Krebiozen

On 2 Aug. Andrew C. Ivy, a former vice president of the University of Illinois, filed a $360,000 libel suit in the State Supreme Court, New York, against George D. Stoddard, former president of the University of Illinois. The suit is based on some 50 passages that are included in a book by Stoddard entitled *Krebiozen: The Great Cancer Mystery.*

The complaint explains that Ivy is studying Krebiozen, which he believes shows promise as a treatment for cancer, and that as a result of Stoddard's writings Ivy has been "shunned by scientists and medical doctors, excluded from their meetings and from the lecture programs to which he [has] frequently been invited in the past as a lecturer . . . and his professional papers on scientific subjects [have] been rejected by scientific journals."

The Krebiozen issue arose more than 4 years ago when the substance was first announced. Ivy's failure at that time to disclose the nature of the drug led to his suspension for 3 mo from the Chicago Medical Society. After both the American Medical Association and the National Research Council had reported unfavorably on Krebiozen, and after the submission of a report by a specially appointed university committee, President Stoddard banned further research with the material and arranged that Ivy take a leave of absence.

Several months later, on 31 Aug. 1953, Stoddard was forced to resign his presidency as the result of a 6-to-3 "no confidence" vote by the university's board of trustees. Some 20 department heads joined together to condemn publicly the action of the board and to thank Stoddard for his "stand for honesty in science and integrity in education." By early September Ivy had returned to his post as head of the department of clinical science, with the title of distinguished professor of physiology. He resumed his work with Krebiozen, but not under the auspices of the university.

Stoddard's book is an account of the controversy at the University of Illinois over Krebiozen. The manuscript was ready to go to press when, on 6 Apr., Judge Joseph Hurley of Massachusetts Superior Court issued an *ex-parte* restraining order to stop publication of the book by Beacon Press, Boston. *Ex-parte* means that the order was granted without hearing the case for the defense. In addition to Ivy, plaintiffs in the action were Stevan Durovic, who developed Krebiozen; his brother Marko; and the Krebiozen Research Foundation, an Illinois corporation.

Commenting editorially on the case, the Chicago *Tribune* said on 11 Apr.: "Restraint prior to publication is the most vicious form of censorship, held to be unconstitutional a quarter of a century ago by the United States Supreme Court." The publication date, originally 18 May, was postponed pending the court's decision. The 7 May issue of the *Publisher's Weekly* pointed out that the "restraining order stopping publication is believed to be the first of its kind in recent publishing history," and an editorial in the 25 June *Weekly* was entitled "Frightening Case of Censorship."

At a hearing on the application for preliminary injunction, the counsel for Beacon Press presented a vigorous demurrer asserting that to grant such an injunction would be in violation of the constitutional guarantee of freedom of the press. At the subsequent hearing on the constitutionality issue, held 15 June, both the American Book Publishers Council and the American Civil Liberties Union filed *amicus curiae* briefs supporting the request of Beacon Press that the court deny the application for a preliminary injunction.

The ABPC brief stated that ". . . publication and distribution of books of serious import and dealing with subject matter of public concern should not be prevented because of a few handpicked, allegedly defamatory statements contained in that book. We submit that there is here at stake not only the respective rights of the private litigants, but indeed fundamental rights of the public at large."

According to the *Publishers Weekly,* "Beacon Press has made an exhaustive check of the statements in Dr. Stoddard's manuscript." The book is approximately half narrative and half substantiating documents, including evidence presented before the Illinois Legislature's investigation of charges that a conspiracy existed to prevent the distribution of Krebiozen. Although this investigation took place at about the time of Stoddard's resignation, no report has yet been released; however, a preliminary report indicated that no conspiracy had been found.

On 7 July Judge Hurley ruled against the plaintiff's plea for a preliminary injunction and dissolved the restraining order that he had issued on 6 Apr. On 15 Aug. Beacon released *Krebiozen: The Great Cancer Myster.*

National Geographic-Palomar Sky Survey.

