

ENGINEERING

Electricity via Channel

The European continent could transmit power to the British Isles through a submarine cable under the channel.

➤ ELECTRIC power could be transmitted from the European continent to the British Isles through a submarine cable under the Channel carrying high voltage direct current, Sir Harold Hartley, British power and electricity authority, declared in his presidential address before the British Association for the Advancement of Science in Birmingham, Eng.

Such a linking of the continental and British power systems would give a better balance between seasonal and other demands, Sir Harold declared. Direct current transmission of high voltage current has now passed the experimental stage, he said, and is waiting for development.

Recalling the more ambitious schemes of past years for a tunnel under the channel, the proposed power link could be of 250,000 kilowatt capacity and would then give both sides the equivalent of a large modern generating station as stand-by plant.

Looking farther into the future, the BAAS president declared that a way of converting the free energy of carbon oxidation (burning) directly into electricity is still one of the distant goals of research, although a young German doctor, named Mayer, as early as 1842 pointed out the inefficiency of the steam engine and the need of obtaining electricity by chemical means.

Due to the development of automatic controls and precision techniques that consume almost negligible quantities of current, Sir Harold predicted that such modern robots or automechanisms will become substitutes for the drudgery of the human brain.

"In the future one of the indexes of economic progress," he said, "should be, not the energy used per worker, but the output of goods and services per horsepower employed."

The problems that the world faces, as listed by Sir Harold, are:

The growing strain of increasing population.

The malnutrition and the endemic sickness of perhaps half the world.

The inequalities between the more forward and the backward peoples.

The gradual depletion of resources and their unequal distribution.

The human problem of changing the way of life and the outlook of many millions.

"These problems are the challenge to the science and engineering of our time," Sir Harold told the British scientists. "Only

they can solve them—if allowed, and if men's minds are bent on quest of plenty not on quest of power. The orderly solution of these problems must depend on a knowledge of conditions and the needs of each country, on a survey of its natural resources, its human geography, its economic structure and its capacity to produce and consume."

Science News Letter, September 9, 1950

ENGINEERING

Hot Air Distributed By New Ceiling Device

➤ WIDE distribution of heated air, in a factory, garage or store, is provided with a new ceiling or wall heater with diffusers containing both horizontal and vertical blades to direct the heat where wanted.

It is a product of the Trane Company of La Crosse, Wis., and is made in two types. One is called "Louver Cone" and the other "Louver Fin." They are flexible ac-

cessories for the horizontal propeller and vertical projection types of steam and hot water heating units.

These new heat distributors are designed to solve diffusion on the job by simple adjustments which can be made by the fingers without use of tools. The flow of heated air can be sent in almost any direction where needed in many different patterns.

The Louver Cone diffuser fits projection type heaters often seen in high-ceiling factory rooms, warehouses and drug stores. Projection type heaters are generally used to recapture the heated air that has collected near the ceiling and drive it to near the floor where needed.

The Louver Fin diffuser attaches to horizontal type heaters which are usually placed on the walls of the room. It circulates the heated air horizontally. This new type has seven horizontal and 56 vertical blades, each adjustable to send the heated air in various directions.

