Amoag the many serious problems involved in animal experimentation being studied by the Animal Welfare Institute is one which has received a disproportionately large amount of publicity: the matter of procurement of dogs and cats for laboratory use. The Institute stated in its prospectus that it would study procurement programs and seek methods which would not jeopardize practical animal welfare work or the general advancement of humanity through increasing consideration for all living creatures. This study is not complete; however, a brief discussion of some aspects is required.

A DISCUSSION ON PROCUREMENT

The International Conference Against Vivisection has sent a circular discussing the Animal Welfare Institute to all humane associations in the United States and Canada. It states: "This is a serious warning... A study of every available evidence reveals that the primary objective of this organization (the AWI) is not to free animals from laboratory torture, but rather to assure delivery of these same animals to the vivisectors with greatly diminished opposition. Mr. Ricardo of the Vancouver SPCA, and member of the Advisory Committee of the Animal Welfare Institute, has already shown the real purpose of their efforts by signing an agreement with the City Council of Vancouver to turn over to the vivisecional laboratories of the University of British Columbia all unclaimed animals in the hands of the Vancouver SPCA. This action is a betrayal of the fundamental principles of the Humane Movement."

This last sentence would be true if the preceding report of Mr. Ricardo's action were correct. It is not. Occasions are regrettably rare in which research institutions and animal protective societies have been able to enter into reasonable cooperation beneficial both to the advancement of science and the advancement of animal welfare. In Vancouver, an honest attempt has been made to effect such desirable ends.

Briefly stated, the agreement provides that stray dogs at the pound (operated by the city, not SPCA), if unclaimed at the end of the holding period and therefore scheduled to be destroyed, may be available to authorized medical institutions provided that they are used only for those experiments in which they are first placed under full anesthesia, never permitted to recover consciousness, but pass directly into death. The agreement provides for inspection by the SPCA at anytime, unannounced without appointment. It has also resulted in the University's medical curriculum providing a regular place for lectures to medical students by the SPCA on humane treatment of animals. The whole agreement is cooperative, and no force is involved.

An agreement of a somewhat similar nature has been in effect for some years in Louisville, Kentucky. The Animal Welfare Institute will study and report on the actual operation of both of these agreements. It has no objection to such voluntary agreements if they are carefully adhered to and prove to be of benefit to science and the welfare of animals. It does not object to animal experimentation under properly controlled conditions, but it does object to the forced surrender of animals to laboratories, and to repeated attempts to compel humane societies to violate their ethical principles by requiring them to act as procurement agencies for experimental animals upon which physical or mental distress may be inflicted. Bills demanding such action on the part of humane societies have been proposed in Massachusetts and New York State this year.

The origin of the Massachusetts bill is apparently surrounded with mystery. The bill died a natural death at a hearing on February 3 when it failed to elicit support from anyone including the Massachusetts Medical Society and its director of medical information and education, Dr. John F. Conlin. Reporting on the hearing, the Boston Herald states: "It is in fact the same bill Dr. Conlin and his society have filed for several years in the past, but the catch is that neither he nor any of the doctors in genuine sympathy with his cause filed
the bill. 'My interpretation is that our opponents, the anti-vivisectionists, are behind this bill,' Dr. Conlin declared. 'They have filed this pound bill to keep their fund raising alive and to pay the officers of their organizations.'"

The bill in New York State has the strong support of the New York State Society for Medical Research and the determined opposition of the New York State Humane Association. Figures have recently been released by the latter on the handling of lost and unwanted animals in Buffalo, New York, where an ordinance providing for the requisition of impounded animals by laboratories went into effect last year. The Erie County SPCA, which had operated the pound for many years, refused to continue to do so under the provisions of the ordinance. In the past six months, the newly created city pound handled 465 animals at a cost to the city of $12,007.36. The Erie County SPCA continued its services, made possible by private charity, and handled 5005 dogs. It appears, therefore, that the large majority of persons wishing to dispose of a stray or unwanted animal call upon the services of the SPCA rather than an agency operating as a procurement center for experimental animals, even though the latter is supported at the expense of the taxpayer.

Legislation known variously as "pound legislation," "forced surrender legislation" and "pet seizure legislation," has repeatedly worked severe hardship on practical animal welfare societies which have made no attempt to abolish animal experimentation. Far from reducing the scope of anti-vivisection societies, however, this legislation stimulates their growth.

