

MEDICINE

Battle Over Experimental Animals

A proposed Senate bill has stirred up controversy over humane treatment of laboratory animals used for research. Scientists and animal care groups prepare for the big battle.

By GLORIA BALL

THE STARTING GUN for what "might become the biggest antivivisection fight in ten years" has been fired.

At present the hot spot is Washington, where a humane experimental animal treatment act was placed before the Senate Labor and Public Welfare Committee on May 18. Sponsors include 11 senators led by Sen. John Sherman Cooper (R-Ky.) who championed humane slaughter of food animals in a bill approved by the 85th Congress.

The present Cooper bill provides in general terms for housing, treatment and disposal of laboratory animals used by persons receiving Federal grants. Qualified applications with proper animal facilities would receive a "certificate of compliance" from the Secretary of Health, Education and Welfare. No grant would be made and no experiment could be conducted unless a project plan was filed with the Secretary.

Annual reports to the Secretary would include the numbers of animals used and a record of their disposal. All animals on whom students had practiced surgery would be killed before being allowed to recover consciousness.

Authorized representatives of the Secretary would be assigned police powers, would have access to all grantee's laboratories and records and could order the destruction of animals if they saw fit.

Scientists Denounce Bill

Sen. Stuart Symington (D-Mo.) has declined sponsorship of the Cooper bill, because he believed the scientific community would not be happy with it. He could not have been more correct.

In a strongly worded denunciation, the National Society for Medical Research, backed by 500 scientific organizations including every medical college in the United States, said:

"The Cooper bill is identical in its major provisions to the German law . . . which so encumbered animal experimentation that it was cited at the Nuremberg trials as one reason why some Nazi experimenters turned to the use of prisoners in concentration camps."

Dr. Lester R. Dragstedt, NSMR's president, has labeled the bill "a cops and robbers game to drain away the time and resources of scientists . . ." and "an attempt by the antivivisection cult to strangle medical research with red tape."

Both NSMR and the Humane Society of the United States assume that the National Institutes of Health, which now administers medical research grants for the Gov-

ernment, would be the group given police powers.

NIH, although it does not yet have an official position, is expected by informed sources to oppose the bill.

Strangely enough, the Humane Society also opposes the Cooper bill, on the grounds that delegating police powers to NIH, itself a research organization, is merely asking the laboratories to police themselves.

In California, where the Society is engaged in a bitter court battle with two medical schools, an animal protection law that is seemingly stronger than the Cooper bill has been on the books for ten years. But it never has been enforced, the Society says, largely because public health officers interpret the law to fit their own ideas.

Laws that cannot be enforced are a "negative evil," giving false assurance to the public and protecting those guilty of cruelty, the Society charges.

Although no action is expected before

Congress adjourns, the bill is a "serious attempt to get some legislation passed," according to Humane Society executive director Fred Myers.

Between now and convening of the 87th Congress in January, 1961, various groups will try to draft more acceptable legislation.

The Humane Society will hold a meeting late in September. High on the agenda are discussions aimed at harmonizing the sentiments of its 500 chapters and 26,000 members, which at present range from near-antivivisectionism to a leniency accused of being traitorous to the Society's cause.

Matter of Too Few Facts

In the right wing is New York City's Society for Animal Protective Legislation, responsible for drafting the Cooper bill. Although it is independent, it often joins forces with the Humane Society.

At the other end of the scale is a group known as WARDS (Welfare of Animals used for Research in Drugs and Surgery). This organization works closely with research groups and views much of the animal care problem as a matter of inadequate knowledge as to what animals need



MOST POPULAR RESEARCH ANIMAL—These white Swiss mice are being prepared for inoculation in the germ-free animal studies section at the National Institute of Allergy and Infectious Diseases. They are among an estimated 35,000,000 mice used annually in research. Second in popularity is the rat, of which 10,000,000 are used yearly.

rather than as intentional cruelty. The group points out that scientists have conducted few studies aimed at improving or evaluating laboratory animal care.

In the absence of specific standards, researchers around the country are setting up their own guidelines. The American Physiological Society has published general recommendations and flatly states that papers submitted for publication in either of its official journals will be refused if there is evidence of improper care or use of experimental animals.