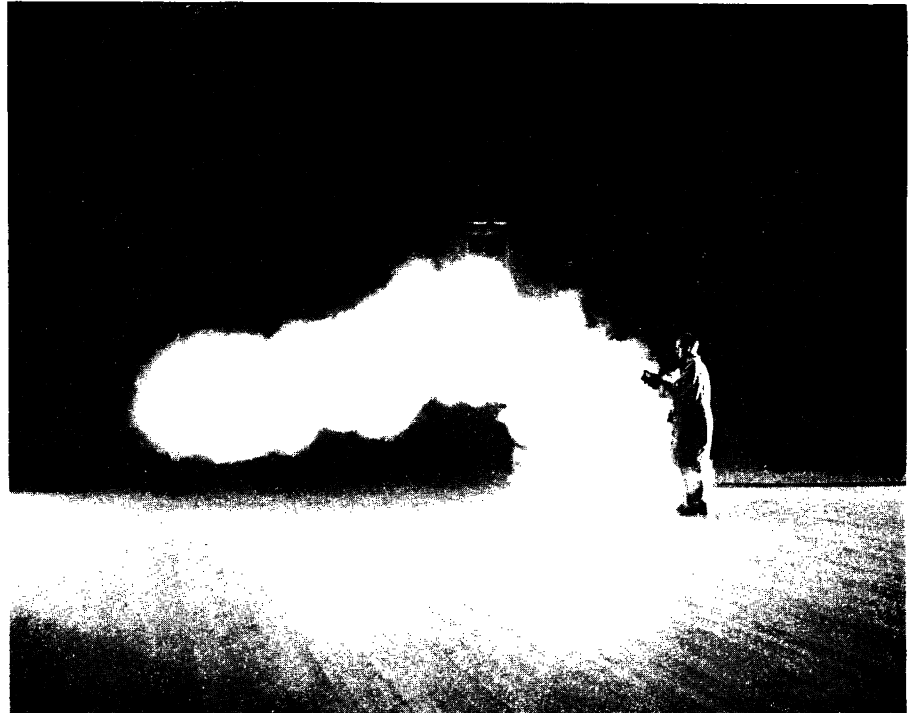
Science News Letter, September 9, 1950

PSYCHOLOGY

Voice, Gestures Express Emotions without Words

➤ EVEN if no words are used, emotions can be expressed through the tone of voice, gestures and other non-verbal methods of expression.

Wire recordings of interviews conducted



HALF AND HALF—With half its blades straightened and half turned to the left, the diffuser can direct air from a unit heater to blanket a doorway and cover a counter. This is a typical store use.

entirely in numbers, by persons counting to each other, were made in an experiment at Stanford University in California. Those taking part in the interviews made independent descriptions of what took place in emotional exchange and a group of observers also made descriptions of the emotional interchange.

Psychologists later were successful in matching the descriptions to the recordings.

Purpose of the experiment was to de-

velop a method for teaching students preparing to be specialists in mental sickness how to pay attention to the emotions expressed by a patient in his tone of voice and gestures. The scheme of using numbers in training situations works, reports Dr. Clare Wright Thompson, of the University of California Medical School, and Dr. Katherine Bradway of Stanford in the *JOURNAL OF CONSULTING PSYCHOLOGY* (Aug.).

Science News Letter, September 9, 1950

PSYCHOLOGY

Psychology in Politics

➤ **PSYCHOLOGICAL** knowledge and insight are most urgently required to solve the political problems that at the present time are the most pressing of all those that beset humanity, Dr. J. C. Flugel, psychologist of London's University College, told the British Association for the Advancement of Science in Birmingham, England, in his presidential address to the psychological section.

Politicians have for the most part shown little inclination to avail themselves of such knowledge as the psychologists possess, Dr. Flugel charged. They have not encouraged psychological research on a scale commensurate with the immense issues at stake.

Racial or national prejudices of a very harmful sort can in some cases be modified by psychological means, Dr. Flugel said.

From psychoanalysis, Dr. Flugel explained, it is now realized that we divide our attitude so that different persons or groups tend to be considered as crudely "good" or "bad." We project our own faults or those of our group and attribute them to others, he said, sometimes with a pathological intensity and disregard of reality which are comparable to those of the individual paranoid.

Individual conscience and judgment give way in favor of a childish and irresponsible idealization of the group or its leader and

everything they stand for, Dr. Flugel observed.

Hope that the world can cure itself exists in the realization of such facts of human behavior as worked out by the social psychologists and the cultural anthropologists. Dr. Flugel felt they could be made as effective in the statesmen's councils as they are in the nurseries.

Science News Letter, September 9, 1950

METEOROLOGY

Warm September Forecast For East and West

➤ A **WARMER**-than-normal September west of the Continental Divide and east of the Appalachians was forecast by the Weather Bureau. The Extended Forecast Section says that the Southwest and New England can expect the greatest departures from normal.

The central regions of the country can expect an average month so far as temperature is concerned.

The country is divided against itself so far as the prediction for rain is concerned. Subnormal rainfall in the West was predicted, but abundant rainfall in the East.

Cool, wet weather in the East during August did not jibe with the Weather Bureau's Aug. 1 30-day prediction. At the time it was made, Extended Forecast Sec-

tion Chief Jerome Namias said that it was a difficult one to make. Events bore him out.

Mr. Namias expected strong west winds from the Pacific in the upper atmosphere to bring the warm, dry weather he had predicted to the East. At the time, however, he thought there was a possibility that tropical air from the Atlantic would upset his forecast. It did, meeting the winds from the Pacific and causing a great deal of rain.

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