

Mech Eng.

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Popular
Science
lecture
#4

Mechanical Vibrations and Their Control will be the subject of a public popular science lecture to be given by one of the outstanding authorities in this field at the Massachusetts Institute of Technology at 4:00 p.m. next Sunday.

Dr. Jacob P. Den Hartog, Professor of Mechanical Engineering at M.I.T., will discuss the occurrence and prevention of vibrations in a variety of structures and machines ranging from aircraft wings to washing machines. The lecture will be illustrated by a number of simple demonstration models, many of which can be easily made at home from a few pieces of wood and steel wire.

In previewing the lecture, Dr. Den Hartog said: "An understanding of vibrations is of great practical importance. Today machines seldom fail because of high loads but almost invariably break because of variations in stresses caused by vibration. The break occurs in the same manner that a strip of tin or wire is broken by repeated bending. Such fatigue breaks take place not only in high speed machinery but also in such seemingly 'static'

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structures as large suspension bridges and overhead transmission lines."

Dr. Den Hartog has made important original contributions to the solution of complicated mechanical vibrations and is outstanding in the field of analysis. He has received both the Pi Tau Sigma Richards Memorial Award for "outstanding work in applied mechanics," and the Worcester Reed Warner Medal for "outstanding contributions to engineering literature" from the American Society of Mechanical Engineers. He is also the author of numerous articles that have appeared in the technical press and of the books "Mechanical Vibrations" (1934), "Mechanics" (1948), and "Strength of Materials" (1949).

Next Sunday's lecture is the concluding one in this year's winter series of popular science lectures under the auspices of the Society of Arts at M.I.T. Tickets may be obtained without charge by enclosing a stamped, addressed envelope for each separate request to the Society of Arts, M.I.T.