The Hydrogen Bomb

THE WORLD IN DANGER

WOMEN'S INTERNATIONAL LEAGUE FOR PEACE AND FREEDOM

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THE HYDROGEN BOMB AND THE WORLD IN DANGER

The W.L.I.L.P.F. continues to stand fast by the principle that war itself, as a means of solving international conflicts, should be strenuously opposed. The experiences of the first world war led to the founding of a specific committee directed against deadly warfare. Our aim has been more effectively to meet the new and ever-increasing perils of:

(a) the use of chemical, physical and even bacteriological science for mass destruction,

(b) the combined effect of these means with the fast development of air forces,

(c) the change of emphasis in attack on the civilian population.

The committee has been studying these methods of attack, the same time keeping in touch with the W.L.I.L.P.F. as a whole. Experts were summoned to a conference at Frankfurt-on-Main. The results of their work, as given in reports to this conference, have now been widely disseminated.

The second world war far surpassed even the gloomiest forebodings. So the W.L.I.L.P.F. once again found itself confronted with the need to investigate the latest developments of atomic, chemical and biological warfare. The latest atom-splitting and H-Bomb trials have illuminated the situation with lightning intensity, and consequently the Executive decided to reconstitute our Committee and publish this pamphlet. Here is a statement, based on scientific facts, explaining why the testing of atom and H-bombs, and still more the unlimited use by both sides of such means of warfare constitute a grave danger to the whole world.

THE NEW WEAPONS THREATEN THE WORLD

The gruesomeness of the new weapons, which are no longer directed against individual enemies but against the whole population of the earth, derives from the following factors:

(a) THERE ARE NO LIMITS TO THE SPREADING OF RADIO-ACTIVE ASH.

This can be seen by the falls of volcanic ash following volcanic eruptions all over the earth's surface. For example, after the famous eruption of Krakatoa in 1883, fine particles which had reached the higher atmospheric levels spread over the earth's surface and made their presence known by unusual light effects at sunrise and sunset. In the space of 8 weeks the particles were distributed over practically the whole area between 30° N and 46° S. In the old world, they spread from Scandinavia to the Cape of Good Hope. In central Europe the presence of volcanic ash in the atmosphere could still be proved a whole year afterwards.

The fact that radioactive dust behaves in much the same way can be scientifically proved. According to the Zeitschrift für Naturwissenschaften (Band 40, 1953, S. 541), radioactive substances, which derived from the U.S.S.R. atom bomb tests spread over the surface of the earth, and made their presence known by unusual light effects at sunrise and sunset. In the space of 8 weeks the particles were distributed over practically the whole area between 30° N and 46° S. In the old world, they spread from Scandinavia to the Cape of Good Hope. In central Europe the presence of volcanic ash in the atmosphere could still be proved a whole year afterwards.

(b) SCIENCE STRESSES THAT their radio-activity was often not decreased sufficiently to be ignored.

Furthermore it was found in various places, that the intensity of the radiation produced was quite considerable. As the explosive power of the atom bomb increases, the danger becomes proportionately greater. In view of these facts, the following statement by Admiral Strauss seems a strange kind of reassurance. On April 1st, 1954 the Frankfurter Allgemeine Zeitung reported Admiral Strauss as having admitted at President Eisenhower's Press Conference that the radio-activity present in the atmosphere had been somewhat increased by the test of March 1st. This, however, had been the case after every similar test conducted both by the Americans and the Russians: This strange kind of logic underlines the increasing danger, and if one adds to this the unparalleled development of atomic weapons, one can imagine the frightful dangers which threaten even the most distant places of the earth.

Another relevant statement comes from Professor Stuhls. Director of the 1st Department of the Institute of Physics at the University of Zurich (as published in the Neue Zürcher Zeitung Nr. 1609, 6th May, 1954): "The transportation of radio-active material can happen through the agency of the prevailing wind which carries the radio-active dustcloud (the 'mushroom') of the explosion in the upper layers of the atmosphere, with a small decrease in density over wide areas. Where it would eventually fall as dust-rain or be deposited in the human body by breathing of the contaminated air.

In fact the same research worker measured the radio-activity in Caltutta after the March explosion. On top of the Komstock Hill at Heidelberg, air was examined over a period of several months. It was passed through a collecting filter every second day, and its radio-activity determined with the help of a counter tube. "Naturwissenschaften" reported the tracing of an active component to a mixture of fission products due to atomic explosion. These reached the recording point in widely varying quantities, depending on the weather.

So-called monitor stations like the above have been recommended by Professor Stuhls, who, unlike the W.L.I.L.P.F., still pursue the phantom of "protective measures". Their main object would be to watch over the radioactivity in the air, and they could furnish valuable information about the appearance and indulgence of radio-active fusion products. Professor Stuhls adds: "Should such a station determine that the radio-activity of the air had reached a dangerously high level, special measures should be taken to protect the sources of drinking water in particular."

