

panes in several of the windows. The veteran, her great-uncle who had contracted malaria in Australia, lived in a tent about 50 feet from her house for about two weeks before she started having chills and fever. Mosquitoes were plentiful and on examination were found to be the malaria-spreading variety. Existence of this kind of mosquitoes in this rural Oregon area had not previously

even been suspected.

The second case was a neighbor whose house was well within the mosquito range of the returned soldier's tent.

A logging partner of the returned soldier who shared the tent may also have contracted malaria. He has returned to Texas and so far Dr. Osgood has been unable to get in touch with him.

Science News Letter, June 23, 1945

GEOLOGY

Equal Access to Minerals

Wise administration of the world's supply for all peaceful nations lies at the very heart of the problem of world peace, leading geologist declares.

► **EQUAL** access to the world's minerals for all peaceful nations lies at the very heart of the problem of world peace, Dr. Charles K. Leith, University of Wisconsin geologist and leading government consultant, has declared.

Some wise administration must be devised, Dr. Leith said, to withhold the minerals so necessary to war-making from nations that threaten the peace of the world.

"Minerals are irreplaceable assets which are being depleted at an alarming rate," Dr. Leith declared. "No nation has enough of all commercial minerals. The United States is better supplied than any other nation, but during the war it has had to import about 70 varieties of minerals. Interdependence of nations as to minerals is a physical fact, not theory.

"Since the first World War, as nations have waked up to the overwhelming importance of mineral supplies both for their future industry and for their security, there has been a world-wide

scramble to control them, resulting in growing international friction. The degree of success in acquiring mineral supplies measures war-making power in these days of mechanized war. There now looms before us the problem of equal access to the world's minerals."

An adequate answer to world mineral control will require not only international cooperation based on goodwill and pious hopes, but a very high order of scientific fact-finding and analysis, Dr. Leith said.

"The United States and the British Empire have been leaders in the development of the world's minerals," he explained. "Between them they control politically and commercially nearly three-fourths of the world's known mineral reserves. Whatever their attitude may be it is obviously a critical factor in finding an answer."

Dr. Leith spoke during the intermission of a New York Philharmonic Symphony broadcast over CBS sponsored by the U. S. Rubber Company.

Science News Letter, June 23, 1945

CHEMISTRY

Eliminates Gypsy Moths

► **THE GYPSY** moth, which has damaged so many fruit, shade and forest trees within the state, can be completely eliminated from Pennsylvania within a few years, Miles Horst, Pennsylvania Secretary of Agriculture, stated after inspecting areas sprayed with DDT by airplane.

Visiting officials found that in large areas of forest land infested with gypsy moths, airplane spraying with a fine mist of DDT over tree tops kills all the caterpillars.

In areas where airplanes cannot be used to advantage, it is believed that the caterpillar, termed by Secretary Horst the most destructive plant pest of the northeastern states, can be eliminated by spraying the DDT solution on the tree trunks. This would take advantage of the caterpillar's habit of deserting the tree-top feeding ground just before daylight and crawling down the trunk to hide under sticks, stones and leaves. Coming into contact with the spray residue on the trunk, the worm would soon die.

The inspection party, composed of agricultural and forestry officials of New York and Pennsylvania, started at sunrise to watch two airplanes scatter DDT over large woodland areas. Visiting several sections sprayed two and three weeks ago, they found the pests had been wiped out. The party also inspected a 20-acre isolated woodlot in Lackawanna County treated experimentally with DDT by plane a year ago and found no moths, egg clusters or caterpillars, indicating that a single spraying had completely destroyed the pest.

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Two planes are spraying with DDT nearly 3,000 acres of the 600 infested square miles in Carbon, Luzerne and Lackawanna Counties. The gypsy moth has been confined to this area by State and Federal control work over the past 12 years at a cost of about \$6,000,000.

New York State has 6,000 square miles

of moth-infested territory, heaviest along the eastern edge. Connecticut, Massachusetts and Vermont have fought the insect for many years. Last year more than 250,000 acres of trees were completely defoliated by the pest in the New England states alone. The use of DDT, however, may change all this.

Science News Letter, June 23, 1945

BACTERIOLOGY

Leads Double Life

The leprosy germ has at times a rod form, and at other times a granule or spore-like form. This makes detection of bacilli difficult.

