

oratories of the American Cyanamid Company, at the meeting of the American Society for Testing Materials in Atlantic City.

The test consists in allowing a stream of finely divided carborundum to fall from a height of 25 inches on the test piece, which is inclined at an angle. A definite amount of the abrasive is allowed to fall, producing a dulled spot. The loss of gloss as compared with the

original gloss is then measured with a glossmeter. This is an instrument used to measure glossiness of paint and of other surfaces.

Several materials were tested in this way giving ratings quite different from those obtained by the scratch and hardness tests, but no one final method was decided upon. However, the "mar" test will undoubtedly help in keeping visibility clear for our air-fighters.

Science News Letter, July 4, 1942

POPULATION

Long-Range Bomber May Bring Population Increase

Threat of Air Attack May Do Away With Large Apartment Houses and Crowded Living in Big Cities

THE BIG long-range bomber which has killed so many civilian fathers, mothers, and little children in this new kind of war may have a part in increasing the number of babies in tomorrow's world.

This prophecy is implied in an analysis of what modern warfare will do to the location of industries and workers presented to the Population Association of America by Dr. Warren S. Thompson, of Miami University.

As long as the threat of attack from the air hangs over the heads of the people, military considerations will dominate all policies influencing the distribution of the people, Dr. Thompson predicted at the Association's meeting in Atlantic City.

The threat of the bomber will very likely do away with the large apartment house which will be replaced by smaller apartment houses with larger open spaces about them and by detached houses — pleasanter places for children to live and grow up.

New factories are likely to be located in outlying regions away from big cities — more healthful places in which to live and grow old even when the bomber is not a constant menace.

When the Soviet Union undertook its first five-year plan, military considerations played a large part in determining where new industrial areas were to be established, Dr. Thompson said.

"In the summer of 1930 I travelled rather extensively in the Soviet Union," he said, "and from many sources I heard that the danger of invasion from

the West was the dominant factor in locating so many of the new industrial cities along the Volga and in the Urals. There was not the least hesitation anywhere in avowing this motive. Today we appreciate the foresight shown in this planned distribution of industry."

However, the new Soviet cities were not themselves decentralized nor were the factories built in small units less vulnerable to crippling damage from air bombardment, Dr. Thompson pointed out. The Russians relied, rather, on distance to insure the safety of their new factories.

More recently, Germany has gone farther. In population figures, the secret location of new war industries in small cities and rural areas can be detected, since those areas are growing faster than are the big German cities.

Rumors also point to the fact that Germany has decentralized the industrial centers. This means the spreading out of population, too. The area covered by larger cities will be increased and businesses which have been tightly packed together in downtown areas will be scattered.

Countries like Russia, America and China can place more reliance on distance rather than decentralization for safety. Germany, Italy, France and Great Britain cannot.

Such policies, intended to protect war production, inevitably have an indirect effect on the lives and happenings of the people—an effect which incidentally is favorable to democracy and unfavorable to dictatorships.

● RADIO

Saturday, July 11, 1:30 p.m., EWT

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

Dr. Steuart H. Britt, director of the National Research Council's Office for Psychological Personnel, will discuss "Psychologists in the War."

Tuesday, July 7, 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.

Privacy for the family and for individual members of the family in any one home is one of the important elements in the American way of life, Dr. Thompson declared.

"It is one of the fundamental differences between the American social structure and the totalitarian. The leaders in the dictatorship do not want the masses of the people to have any private life. They want them to live intimately with other people, to live merely as a cell in the national organism. It may very well be that our marked individualism, particularly among farm people, is in part the result of the type of land settlement which predominated in this country until near the end of the nineteenth century, but the crowding together of greater and greater masses of people in cities and the crowding of the majority of families into one, two or three rooms cannot be looked upon with equanimity by one who still believes that people are entitled to a certain measure of privacy both as families and as individuals."

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