



SPHERICAL MAPS—A nesting series of concave and convex maps, arranged on frames which swing about a central axis, is being completed. Such an atlas of spherical maps will be used by the Science Museum in St. Paul to show the course of the war.

of the Museum's map displays have used large circular segments of globes, which in their entirety would be over 10 feet in diameter. Most globes lose part of their usefulness by being too small.

Since large globes will not go through the average doorway, the globes are cast in separable hemispheres. The Science Museum has successfully evolved a method of casting hemispheres and globe segments in basin molds prepared on a plaster-of-Paris master form.

The globes and spherical maps are made of a papier-mache composed of small squares of brown paper dipped in a dextrin-tempered plaster mix. The smooth surface is obtained during cast-

ing by brushing in a thin layer of the soft casting medium before laying the paper. The maps are reasonably durable and the material not particularly affected by atmospheric changes.

Due to these developments, the use of large globes is becoming increasingly practical. The Navy ordered 40-inch black-board-surfaced globes for training aerial navigators. And the blackboard-surfaced globes with and without the mechanical mounting are already being used in schools, colleges and by airlines so that people can trace their real or imaginary trips on a globe which truly represents the curvature of the earth.

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ENGINEERING

Engineering Guidance

➤ AFTER seeing the miracle which has been performed by American industry during this war, South American young men are turning to the United States rather than Europe for engineering educations, Anibal Santos, formerly mechanical engineer of Empresa Electrica del Ecuador, Inc., Guayaquil, Ecuador, and now associated with the Combustion Engineering Company, reported at the meeting of the American Society of Mechanical Engineers. Only recently have South Americans begun to study engineering in North America, he pointed out.

The problems faced by American engineers in Latin America are complicated by the fact that there are relatively few technical men there, as compared with the legal and medical professions, Mr. Santos stated. It was not until recent years that South America began to think of industry and manufacturing, and therefore until recently there was little interest in the engineering profession.

Praising the Good Neighbor Policy, Mr. Santos declared that there is still much more to be accomplished. Closer intermingling with local people and fa-

miliarity with the languages of the country will be helpful in better understanding, he predicted.

Winning Good Will

➤ ACCEPTING speaking engagements to tell Brazilians about life in America, familiarity with Brazilian labor laws, import regulations, knowledge of the country's trade journals, a willingness to give technical help, were among the means suggested to the meeting by Chandra R. Saksena, of Rio de Janeiro, to win the good will of Brazil and its people.

Addressing his remarks to Americans who expect to engage in industrial and business enterprises in Latin America, he pointed out a number of do's and don'ts to observe while in Brazil. We must remember, he stated, that Brazil is a new and rapidly developing country. It lacks the complex organization of the United States and other older nations. Brazil's Latin cultural background naturally presents a pattern of different habits and customs.

He also suggested that Americans refrain from meddling in politics or religion. "We have a good motto which we tell all our foreign friends as they arrive," he stated: "If you want to keep out of trouble, keep out of politics."

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MEDICINE

Anti-Germ Activity Found In Buttercup Juice

➤ THE POSSIBILITY of a remedy like penicillin being developed from buttercup juice appears in a report by Dr. Beatrice Carrier Seegal and Dr. Margaret Holden, of Columbia University College of Physicians and Surgeons in *Science*, (April 20.)

Growth of streptococci, staphylococci, pneumonia, anthrax and tuberculosis germs and a number of other microorganisms that cause sickness in humans was stopped by juice pressed from buttercup leaves, stems and blossoms. A steam distillate of this pressed juice was also effective. Anemone juice gave similar results.

The use of the buttercup juice as a remedy in infections was prevented by its toxicity for laboratory animals. The distilled juice is less poisonous than the whole juice. Chemical methods are now being developed, the scientists report, in an effort to separate the poisonous from the anti-germ substances.

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