

GENERAL SCIENCE

Science Does Not Make War But Peace and "Good Life"

SCIENCE, instead of promoting war, actually holds the key to the ultimate solution of the problem of peace, Dr. C. C. Furnas, Yale professor of chemical engineering and author of "The Next Hundred Years," told the American Institute of New York City in a recent address.

"It takes a long time view to believe this," he explained, "but it is true even if slow."

Some feel that science is merely an instrument of suicide because of its contribution to the deadliness of war, he said. The mob-stirring abilities of super-nationalistic maniacs does not seem to him to be dependent in any way upon the effectiveness of science. They can act more quickly than they used to but they will be eliminated more quickly too.

"Modern war with its destructive potentialities is no more destructive of life than the old-fashioned kind—with its attendant pestilence," Dr. Furnas continued. "The Thirty Years War with the crudest of weapons succeeded in laying waste to northern Europe and directly causing the death of between

eight and twelve million persons, more through starvation and pestilence than combat. A race bent on suicide will turn the trick if it has to resort entirely to stone axes.

"Modern equipment increases the speed of the reaction but doesn't change the final result. Science further holds this important ace—it has the ability to reduce economic pressure because productivity per man, per acre, per hour, per anything is rapidly increasing, hence in the long run there will be a gradual diminution of economic pressure in certain groups. Since Germany can and is making nitrate fertilizers from the air, artificial rubber from limestone and coke, motor fuels from coal, there is less high pressure demand for these commodities than there would otherwise be. The demands of peoples are gradually being limited to a few basic commodities such as coal, iron, lumber, cotton and potash. It simplifies the picture of international relations and demands and hence raises hopes of peaceful solutions.

"Economic pressure is one, if not almost the sole fundamental cause of

war. It is only through the application of science that we can hope to have a universal standard of living high enough to ease this pressure which is the virus of the greatest mental disease of the world."

Dr. Furnas said that science and technology are taking us toward a longer and better life and doing it relatively swiftly. If the world can for a short while keep the superpatriots from cutting the jugular vein of civilization, he believes we shall find applied science leading us into the wide rolling sea of the good life.

"Only the most rabid optimist could say that life is yet 'good' for the average man," he said, "but give us time and it will be. The critics of science are impatient. The scientists are just beginning to get steam up. With the help of the crowd, or perhaps in spite of it, they will soon begin going places."

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BIOGRAPHY

Gregor Mendel Regarded His Life as a Failure

JOHANN Gregor Mendel, mitred abbot of the Monastery of St. Thomas in Brünn, founder of the modern science of genetics, rated himself as a failure. The "breaks" were against him from early boyhood, nothing that he undertook seemed to prosper, and his greatest apparent success only defeated the end which he hoped it would promote.

This somewhat gray picture of one of the most significant lives in the history of science was presented by Prof. Samuel W. Fernberger of the University of Pennsylvania in a discourse before the Franklin Institute of Philadelphia. That the world now universally acclaim Mendel can not really redress the balance, suggested Prof. Fernberger: "Posthumous praise is poor consolation indeed!"

Mendel's hard luck began with his father's bad judgment. The elder Mendel, an orchardist, had bought himself land-poor, so that when young Johann was sent away to school he had so little to eat, much of the time, that he was often ill. In later adolescence, he tried to work his way through college by tutoring, and didn't have a great deal of success at that.

He finally gave up hopes for a secular career, and presented himself at the Abbey of St. Thomas as a candidate for admission to the Order. Here he had his only two favorable



GLOW IN BLACK LIGHT

Invisible light rays of ultra-violet are used at the Humboldt Mine, Mill City, Nev., to detect patches of scheelite, one of principal sources of tungsten. Frequently scheelite is nearly colorless and looks quite like the quartz with which it is associated. When irradiated with ultra-violet rays, it glows with characteristic fluorescence.