## World Conquest For Ideals Must Be Slogan For Democracy

## To Think Americans Can Be Swayed by Foreign Talk Is False Assumption of Folklore, Scientist Says

THE BILL OF RIGHTS must become more important than the refrigerator if the Nazi war of ideas is to be wiped out, Dr. Mark Graubard, physiologist in charge of industrial education for the Defense Health and Welfare Service, said. In addressing the American Academy of Arts and Sciences in Boston, Dr. Graubard made it plain that he expressed his own views and not any Government views or plans.

Democracy should not be on the defensive in this war of ideas, Dr. Graubard told his audience.

'World conquest must be democracy's slogan," he declared. "Every corner of the globe must come under its rule and every corner will subsequently have to be guarded against infection.

Worries about the swaying of our people by enemy propaganda are needless, Dr. Graubard indicated. To think that people can be fooled and manipulated at will by words properly handled is a false assumption by those under

the sway of the folklore of radicalism. The lessons of anthropology and history disprove this notion.

'Man lives within the frame of culture patterns and belief patterns which he finds consistent and logical," Dr. Graubard said. "Changes in these patterns he opposes at the beginning, and often resists for hundreds of years.

People do not give up the caste system, slavery, belief in astrology, in witchcraft, racial superiority, prestige values, democracy and similar belief patterns because of arguments or words no matter how skilfully they are pre-

"On the other hand, we know that there is a flux in beliefs, which have their periods of rise and decline. As illustrations, we might cite the course of astrological belief among scientists, the witchcraft delusion of the Middle Ages, the rise of nationalism and racialism.

"It is a fact that during the eighteenth

century, democracy spread like wildfire through Europe and even Napoleon could not stop the spirited diffusion of the slogans, liberty, equality and fraternity. People were inspired. Democracy was a dynamic faith, a hope and a goal.

"In the nineteenth century, the passion of this faith was somewhat diminished perhaps for several reasons. The good it brought was taken for granted and, with the rise of science and social progress, there was great stress of mechanism in science and philosophy and of materialism in society. The refrigerator became the chief goal and the truth and wisdom of the Bill of Rights were seldom referred to or remembered.

"Democracy must rediscover and strengthen the old faith which led to its victory in the past and to the inspiration of millions all over the world."

Science News Letter, May 23, 1942

## New Method for Making Cylinder Heads Cuts Weight

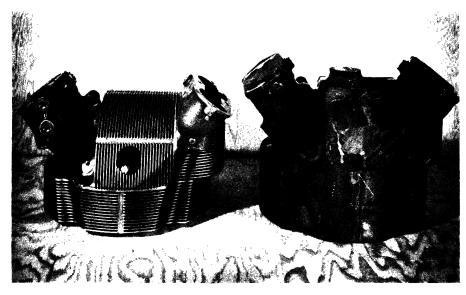
See Front Cover

**R**EDUCTION of weight in airplane engines to less than one pound per horsepower, through the Wright Aeronautical Corporation's new method of forging cylinder heads, promises to give American airplanes a considerable edge over enemy combat aircraft in speed, altitude, load and range.

The new forged heads are made by a process of extrusion through a die, and nine separate drop-hammer operations are eliminated. The cooling fins are cut on the exterior of the cylinders by a high-speed milling machine.

The new head allows twelve to fifteen per cent increase in power output without weight increase. The new development is applicable to the big 2,000 horsepower engines that power such ships as the Douglas B-19 bomber.

Science News Letter, May 23, 1942



FINISHED AND ROUGH

The forged cylinder head on the right is made by extrusion through a die. The finished head at left shows the cooling fins which are cut on the exterior by a high-speed milling machine. The new machine for this purpose, shown on the front cover, is said to work with the speed of a wood-working machine.

## RADIO

Saturday, May 30, 1:30 p.m., EWT

"Adventures in Science," with Watson Davis,
director of Science, over Columbia Broadcasting

Dr. A. Newton Richards, chairman of the Committee of Medical Research, Office of Scientific Research and Development, will talk on Medicine and the War.

Tuesday, May 26, 7:30 p.m., EWT Science Clubs of America programs over WRUL, Boston, on 6.04, 9.70 and 11.73 megacycles.

One in a series of regular periods over this short wave station to serve science clubs, particularly in the high schools, throughout the Americas. Have your science group listen in at this time.