THE PHILOSOPHY OF DR. ALBERT SCHWEITZER

"Thought cannot avoid the ethic of reverence and love for all life. It will abandon the old confined system of ethics and be forced to recognize the ethics that knows no bounds. But on the other hand those who believe in love for all creation must realize clearly the difficulties involved in the problem of a boundless ethic and must be resolved not to veil from man the conflicts in which this ethic will involve him, but allow him really to experience them. To think out in every implication the ethic of love for all creation — this is the difficult task which confronts our age." Albert Schweitzer.

Dr. Albert Schweitzer, world renowned philosopher, physician, and clergyman, has so well expressed the ethical principles which guide the work of the Institute that permission was requested to quote occasionally from his many writings. In response to this request, the Institute was greatly honored to receive a personal letter from Dr. Schweitzer sending his cordial good wishes with permission to quote from his works at any time, and saying "permit me thus to join with you in fighting for the idea of reverence for life extended to all creatures."

CARE AND HOUSING

The Institute is continuing its survey of housing conditions for laboratory animals through visits to laboratories in various parts of the country. Undesirable conditions described in the first Information Report continue to be encountered. Information from all sources regarding model quarters for laboratory animals is being collected. It is hoped that authorities of institutions planning to remodel existing quarters, or construct new quarters, will continue to communicate with the Institute in order to contribute and receive information and suggestions on the use of available space and funds to the best advantage.

The Institute recently learned that a medical school had a large bequest available for research involving animals, but none of it could be used to construct badly needed new animal quarters, or even to improve existing housing, since the will had not specified this use for money. It would be well for those making bequests for medical research to remember — and to remind others to remember — that a part of their fund should be earmarked for new construction, or for whatever may be necessary to provide adequate and comfortable animal quarters and, if needed, to pay the salaries of well trained and competent personnel to care for the animals.
CONVENTIONS AND MEETINGS

Representatives of the Institute attended the second annual meeting of the Animal Care Panel in Chicago, November 29-30. Papers on disease and parasite control, breeding, nutrition and general management of laboratory animal colonies were presented. A transcript of the proceedings will be useful to laboratory workers and may be obtained from Dr. B. J. Cohen, Secretary of the Animal Care Panel, Northwestern University.

During the discussion period, the question was raised as to whether the housing of dogs in metabolism cages without provision for exercise over long periods of time could be considered adequate. This question and others were referred to a committee appointed to suggest standards for animal care to be used in localities where the law requires inspection of laboratories.

The Institute was also represented with an exhibit at the annual convention of the American Academy for the Advancement of Science at Philadelphia, December 27-30. Using photographs with explanatory captions, one section of the display showed animals in research projects; another portrayed some of the commendable animal quarters in this country; a third emphasized the ethical considerations involved in the proper use of laboratory animals. The exhibit was well received by the thousands attending the convention.

THE "MISSING LINK"

The mutual antagonism between research scientists and anti-vivisectionists has long been considered a major obstacle to a sound program of laboratory animal welfare. When the Animal Welfare Institute was founded, and a news item optimistically stated that it would 'link' the two groups, such a possibility seemed fantastic. It is well known that phrases such as "ignorant fanatic" and "satanic sadist" have been freely applied in a running battle which began in the past century and has shown no sign of abating.

However, it has now become apparent that one unexpected result of the founding of the Institute is the expression of several surprisingly similar opinions by the A-V Magazine and the N.Y. State Society for Medical Research, whose viewpoints are generally considered to be diametrically opposed.

For example, on the subject of regulation of experimentation as it exists in Great Britain, the N.Y. State Society for Medical Research passed a resolution disapproving it. The A-V Magazine agrees emphatically with the research society on this point and supports its condemnation with the statement: "This act, instead of being an Act for the protection of animals, is an Act for the protection of the medical men who carry out the experimentation."

Both agree, too, that the Animal Welfare Institute should be boycotted. The A-V warns humanitarians against endorsing the Institute. The N.Y. State Society for Medical Research passed a resolution against having any further relations with the Animal Welfare Institute. The resolution had an immediate effect. Two laboratories which are members of the N.Y. State Society for Medical Research had given permission to have their animal quarters photographed at Animal Welfare Institute expense, for exhibit in the Institute's booth at the American Association for the Advancement of Science convention. The pictures were to have been used to exemplify comfortable features for the housing of laboratory animals. After they had been taken, the laboratories declined to release them because the above-mentioned resolution had been passed in the meantime. Other animal quarters were favorably displayed. The A-V steadfastly agrees in opposing this exhibit by the Animal Welfare Institute, classing the displays as "efforts which acted as a defense of vivisection."