► THE LEPROSY germ, like that of tuberculosis, may lead a double life, at times going through a phase in which it has rod-like form and at other times having a granule or spore-like form, Dr. Eleanor Alexander-Jackson, of Cornell University Medical College, reports. (*Science*, June 1).

This finding may explain, she believes, why leprosy has such a long incubation period and why it is difficult to find the bacilli in certain kinds of leprosy sores.

The discovery was made on material obtained at the Branch Laboratory of the New York State Department of Health from the nasal septum of a Mexican with an early case of leprosy. Dr. Alexander-Jackson used a triple-stain

technique which has been successfully used to detect the tuberculosis mycobacterium. It causes one form of that germ to stain red, and other forms to stain blue, while other organisms, tissue cells, etc., form a light green background.

Unfortunately, when the case was diagnosed as leprosy, the patient suddenly disappeared, making it impossible to obtain further smears for study. But Dr. Alexander-Jackson believes the results she has already obtained from 32 smears of this and other patients from the U. S. Marine Hospital at Carville, La., and from Willard Parker Hospital, to be significant enough to encourage further use of the triple-stain technique.

Science News Letter, June 23, 1945

PSYCHOLOGY

Lack of Shame Normal

The stubborn refusal of individual Germans to admit any guilt in war crimes is due to natural defense of human mind against loss of self-respect.

► REPORTS indicate that the German people do not feel any sense of shame or guilt, either personal or national, over the cruelties inflicted on prisoners and on the people of other nations.

It is not surprising. Even the most vicious criminal may have no feeling of guilt when he is brought to justice; instead he is likely to feel that he has been "framed" and be sorry for himself.

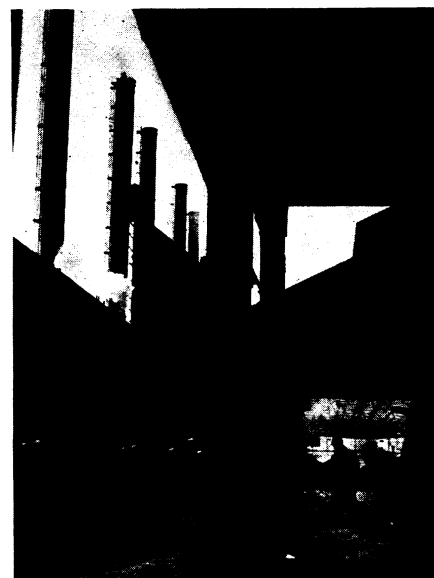
The explanation is that the deepest, strongest need of human nature—stronger almost than the need for life itself—is the need for self-respect. No one can bear to face the thought that he is fundamentally wrong or evil.

When a man is faced with undeniable

evidence of his own guilt, his mind automatically builds up defenses. He refuses to believe that his acts have had such ill effects; he says to himself that he was forced to commit the crimes, that he acted in self-defense; someone else was responsible; or perhaps he says to himself that his victims were not quite human, anyway, and so were not capable of feeling as you or I would about the torture.

Such self-deception is not healthy. But it is better than it would be for a man to admit in his own heart that he is guilty of crimes all the rest of mankind abhors.

It is a good thing that the German



ARC WELDED—These smokestacks, replacing those of conventional design, tower over this industrial scene and signify the importance of the electric arc process in steel mill maintenance. Photograph by the Lincoln Electric Company

people cling to their self-respect even when, in the eyes of the rest of the world, they must share responsibility with their leaders for serious crimes against all humanity. For when a man loses not only the respect of other men but his own as well, there is no longer any hope of his being a useful member of society. Either he kills himself or he abandons any attempt to do what is right and what is expected by one man of another.

What hope there is for building a decent society in what was Germany lies, psychologists believe, in building up on this stubborn remnant of self-respect. Keep the German people from letting go of it and saying to themselves, "I can't help what I do, I am no good." Encourage them, instead, to feel a responsibility for demonstrating to all the world that they are worthy not only of their own self-respect, but the respect of other men as well.

For example, in a declaration of the basic facts regarding human nature that must be considered to attain a lasting peace, more than 2,000 American psychologists agreed that:

"Liberated and enemy peoples must participate in planning their own destiny. Complete outside authority imposed on liberated and enemy peoples without any participation by them will not be