

GENERAL SCIENCE

Oath for One Out of Five

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➤ ONE PERSON out of five in the United States has either taken a loyalty oath or been cleared for security as a condition of his employment, Prof. Ralph S. Brown Jr. of Yale University's Law School reported.

His views on how widely security and loyalty programs, both in government and private industry, affect every citizen in the country are outlined in a special issue of the *Bulletin of the Atomic Scientists* (April) devoted to analyzing the impact of these policies.

Taking the total labor force as 62,000,000, Prof. Brown estimates that 12,600,000 have "taken a test oath, or completed a loyalty statement, or survived some undefined private scrutiny." Resulting dismissals are less than one-tenth of one percent, he calculates, representing a "shocking waste of resources," since thousands are engaged in administering the security programs.

"It would not be at all surprising if the hunters should turn out to be more numerous than the quarry," Prof. Brown concludes.

Security-loyalty policies affect every major aspect of national life, from cutting down on competitive free enterprise to foreign policy. All authors of the 15 articles in the issue make suggestions for improving these programs, but not dismantling or discarding them.

The United States needs "to make secure what needs to be secure for the progress of national military strength and to let all else go free," Edward Shils, professor in the Committee on Social Thought at the University of Chicago, believes. Although there should be changes in existing security requirements, he says, the problem will be solved by a restoration of national self-confidence and common sense.

J. G. Beckerley, director of classification for the Atomic Energy Commission from 1949 to 1954, charges that competition in private industry is a fiction in the field of atomic energy. This lack of competition, he says, tends to spread into many other industries as the scope of government controls over information and security widens.

If private industry is to flourish, the present trend toward over-classification of information and more stringent control of personnel must be reversed. Mr. Beckerley is now a physicist with the Schlumberger Well Survey Corporation in Ridgefield, Conn.

How the Atomic Energy Commission has dealt with security problems since its foundation is related by John G. Palfrey, professor of law at Columbia University. In its early days, the agency learned to recognize

the balance between security by concealment and security by achievement.

More recently, it kept the "superstructure of its security system intact, but abandoned its moorings, and the system foundered." Most glaring example of this was the AEC's withdrawal of security clearance from Dr. J. Robert Oppenheimer, director of the Institute for Advanced Study, Princeton, N. J.

This case, Prof. Palfrey says, when viewed against the background of earlier AEC practices, leads to the conclusion that "almost everything of importance" accomplished until then had been discarded.

Case histories of several scientists who have had difficulties under the present system are presented by the Scientists' Committee on Loyalty and Security, with headquarters in New Haven, Conn. Concerning the Fort Monmouth Laboratories, they conclude that "whatever gains were made by the elimination of doubtful personnel were overwhelmingly offset by a decline in the effectiveness" of the laboratories.

Science News Letter, April 30, 1955

MEDICINE

Lung Cancers More Easily Transplanted

➤ HUMAN LUNG cancers can be more successfully transplanted to laboratory animals than other kinds of human cancers, Drs. Edward T. Krementz and Joseph A. Spedale of Tulane University School of Medicine, New Orleans, reported at the meeting of the American Association for Cancer Research in San Francisco.

Successful transplants of lung cancers occurred in 27.3% of the attempts, compared to 3.4% for breast cancers.

The fact that patient salvage from this disease is so poor, and the fact that the number of successful transfers is high by comparison with other cancers may, it was pointed out, indicate a significant characteristic of behavior existing in carcinoma of the lung.

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MEDICINE

Hydrocortisone Helps Hay Fever, Skin Trouble

➤ RUNNING, STUFFY noses of hay-fever patients can be relieved by a nasal spray containing hydrocortisone, relative of the famous anti-arthritis drug, cortisone.

Good results in 86 out of 100 patients were reported by Drs. John H. Burger and Joseph H. Shaffer of the Henry Ford Hospital,



PURIFYING TITANIUM — Enclosed in inert gas, a bar of titanium is shown being purified by a new method, called cage zone refining. As the bar is melted progressively from one end to the other, the iron impurities tend to remain behind in this method developed by Westinghouse Electric Corporation.

Detroit, at a New York Academy of Sciences conference in New York.

Unfortunately, patients have to go on using the medicine, since symptoms return within a week or two after stopping the hydrocortisone spray. Fortunately, however, the hydrocortisone is apparently not absorbed into the blood stream through the nose, so there are no side effects to limit the time that it can be taken in the nasal spray.

An ointment of hydrocortisone has given such good results in treatment of eczema in babies and other stubborn skin troubles that Dr. Victor H. Witten of New York University-Bellevue Medical Center, New York, told the conference it is "one of the most important recent additions to the list of topical medications for use in the treatment of diseases of the skin."

Science News Letter, April 30, 1955

CHEMISTRY

Anti-Blood Clotting Chemical From Seaweed

➤ KELP, A kind of seaweed, has furnished the basic material for synthesis of a new chemical to keep blood from clotting. Although not yet available commercially, this new chemical promises to be a relatively cheap medicine for such dangerous clotting conditions as thrombosis in which blood clots in veins.

The new chemical was synthesized by scientists at the Canadian National Research Council's Maritime Regional Laboratory in Halifax, N.S.

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