

GENERAL SCIENCE

Physiologist Named President Of American Association

Prof. Walter B. Cannon Noted for Research on Glands And Active in Fight for Freedom of Scientific Work

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SOcially conscious scientists, who represent a rapidly growing wing of organized researchers, now have among their number the president of the largest general scientific organization in the United States, the American Association for the Advancement of Science.

He is Prof. Walter B. Cannon, eminent Harvard physiologist, elected at the Richmond meeting of the A.A.A.S.

Actively identified with the campaign to send American doctors, nurses and medical supplies to war-torn Loyalist Spain, Dr. Cannon is co-chairman of the North American Committee to Aid Spanish Democracy and the Medical Bureau to Aid Spanish Democracy, leading pro-Loyalist groups. He has joined in militant anti-fascist activity since he became chairman of the Medical Bureau when it was founded in November, 1936.

Dr. Cannon, who is 67, is an international figure in the world of science. Since 1897, the year after he graduated from Harvard but before he finished his medical course, he has done outstanding original work in the field of physiology.

He has made important contributions to knowledge of digestion, the nervous system, the ductless glands and the effects of emotion upon bodily processes.

He showed that in rage, fear or anger, the emotions which prepare the animal for flight or fight, the digestive and sexual functions are immediately inhibited and the adrenal glands pour into the

blood large quantities of one of their hormones, adrenalin or epinephrin. As a result of this adrenal action, sugar is mobilized from its storage place in the body to counteract the effects of muscular fatigue, and the clotting time of the blood is speeded up. All this instantaneous preparation gives the animal or man a "wonderful capacity for offense, defense, flight, and repair of injured tissues."

During the World War, Dr. Cannon, working with another physiologist, developed the gum acacia treatment of shock.

Since then he has discovered a new hormone, sympathin, which is produced by smooth muscle, and has an effect on the body similar to epinephrin.

Recent investigations have been on the sympathetic nervous system and on high blood pressure.

Besides conducting original scientific investigations, Dr. Cannon has been a leader in medical education and in the fight for the freedom of medical research.

His term of office as president of the A.A.A.S. follows that of Prof. Wesley C. Mitchell, Columbia economist, the first social scientist in many years to head the A.A.A.S. The elections of both men call attention to the significant advance in scientists' interest in every day affairs and in what the world does with their inventions and discoveries.

A close friend of Premier Juan Negrin of Loyalist Spain, Dr. Cannon has served

the Loyalist aid organizations actively. He is also chairman of the Boston Chapter of the national organization of which he is one of the heads. Speeches by him on behalf of the Loyalists have received wide circulation in pamphlet form.

A recent gift of nicotinic acid, new pellagra treatment, to Premier Negrin, though paid for by 39 scientists, was sent in Dr. Cannon's name. Premier Negrin is also a well-known physiologist. The nicotinic acid gift provides the first occasion on which the treatment, which has thus far given encouraging results, is being tried on a large scale. Pellagra is a diet deficiency disease, common in America's south and from which thousands of Madrid residents are suffering.

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Dangers Seen in Applying Science to Human Affairs

AS the economic and political conditions of the world become more disturbed, there is a tendency to look more and more to science for factual and social guidance. In many cases, especially where sharply delineated areas of non-emotional activity are concerned, scientific facts and procedures are directly helpful and pertinent without any major dangers.

The world has seen some shocking misinterpretations or perversions of science, such as the race doctrine of the Nazis, the misconception of thermodynamical principles called technocracy, the empirical materialism that flourishes in Moscow, and the more wide-spread idea that Darwin's "survival of the fittest" justifies war.

There has been great concern in scientific circles over such dangers, coupled with a feeling that scientists themselves should do something about this problem of science's social aspects. Aside from the scientists who are emphatic and adamant in holding to the idea that science should not concern itself with applications or difficulties in politics, religion, etc., there are also highly competent experimentalists who feel strongly that in social application scientists should be sure that haste is made slowly.

This viewpoint is put neatly by Prof. G. A. Boutry of Paris, who contends that a proposed scientific experiment must be considered in the light of whether it has any limitations, whether it can be stopped and started again at will, and whether it will endanger in any way the human commonwealth already acquired.

It is evident that caution is necessary,

Urges Spirit of Truth Seeker

Dr. Walter B. Cannon, Harvard physiologist, elected president of the American Association for the Advancement of Science at its Richmond meeting, issued at the request of Science Service the following inaugural statement, to his fellow scientists and the public:

"Thousands of teachers and investigators in all aspects of scientific endeavor have abundant opportunities for diffusion of the spirit of the truth seeker—a spirit much needed in our distressed world. It stands for tolerance as opposed to bigotry, for the welfare of all mankind as opposed to exclusive national and racial interests, for fighting the foes of humanity—misery, ignorance and disease—as opposed to human slaughter by human beings who abominably pervert scientific discoveries. I honestly express the hope that the coming year may see both noteworthy progress in science and a wider spreading of the scientific spirit."