

that if the public's money is spent the results of the investigation should be made available to all by the government.

Decisions upon these differences, important as they are for the future of American science, begin to seem somewhat unimportant when compared with the vastly larger decisions that will have been made should the May bill on atomic energy control in its present form be passed by Congress.

Under this bill potentially complete control of almost all chemistry and physics, and almost any other branch of science, is placed in the hands of a presidentially appointed commission of nine members, practically secure from removal during their nine-year terms, who in turn appoint an atomic energy administrator who wields unparalleled powers for peacetime. He can force the firing of anyone concerned with any phase of the work without being challenged in the

courts. He can seize any property in the nation. He can declare any field of industry or science to come under his control.

Such an atomic energy act would be a declaration of an atomic bomb armament race, and, in fact, the mere consideration and tacit Presidential support of it, is a challenge to other nations with which the United States has been allied, particularly the U.S.S.R.

It is not alone a question as to how we here in America consider this proposal. We need to know how it is received in Moscow and we can guess that it can play a large part in stopping the building of world cooperation so urgently needed.

The atomic bomb is explosive enough, but the attitude toward atomic energy control may start a chain reaction of international rivalry that we will not be able to stop.

Science News Letter, October 27, 1945

onium can be learned in five years' work or less by another nation, such as the U.S.S.R., they estimate, and for that reason it is considered impractical to try to keep the atomic bomb the exclusive property of the United States, Britain and Canada. Moreover, there is the danger that intensive research in rival laboratories may bring forth new methods of atomic energy release which may have immediate military application.

Science News Letter, October 27, 1945

"Aquiculture" is raising fish in farm ponds on fertilized water-plants.

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PHYSICS

Atom Research Threatened

Secrecy proposals for all atom research threaten continued investigations. Scientists organize to express views before control is imposed.

► AMERICA is in danger of a stoppage of fundamental researches on the atom, the sort of scientific inquiries that gave birth to the atomic bomb.

Scientists by the thousands, those who have been working at the research Shantri-Las of Los Alamos, New Mex., Clinton, Tenn., Hanford, Wash., and Chicago, Ill., are concerned about the secrecy provisions in the proposed atomic energy control bill and the chances of having a \$300,000 fine or 30 years in jail held over them if they misjudge whether their researches should and should not be announced.

Rather than work under such restraint, many of them, as Dr. Harold C. Urey, Nobelist and heavy water discoverer, has suggested, will turn to safer fields of inquiry such as biological and physiological chemistry. Government control would apply to private, university and industrial investigation in nuclear physics and related chemistry because a license would have to be obtained by every investigator.

If this happens, the brilliant war researches that have produced the practical explosive release of atomic energy and the prospect of application of these researches to peacetime use, will be hampered.

Even now the research work at the government laboratories has slowed down tremendously. The scientists feel that they are not encouraged to push on in experiments that might be productive of new weapons and applications to non-military uses.

The return of a considerable number of the scientists to university and industrial laboratories was expected after the end of the war, but the present exodus to unrestrained research and teaching may deplete the staffs of the atomic laboratories to a dangerous degree.

The attempt in Congress to railroad the atomic control bill with only one day of hearings with pro-control government witnesses only heard has impressed the atomic scientists with the necessity of making their own expert opinions known.

Spontaneously in each of the major centers of atomic research, Oak Ridge, Los Alamos and Chicago, groups composed of more than nine-tenths of the scientists there, have organized and formulated statements which point out the necessity for international control of the atomic bomb. The secrets of "know-how" in fabricating the bombs from plu-