Various items brought to the attention of the Animal Welfare Institute indicate that some representatives of medical research groups and of anti-vivisection societies have asserted that the Institute is secretly in league with "the opposition." Simultaneously misrepresented as a mysterious and potent advocate of the abolition of experimentation and of the unlimited expansion of "torture," the Institute has been used in connection with fund raising or membership campaigns by groups on both sides of the argument.
The Institute has been greatly encouraged by the friendly and thoughtful communications received in response to its literature mailed to the members of the Federation of American Societies for Experimental Biology. A number of these scientists have become members of the Institute, and some laboratories have also joined. The kind response of animal protective workers is likewise much appreciated by the Institute which is pleased to receive comment from everyone interested in the welfare of laboratory animals. The Institute welcomes as members all those who desire to encourage humane treatment of these animals.

ANIMAL WELFARE INSTITUTE

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CITY STATE

"ANIMAL'S WORK FOR YOU — A. W. I. WORKS FOR THEM"
The observation that you must "fight-fire with fire" has been made on several occasions by respected medical men to representatives of the Animal Welfare Institute. This saying is intended as a justification of some of the methods used by medical research societies in activities which purport to combat anti-vivisectionists. It is not generally understood that legislation such as the Hatch-Metcalf Act is not anti-anti-vivisectionist. It is anti-humane society.

The use of high-pressure methods to secure the passage of legislation involving the socialistic principle of forced requisition from private agencies sets a dangerous precedent. It may rebound against the medical profession and against the many laymen who oppose the forced requisition of the services of private medical practitioners.

With the signature of the Hatch-Metcalf Act by Governor Dewey on March 10, 1952, New York became the fifth state to empower its Commissioner of Health to seize unclaimed dogs and cats and allocate them to laboratories. Although similar bills have been defeated in state legislatures much more frequently than they have been passed, Minnesota, Oklahoma, South Dakota, and Wisconsin have enacted them. But these states have not an impressive list of institutions designated as lawful recipients of impounded animals. South Dakota, for example, has only one. In New York State where 473 laboratories are currently licensed to use experimental animals, it has not yet been announced how many will receive a free supply. To date, Wisconsin is the only state in which the law has been used to force humane societies to act as procurement agencies. In New York State, 15 pounds operated by humane societies fall under the jurisdiction of the Act.

The National Society for Medical Research has announced that activity is now under way for passage of this legislation in 1953 in Pennsylvania and Massachusetts where it has been repeatedly defeated. A recent publication of this Society features a map showing cities and states where animal procurement laws are now in effect and urges more complete coverage. In 1951, leaders of the National Society for Medical Research took an active part in urging passage in Illinois of one of the most extreme examples of this type of legislation. Facts such as these make it essential that persons interested in experimental biology and animal welfare consider carefully the effects and the means of passage of state procurement laws.

Analysis of the campaign for the Hatch-Metcalf bill provides a recent example. There was much opposition to the bill led by the New York State Humane Association. Legislators received many thousands of letters concerning the bill, the large majority of which opposed its passage. However, the press was almost unanimously in favor of the bill, and the Governor strongly supported it. Petitions were circulated among the inmates of hospitals; students of medicine and pharmacy were asked to write to legislators; and blanket resolutions were obtained in favor of the bill from large organizations. At the public hearing, the galleries were largely filled with two separate cheering sections: anti-vivisectionist "boos" and applause alternated with "boos" and applause from students. The laughing technique, well known to political propagandists faced with troublesome questions, was also employed by the students on those occasions when the plainly socialistic nature of the bill was brought to the attention of the Committee.
Although the Chairman of the Committee announced that the discussion would be confined to the bill under consideration, many of the proponents and of those opponents who were anti-vivisectionists confused the issue by limiting themselves instead to speeches on the merits and demerits of animal experimentation, combined with efforts to play on the sympathies and prejudices of legislators. Representatives of humane societies made clear statements concerning the real issue: procurement. The extent to which the issue had been successfully obscured by the New York State Society for Medical Research was surprisingly demonstrated by the representative of a farm group who had come to speak in favor of the bill. Several SPCA officials had registered their protests against seizure of animals from private organizations dedicated to their protection, before his turn came. He pointed out that he represented a group in favor of research but said he hadn't understood that private organizations were to be compelled to give up animals against their will, and that he did not favor such a provision. He further pointed out that he was confident that farmers would be glad to supply research animals if they were asked to do so. His honest statements showed with remarkable clarity how little the actual purpose of the bill was understood even by special representatives of large groups which allegedly favored it unanimously. They also showed how little effort had been made to alleviate by non-political means the alleged shortage of animals which, according to the New York State Society for Medical Research, was holding up important research projects throughout the state.