The Assembly of Scientists, composed of 350 researchers from two of the seven National Institutes of Health, took note and is now working toward a similar goal. The interest that began "sort of as a discussion of an ethical question," as one scientist member put it, has materialized into recommendations now being presented to NIH officials as a code that could be adopted by all seven institutes.

"We are not trying to have this adopted as the rule for everyone or set ourselves up as better than anyone else," an Assembly member said. "Problems are not the same in every laboratory. Here we have no housing problem, but in other places that is the main trouble."

Agree on Basic Idea

Like the American Physiological Society, the Assembly believes that refusing publication of a research paper is a highly effective whip for keeping scientists in line.

Both the humane and scientific groups agree on one point—that animals should be well treated.

Dr. Lester Dragstedt of NSMR put it this way: "Good care of laboratory animals is more than a matter of humanity. It is a matter of scientific accuracy and efficiency . . . because a stray germ in a test animal can waste all of the work put into a piece of research."

While the Humane Society hopes to gain support for a bill that favors policing from outside, the research groups are maneuvering into a better position for arguing that they are capable of handling their own affairs.

Conceding that some laboratories do their best to facilitate good treatment, humane groups nevertheless make the most of cases such as that in which unanesthetized animals were locked in a burning building for a study of what causes death in fires.

Pets Prompt Criticism

Most of the concern for humane treatment centers around dogs and cats. Although proposed legislation invariably provides for all "living vertebrate animals," the critical letters received by scientists rarely refer to treatment of rodents. Mice and rats are the most popular research animals and, in numbers, are used, respectively, 200 and 80 times more often than dogs.

Whatever the sentiment, opposing factions are preparing to throw all their fire power into a Congressional battle they expect next session.

The scientific camp, which estimates that an annual total of \$1,000,000 is spent "fighting the antivivisectionists," believe "medical research is in for a bad time."

Science News Letter, July 9, 1960

SURGERY

Whole Blood Used During Surgical Chill

THE DEVELOPMENT of using whole blood in a heart-lung machine to chill a brain surgery patient's body to four degrees above freezing was reported by Dr. Sam T. Gibson, director of the American National Red Cross blood program.

Dr. Gibson said that surgeons at Duke University, using the heart-lung machine, piped whole blood through the body of a brain tumor patient. The blood was gradually chilled and, at 49 degrees Fahrenheit, the heart stopped. At 36 degrees, the electrical impulses indicating brain action halted.

The brain tumor was removed and the blood coursing through the patient's body was gradually warmed to body temperature. The surgery was successful, Dr. Gibson reported.

He said that scientists at Vanderbilt University are experimenting on laboratory animals to determine whether, after a heart attack, a heart-lung machine and donor blood could be used to keep the damaged heart outside the body until it can heal completely.

Science News Letter, July 9, 1960

DENTISTRY

Fluoride Concentrate Can Be Added at Home

A SODIUM FLUORIDE concentrate has been placed on the market for the dental protection of persons whose water supplies do not contain fluorine. The liquid is now available in New York, New Jersey, Oregon, Washington, Massachusetts, Nebraska, Michigan and southern California. Introduced by Crookes-Barnes Laboratories of Wayne, N. J., the liquid is available through prescription by a doctor or dentist for adding to beverages in the home.

Science News Letter, July 9, 1960

MEDICINE

Wrong Diagnosis Sends Many to TB Hospitals

FROM 3,000 TO 4,000 patients are in 65 tuberculosis hospitals through wrong diagnosis of a lung disease, histoplasmosis, caused by a fungus, a study of these hospitals has shown.

Dr. Robert J. Anderson, chief of the U. S. Public Health Service's Communicable Disease Center in Atlanta, Ga., said such patients run the risk of becoming infected with TB. The 65 tuberculosis sanatoriums are participating in a CDC study, and have conducted blood tests on 30,000 patients to determine the correct diagnosis.

Histoplasmosis is acquired by inhaling dust containing spores of the fungus *Histoplasma capsulatum*. It is not transmitted from person to person. Widely distributed in the United States, the disease is mainly concentrated in the Middle West.

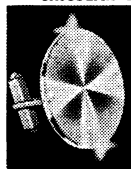
An experimental drug, amphotericin B, is being used as a remedy for histoplasmosis, but the Communicable Disease Center is trying to find better treatment as well as prevention methods.

Science News Letter, July 9, 1960

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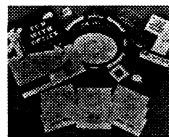
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