

ENGINEERING

Four Motors to Pump Water from Grand Coulee

► **FOUR MIGHTY** motors to pump irrigation water from the Grand Coulee reservoir have been ordered. They will be the most powerful single alternating current electric motors ever built.

These giants will be 65,000 horsepower units, 50% larger than the most powerful motor of the type now in existence. Each will force more than 600,000 gallons of water a minute through an 850-foot tunnel into a canal leading to a reservoir from which the water will flow to irrigate more than a million acres of semi-dry land in south-central Washington.

The giant motors are to be built by Westinghouse at its East Pittsburgh plant. At the Grand Coulee project, they will team up with six huge water-wheel generators designed and constructed by the same company. Each motor will weigh 325 tons, and will be as big as a modern six-room house. Their rotors, or rotating parts, will each weigh 172 tons.

The heating in such giant motors constitutes a special problem. In operation the motor will revolve 200 times a minute, using up 50,000 kilowatts of electricity. This means the generation of very large amounts of heat. Because these motors will be completely enclosed, cooling will be accomplished by recirculated air, which itself will be cooled by water.

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TEXTILES

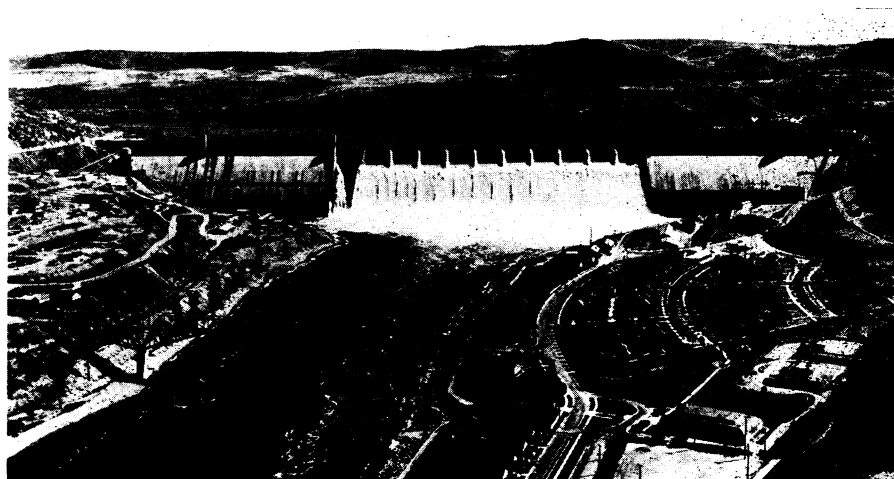
Less Frills, Better Fabric Will Please Housewives

► **ATTENTION**, clothing designers: the American woman wants her house dresses to be more practical, not with more frills.

Colorfast with less shrinking and more easily understood labels are what she wants in her house dresses, the American Home Economics Association's Consumer Speaks poll found when it quizzed 11,577 women recently.

Votes of 750 groups of women in 22 states revealed that the quality of fabric and workmanship were two-to-one over design details in the choice of the women. Instead of frill trimming, the women want better material in their dresses, the poll showed.

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GRAND COULEE—This dam is being made ready to irrigate more than 1,000,000 acres of semi-arid land in south central Washington. The Westinghouse Electric Corporation is building four 65,000 horsepower motors to pump water.

MEDICINE

Pentaquine Cures Malaria

► A **CHEMICAL** that cures malaria instead of just suppressing it is reported to the medical profession through the columns of the *Journal of the American Medical Association* (Oct. 12).

The chemical has been named pentaquine. During the secret wartime search for drugs to protect our fighting men against malaria after the quinine of the Dutch East Indies was lost, pentaquine was known as SN 13,276.

"Radical cure" of severe vivax malaria is achieved by pentaquine when given with quinine every four hours day and night for 14 days, Dr. R. F. Loeb, chairman of the Board for Coordination of Malarial Studies, states in the report to doctors.

In 16 out of 17 patients, the drug given in this way completely eradicated the disease. When given without quinine, pentaquine is only partially effective in preventing relapses.

The effectiveness of pentaquine was less striking when given to volunteers who got malaria in experiments planned to duplicate conditions under which persons would get the disease naturally.

Although the drug is considered safe to give for treatment, Dr. Loeb's report cautions that it should be given only under close medical supervision and preferably in a hospital. It is too poisonous to be used for prevention or prolonged suppression of malaria.

Studies are now being made to learn

whether it can safely be given to dark-skinned races or whether, like another anti-malarial drug called pamaquine, it will cause a severe anemia.

Pamaquine, also called plasmochin, was developed in 1930 and was effective in treating vivax malaria, but the dose for a cure was too close in size to the poisonous dose. Pentaquine in curative doses is about one-half to three-fourths as poisonous as pamaquine.

Vivax malaria is the most common kind in the United States and caused the most trouble among our forces in the South Pacific. Atabrine and quina-crine or SN 7618, another of the war-developed anti-malarials, do not cure vivax although they stop each attack of chills and fever and are good suppressives. They do cure a less common but more often fatal kind of malaria, falciparum.

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INVENTION

Cooling Liquid Gives Milk Cans Showerbath

► **IN A REFRIGERATING** showerbath for milk cans and similar containers, the cooling liquid is recirculated through a mechanical chilling unit, and kept constantly drizzling over the cans as they stand in a closed cabinet. This invention of A. F. McMahon of Oak Park, Ill., is covered by patent 2,411,833.

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