And if the control finds activity at a dangerously high level? What then? What is the relationship between the higher parts of the atmosphere and the lower parts of the air, the die of thirst or to perish from radio-active poisoning? For against this kind of contamination of the water even boiling is of no help.

And this is not all the story. The air we breathe, the water we drink, are already in constant danger of radioactive contamination. The radio-active rain which was registered in Sydney (Australia) —to leave out of account the many unrecorded instances of this kind—

This happens within such a short time that, e.g., particles of radio-active clouds — after they have entered the earth's atmosphere—can be found on the island of Bikini, of origin four weeks after the explosion, on the Bikini Islands, of 31st March, and on the island of Pohnpei of origin 3rd April, 1954.

Prof. Lene Meier has drawn our attention to the fact that the Heidelberg Station was originally set up to study horizontal currents of air. The first measurement of radio activity were taken 7 days after the Las Vegas bomb explosion of 5th May, 1953.
show clearly the danger to those countries, like Japan, which depend for their drinking water mainly on rain water supply. This further poisons the vegetation rice, sugar, tea, grass, fruit, etc., freshwater springs and cattle, and those that live on them.

b) Professor Staub believes the PLANT AND ANIMAL FOOD produced by the neighborhood of test stations for atomic explosions presents an even greater peril. "It is quite possible", Professor Staub says, "that fish and fish products for example, containing a significant amount of radioactivity could get into our country, without their dangerous contamination being discovered, as it were, by chance. The thoroughgoing, systematic examination of imported foodstuffs. This examination must be extended to include fish and other aquatic animals. For one can and has to believe that the injection of a tiny amount of fallout directly to the fish whose principal food is fish. The "Darmstädter Täglicher" of August 23rd, 1954, reported that Japanese Government officials had to confiscate a few days earlier the 10 tons of tuna fish--the entire catch of one of the fishing boats just returned from the Pacific--because of its high radioactivity. The total value of confiscated radioactive fish in Japan during August amounted to $120,000. "Basler Nachrichten", 7th Oct., 1954. We are not sure exactly how much, however, Prof. Klinseger of the College of Marine Science has proved by means of X-rays that the effect of radio-active foodstuffs on fish has very serious results. The reproduction cells particularly are damaged to an extent that the first generation is born normal and its eggs are completely sterile. We can easily understand that the consequence of this on the fish-species production of Japan and of the whole Pacific represents a menace of a peculiarly serious order. As Prof. Klinseger points out.

(1) POSSIBLE CONNECTIONS WITH NATURAL CATASTROPHES:

The coral atolls themselves, as well as the plant and animal world below the sea, if they are in the region of atomic tests, are exposed to radio-active pollution. Charles Darwin called the inhabited areas of the planet radioactive "sinkers" or "resettlers". The ocean life seems doomed to slow extinction through being used as a testing ground for atomic bombs.

If the coral reefs are not smashed up by the explosion itself, they will gradually perish from the radio-active poisoning of the tiny creatures which build it, within the wide region of sea contaminated by the bombs. If the power of the explosions is such that they can smash coral islands, one may at least what would happen if the force of such a bomb tore into the sea bed itself at any great depth.

The danger of a break-through of the sea, through crevices and faults in the sea bed to the fiery fluid of the earth's core is not yet acute, and the question whether it could happen with further developments of the H-bomb if certain geological conditions existed, can not yet be decided.

According to the Darmstädter Täglicher of 3rd and 4th April, 1954, the whole cargo of 22 tons of tuna found on the fishing vessel caught in the radio-active dust had to be discarded.

This would be a catastrophic first described by G. F. Rodinchev (the teacher of Lunin in the chemistry of modern chemistry) as the cause of coal fires in the ocean. The coal fire is situated in the region of the ocean.

The theory is described in an article by P. Lemay and R. H. Clever. The theory has been verified by the author of the ocean, even though there are indications of atomic energy that it is not possible. The theory has been verified by the ocean, even though there are indications of atomic energy that it is not possible. The theory has been verified by the ocean, even though there are indications of atomic energy that it is not possible. The theory has been verified by the ocean, even though there are indications of atomic energy that it is not possible. The theory has been verified by the ocean, even though there are indications of atomic energy that it is not possible.

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4 Regarding the patients of the "Lucky Dragon", serious damage was done to their blood-producing organs. The number of blood corpuscles fell by 50 percent, and the blood-building drugs, and there is a tendency to anaemia. Their state of health shows resemblance to that affected by the Hiroshima bomb, but of whom died.