The first section of an atlas of the universe, farthest-reaching map ever attempted, is being published by Palomar Observatory after almost 7 years' work, the National Geographic Society and California Institute of Technology announced on 31 July. The National Geographic Society–Palomar Observatory Sky Survey, begun in 1949, has mapped three-quarters of the sky—all that can be seen from Palomar—out to an unprecedented depth in space of 600 million light-years.

Many of the space regions photographed in detail by Palomar's 48-in. Schmidt telescope have never been seen before by astronomers. Now an over-all picture of the universe has been provided to distances beyond range of all but the largest telescopes. Observatories around the world are being sent the first 200 photo sky charts.

The total atlas will comprise 1758 photomaps when it is finished in 1956. Price per copy, covering only printing costs, is about $2000. Nearly 100 have been ordered. Each plate of the atlas is 14 in. square. The original plates now are locked three floors underground in Pasadena, Calif., and a duplicate set is buried beneath the dome of the Hale telescope at Palomar Observatory. Copies being mailed out to institutions that requested the atlas before a deadline last October are negative prints on double-weight photographic paper. Stars and other bodies in the heavens show as dark spots against a light background, for astronomers find it easier to measure the brightness of objects on such charts than on positive prints.

The National Geographic Society has borne the costs of materials as well as astronomers' salaries; observing time for the survey was provided by Palomar. General supervision of the project has been carried out by an advisory committee consisting of Lee DuBridge and Ira S. Bowen, representing C.I.T., and John Oliver La Gorce and Lyman J. Briggs, representing National Geographic. Bowen has written an article describing the mapping project for the current *National Geographic Magazine.*

The atlas offers new clues to the size of the universe, how it is made up, how old it is. New celestial bodies—comets, asteroids, stars, and island galaxies like the Milky Way—have been found. The skies have been carefully photographed for all objects down to a brightness only one one-millionth of that of the faintest star that the naked eye can see on a dark moonless night.

From the survey, astronomers will be able to determine more clearly the shape of the Milky Way. Furthermore, far beyond in outer space there are galaxies similar to the Milky Way. Sometimes they group into clusters. Although only a scant 3 dozen such clusters were known before the survey, now more than 1000 have been found. They may point to a new general law of nature governing the organization of matter in the universe.

Temperature, color, and brilliance of distant stars will be better known because

the Palomar group photographed each section of the sky twice, once in blue light and again in red light. More may thus be learned about the novae and supernovae. In contrast, dark clouds of gas and dust in space, first seen clearly on the survey's plates, may show stars in process of being born.

Years of study will bring many more discoveries. DuBridge predicts that the new atlas will be "an astronomical bible for 100 years." By analysis of light from the distant clusters of galaxies discovered on the survey's photographs, additional evidence is being obtained on the question of whether or not the entire universe is expanding, with objects racing outward like fragments from a bomb.

The late Edwin P. Hubble of Mount Wilson and Palomar found, 30 years ago, that this apparent recession obeyed a simple law—speed seemed to increase in direct proportion to distance. To test the law, galaxies farther and farther away must be measured. Milton L. Humason, working from the survey plates, has found clusters of galaxies receding at about 38,000 mi/sec—one-fifth of the speed of light. The ages of the stars, and of the universe itself, will someday be better understood because of the new atlas.

News Briefs

■ Otto A. Kuhl, W. Ralph Singleton, and Bernard Manowitz of the Brookhaven National Laboratory have developed a portable radiation unit for use in the field to induce mutations in plants. When not in use, the radioactive cobalt source is housed in a 1-ton steel and lead shield. The unit can be produced for approximately $5000.

■ Operations carried on in the east wing of the U.S. Department of Agriculture's administration building involving certain livestock diseases transmissible to man were suspended on 1 July because of hazards to the health of those engaged in the work. The work included research on tuberculosis, anthrax, and other diseases that can affect human beings. The action was taken by research administrator Byron T. Shaw on recommendation of three research scientists who recently made an inspection, at Shaw's request, of the east-wing laboratories.

