests Measure Qualities of Asphalt

► THE selection of the right asphalt for the particular job, whether surfacing a street, water-proofing a cellar wall, or covering a house roof, can be made with the aid of a new series of tests, the American

Chemical Society was told by Edmund Thelen of the Franklin Institute.

An efficient and coordinated scheme consisting of five separate tests has been devised, he stated, to measure the properties of asphalt-like materials. They measure resistance to impact, damage by vibration, flow at high temperatures, adhesion to rocks and fibers, and whether the material will run on a warm day and crack upon sudden cooling.

They are laboratory tests, requiring relatively little time to complete. The usual test methods involved applications on the job and weeks or months of waiting to determine results. In the first of this new series, it can be learned how well the asphalt will flow while being applied hot, and how tight a bond it will make to solids.

Other tests make it possible to estimate the brittleness of cold asphalt, and to show how tightly the material will adhere to the other materials used with it. Vibration tests are important because a road surface can fail due to vibrations caused by heavy traffic.

Science News Letter, February 5, 1949

MEDICINE

Electrical Activity In Polio Muscles

► IN patients with acute infantile paralysis, abnormal electrical activity can be detected in the muscles while at rest, whether the muscles have normal strength or are weakened by the disease. But the completely paralyzed muscles, with some exceptions, are electrically silent.

These findings have been observed in widely separated clinics, Dr. Arthur L. Watkins of Harvard Medical School said at the meeting of the American Academy of Orthopaedic Surgeons in Chicago.

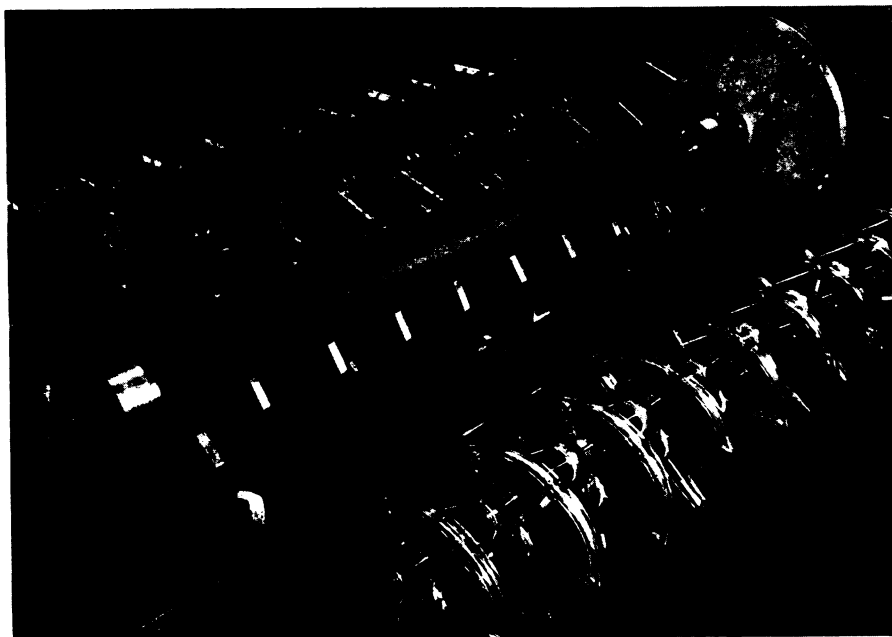
"Change in position or passive stretching has been found to produce strong discharges from the muscles in spasm corresponding to the clinical findings of pain and tenderness," he continued.

Studies of electrical discharges from muscles are also useful, he said, where there is "suspected hysteria or malingering as normal potentials may be discharged from the muscles apparently paralyzed. Greatest value of such studies is probably in following the course of regeneration of peripheral nerves to determine the extent of reinnervation of muscles."

"In the case of Parkinson's disease, the electrical recording of the tremor characteristics is so constant that it is of diagnostic importance."

Science News Letter, February 5, 1949

Neatsfoot oil and stearine are obtained from the leg bones of cattle; in the process the bones are cooked and the fat skimmed off, strained, heated and filtered to obtain neatsfoot stock from which the two products are separated.



MUSIC ON TAPE—This machine which makes simultaneously 48 hour-long tape recordings paves the way to mass production of recorded music on tape.