common sense to nearly all of us. Neither the wild-eyed "Red" nor the "Economic Royalist" is popular with the mass of the people.

But when crisis comes, the conservative majority disappears. We take sides, and we recognize but two sides. At such a time, you are told that you must be for Hitler or for the Reds. You must be for Supreme Court reform or be Anti-New Deal. In Labor ranks you are a follower of Green or of Lewis.

It was the same in 1918. Either you approved entrance of the United States into the World War or you were pro-German. In times of national stress, the middle road, the compromise, the neutral stand may be gradually abandoned. It is hard to keep a cool judicial attitude during a war fever.

Partly this is because the extremes recruit young zealots, youths who would lay down their lives for their ideals. Partly it is because the extremes are picturesque and they manufacture strong propaganda.

This propaganda builds up a picture of the other extreme as a huge and powerful monster. The Bolshevik Menace takes on definite form of a great beast with tentacles like an octopus. Only the power of a totalitarian state can grapple with such a creature, you are told.

In the propaganda of the communist, the iron heel of the dictator is likewise personified. Only by wiping out capitalism can this overlord be robbed of his crushing power.

Radio Takes Part

Perfection of the radio has made it possible to hear the voices of London, Rome, Berlin, Paris and Praha within the space of a single hour.

From Paris I hear the world news as the French view it. I turn my dial. From Berlin comes a voice speaking precise English. He tells of "sadistic" officers of the Czech government and their "torture of Sudetens." These "sadists," I hear, go into a little Sudeten town, first drain the little lakes so as to destroy possibility of fire control and then set fire to the homes. Sudeten men are driven from their homes. Their women and children, left defenseless, are "frightfully mishandled before being thrown into jail."

I have only to turn the needle of my dial a hair's breadth to bring in the voice of an English woman. She describes a trip through the Sudeten area which "was so peaceful that I found it difficult to believe that it was the center of such a crisis."

The voice of Praha itself denounces German propaganda and tells of attacks by men fully armed with tools of war made in Germany.

It is pleasant to turn again to London and find that at least a part of Europe is still interested in Rugby results.

The present easing of the European tension does not necessarily bring any moratorium on war propaganda.

There will still be those who seek personal gain by fomenting hatred of man against man while preaching peace and urging a "war to end war."

Science News Letter, October 8, 1938

PUBLIC HEALTH

Better Health Seen As Result Of Air-Raid Threats

If City Residents Should Move Out to Country They Would Benefit If Proper Precautions Were Taken

THE threat of air raids of Paris, London and other large European cities may reap a harvest of vastly better health for the people now living in these cities.

The French and British governments, have emergency plans for moving Londoners, Parisians and other city residents out into the country where they may be safer from bombs and poison gas.

Health as well as safety would be served by such a move, Dr. Robert Olesen, assistant surgeon general of the U. S. Public Health Service, believes.

Horrible pictures of the devastating epidemics of smallpox, typhoid fever, cholera and typhus fever that attended mass movements of populations in the past come to mind when the question arises as to the effect on health of present day evacuation of Paris, London and other large cities.

If the residents of these cities are scattered over a considerable area, the evacuation can be done without any danger to health, Dr. Olesen believes. In fact, he added, if there is a long-drawn-out war, the end result of the emptying out of the cities will be better health for all those moved.

Dangers to health, when large masses of people are moved, arise from lack of sanitation and overcrowding. When sanitary facilities are lacking there is danger of typhoid fever, cholera and the dysenteries. With overcrowding there is danger of influenza, meningitis and many other communicable diseases.

Modern health departments, such as the British Ministry of Health and the French Ministry of Hygiene and our own federal health service have the means and the knowledge of providing pure water, milk and food supplies and sanitary sewage disposal even in emergencies.

When thousands of refugees were hastily assembled in emergency camps during the Ohio-Mississippi floods, Dr. Olesen pointed out, no epidemics occurred. In fact, there were fewer cases of communicable diseases in the affected regions during and after the floods than there are in those regions in normal times

People evacuated from Paris, London and other cities to escape air raids would probably have to live at first in tents and temporary shacks, as refugees from floods or fire must live. These may be uncomfortable but they need not be unhealthful, Dr. Olesen said.

When the city residents are moved to these emergency camps they will all undoubtedly be vaccinated against smallpox. Many or all may be given antityphoid fever inoculations. The children will be given diphtheria-preventing toxoid or toxin-antitoxin. Many persons who have never been vaccinated will get this extra health protection from the move out of the city.

The change from crowded, damp and sometimes insanitary tenements in the cities to the country with its fresh air and more abundant sunshine is an additional health benefit Dr. Olesen sees in the move.