The men who made the recommendation were LeRoy Fothergill, U.S. Army, Camp Detrick, Md.; William H. Feldman, Mayo Foundation, Rochester, Minn.; and Byron J. Olson, National Institutes of Health, Washington, D.C. The action was taken as a precautionary measure, since the health record in the laboratories has been very good. In the 50 years that research on anthrax has been going on, no case of this disease has been reported among workers in the east wing. In the more than 60 years since the USDA began making tuberculin there have been four cases of tuberculosis among laboratory employees. Only one of these cases was found to have resulted from official work. The suspension order involves only animal disease work that has been carried out in the administration building in Washington.

■ The University of California's Los Alamos Scientific Laboratory announced 16 July the completion of a scintillation detector large enough to accommodate a human body and to measure its accumulated amount of radioactivity. The project has been carried out under direction of the biomedical research group of the laboratory's health division and was shown in operation for the first time during the laboratory's open house 16–17 July.

By use of the scintillation detector, or "human counter," it is possible to measure radioactivity naturally present in the body. Study of this natural level of radioactivity is useful in determining how much radiation exposure is permissible. Measurements have been made at the Los Alamos laboratory of the natural potassium radioactivity of a number of subjects.

It is also necessary to guard against the possible ingestion and inhalation of radioactivity for the protection of personnel working with radioactive materials. The new instrument can be used to determine the amount of radioactivity that might have accumulated in the bodies of exposed personnel by direct measurement of gamma rays from the human body.

The scintillation detector is a cylindrical tank 6 ft long and 28 in. in diameter. Through it runs a cavity large enough to contain the human subject to be measured. The walls of the tank contain a liquid that gives off minute flashes of light when gamma rays from the person pass through it. This light is detected and amplified by 108 photomultiplier tubes installed in the outer wall of the tank. Electronic instruments record the number of gamma rays registered. The entire tank is surrounded by a 10-ton lead shield to reduce interference by external radioactivities.

The first human counter at the Los Alamos laboratory was a modification of a counter designed for a current laboratory experiment to detect the neutrino. Measurements of human radioactivity made with this apparatus in January 1953 proved that the device was feasible for this purpose. The present improved version was designed during 1953, and construction was begun in the spring of 1954.

■ The Atomic Energy Commission issued the following statement on 4 Aug.: "Within the past few days the Soviets have resumed testing of nuclear weapons. This may mean the beginning of a new test series."

■ V. D. Hopper, senior lecturer of Melbourne University's physics department, stated at a recent news conference that radioactive clouds were circling the earth at altitudes as low as 20,000 ft.

He said that four different consignments of special photographic film that is sensitive to radioactivity had been ruined when flown through the clouds en route from London to Melbourne.

■ Three British professors are to lecture at Moscow University this fall: Paul Dirac of Cambridge University, physicist and Nobel prize winner; William Astbury of Leeds University, an expert on textile physics; and Peter Medawar of London University, biologist. The lectures are part of an exchange arrangement. A Soviet natural scientist, Vladimir Engelhardt, lectured at London University this past spring.

■ The United Nations has announced that 13 Asian experts are to visit the Soviet Union soon to study mining and geology. Specialists in those fields from Afghanistan, Burma, Hong Kong, India, Indonesia, and Japan left New Delhi 2 Aug. on a 13-wk tour of the Soviet Union, Britain, France, and West and East Germany.

The UN technical assistance fund is paying all their expenses except when countries along the way are sharing the cost. The Technical Assistance Administration in New York and the UN Economic Commission for Asia and the Far East in Bangkok, Thailand, organized the project and are sending three representatives.

The group's itinerary includes Kabul, Afghanistan; Moscow; Sverdlovsk, Chelyabinsk, and Kustanai in the Urals; Samarkand and Tashkent, Uzbekistan; Dnepropetrovsk, Krivoi Rog, Zaporozhe, Kremenchug, and Kiev in the Ukraine; and Leningrad.

■ East Germany has agreed to allow a University of Pennsylvania scientist to spend "a couple of months" studying ancient Mesopotamian tablets at the University of Jena. Samuel Noah Kramer, cuneiformist, who is Clark research professor of Assyriology at Pennsylvania and curator of the tablet collection of the University Museum, has applied for a passport and hopes to reach Jena late in September.

Sanction for Kramer's trip into East Germany came from the Secretariat for Institutions of Higher Learning of the