Nurses and physicians, serum for diagnosing and treating pneumonia, and for treating meningitis and tetanus (lock-jaw) will be needed as well as food and shelter if the city people are moved into temporary camps or barracks. These added health safeguards will undoubtedly be provided.

The distress of being uprooted from

their homes and knowing that these are in constant danger of destruction is a distinct danger to mental health, Dr. Olesen pointed out. This can be overcome by providing diversion and occupation.

Many mothers and home makers improved their knowledge of cooking, child-care and home hygiene while they were living in refugee camps during the Ohio-Mississippi flood. This benefit to health was a result of nutrition and similar classes organized by the Red Cross to give occupation to the women in the refugee camps.

Final health benefit seen by Dr. Olesen as following the wartime evacuation of the cities is the possibility of returning city dwellers after the emergency to homes that are much more healthful than those they formerly occupied. This has been accomplished in the flooded areas and can be done in the warthreatened cities. Many homes may be destroyed by bombs, as many were by flood waters. When they are rebuilt, provision can be made for better sanitation and more sunshine and air.

Science News Letter, October 8, 1938

GEOLOGY

Submarine Volcano Found Off California Coast

SUBMERGED volcano, in water two miles deep off the coast of California about 150 miles southwest of Catalina, has been discovered by an expedition of the U. S. Coast and Geodetic Survey. Prof. W. F. Shepard of the University of Illinois, at present working at the University of California's Scripps Institution of Oceanography, determined the nature of the submarine mountain, which has two craters. Whether or not it is active has not yet been learned.

Science News Letter, October 8, 1938

ZERO TO EIGHTY

by Dr. E. F. Northrup

The Inventions and Reflections of an Eminent Scientist and Inventor of the Ajax Northrup High Frequency Induction Furnace—Life from 1920 to 2000 A. D.—Future Space Ships—Possibility of Interplanetary Travel—Electric Gun of Tomorrow.

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AERONAUTICS

Millions Spent on Aviation Will Show Ghastly Results

European Laboratories Have Invested Far More In Research Than Has America; Return Not in Cash

EAVY European expenditures for aernoautical reasearch, which far outstrip American budgets devoted to the improvement of military aircraft, will be repaid a thousandfold when war breaks out. But the payment will not be in dollars and cents. It will be made in a coin of a vastly different kind.

Behind the 20,000 military aircraft poised at European airports for the command to take off on destructive military missions are scientists who have created more efficient aerial means of destruction at a frenzied pace dictated by the totalitarian states they either serve or fear they must fight.

Many more millions are known to have been spent by European governments on research in military aeronautics than by the U. S. government, though any estimate of the exact amount would be the wildest sort of guess.

Research plants that dwarf the National Advisory Committee for Aeronautics' laboratories at Langley Field, Va., have been turning out improved planes, better bombs, more efficient armament and war-time aeronautical accessories in a bewildering flood.

Such laboratories include Guidonia, near Rome; the magnificent facilities of the Deutsche Versuchsanstalt fuer Luftfahrt (German Research Institute for Aeronautics) at Adlershof; the Royal Aircraft Establishment at Farnborough in England; the Aerodynamics Department of England's National Physical Laboratory at Teddington and others that have either sprung up or been greatly expanded since the world became acutely conscious of the war menace half a dozen years ago.

Not more than \$3,000,000 is spent each year in the United States for government-supported military aeronautics research, a small sum compared to expenditures in any single major European country. The National Advisory Committee for Aeronautics' 1938 budget totaled but \$1,733,850, while smaller amounts were spent by the U. S. Army Air Corps and the Navy for developing new types of craft.

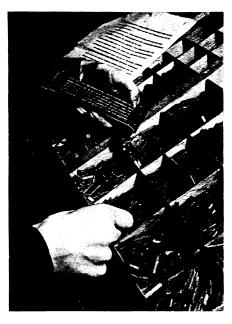
The difference is shown in the fact

that European research has actually progressed at a faster rate than in this country during the last few years. Once markedly behind America in important developments, European countries have in some cases actually caught up with the United States. One such country is Germany.

Material testing has occupied a prominent place on the research programs of European laboratories, for raw materials are more difficult to get on the Continent and in England. Consequently more attention has been paid abroad to development of substitutes for aluminum alloys that are preferred in the United States almost to the exclusion of other substances.

Science News Letter, October 8, 1938

Cleaning up a wishing well in a national park reservation, employees recently removed 700 objects—from bobby pins to chewing gum—placed in the well by wishful tourists.



NEW TYPE

This is how the new plastic type is set. At present it cannot be set on the linotype machine.