Its supporters were remarkably successful in concealing the fact that the Hatch-Metcalf bill was a procurement bill and nothing else. Many newsmen apparently believed that it was legislation for the proper care and treatment of animals used in research with a clause providing for requisition of unclaimed animals. According to a leaflet issued by the New York State Society for Medical Research, the bill would provide for "proper care, humane treatment and the use of anesthetics for these animals in the laboratory." The fact that all of these points except the procurement provision were already on the statute books of the State of New York and had been there for five years was consistently ignored.

While fear of the atomic bomb undoubtedly played a significant role in gaining support for the legislation, fear of ridicule was also exploited. With the cooperation of the press, two simple premises were firmly established: 1) anti-vivisectionists are fools; 2) everyone who opposed procurement legislation is an anti-vivisectionist. The latter point was hammered home day after day despite the fact that the bulk of the opposition to the bill came from organized humane societies under the leadership of the New York State Humane Association. These organizations have never attempted to abolish animal experimentation, and their spokesmen have repeatedly emphasized that they have no quarrel with the law which legalizes the use of experimental animals. Thousands of individuals who also do not oppose properly conducted research with animals conscientiously opposed legislation requiring humane societies to violate their principles by turning over animals from their shelters to an unknown fate involving in many cases the infliction of suffering. Alone among humane organizations operating pounds in the State of New York, the ASPCA failed to oppose the bill. This fact was used to great advantage by proponents of the legislation.

One outstanding misrepresentation used repeatedly throughout the course of the campaign had its origin at a press conference held by the New York State Society for Medical Research on December 27 where it was reported that the shortage of animals was such that the Atomic Energy Commission laboratories at Rochester were forced to pay $35 apiece for "stray" dogs. This surprising statement was eagerly seized by the press and despite a public refutation continued to be used as an argument for forced surrender of dogs by humane societies. Acknowledgement of the truth finally came at the public hearing in Albany when the spokesman for the Atomic Energy Commission laboratories at Rochester correctly stated that the dogs for which the Commission had paid $35 were bred and raised by farmers for the specific purposes of the laboratories. Dogs of unknown background can, of course, be purchased for a very much smaller
amount. For the atomic radiation studies at Rochester, the scientists preferred to use more uniform animals in the interest of accuracy of conclusions.

Following passage of the Hatch-Metcalf bill, an amendment was introduced providing for appointment by the Commissioner of Health of a representative of the New York State Humane Association to assist in the inspection of laboratories. In view of the widely publicized campaign promises of the New York State Society for Medical Research that laboratory animals would be kindly and humanely treated, it would have been logical for its leaders to welcome the assistance of an experienced animal welfare worker. Instead, they heatedly opposed the amendment, and it was defeated by a margin of two votes in the Senate. Room for serious speculation on the meaning ascribed to the words "kind" and "humanely arises when "procedures which laboratory men consider correct" (as a spokesman for the New York State Society for Medical Research put it) must be hidden from the view of a humanitator selected by the Commissioner of Health.

A LETTER TO EXPERIMENTAL BIOLOGISTS

Dr. Robert Gesell, Professor of Physiology at the University of Michigan, recently sent a letter to all members of the American Federation of American Societies for Experimental Biology on the subject of experimental animals, urging greater humanity in their use. Dr. Gesell is a member of the Advisory Committee of the Animal Welfare Institute, and of the Federation whose annual meeting was held in New York April 14 through April 18.

In emphasizing the great importance of proper consideration for laboratory animals, Dr. Gesell wrote: "Dr. Walter B. Cannon, the late Professor of Physiology at Harvard, had seen the need of a restraining force to contain man's curiosity within the proper bounds of experimental procedure and as a result of his efforts, laboratories throughout the land voluntarily posted a code of experimental ethics. The fine influence from which this movement started was, however, doomed to suffer from the lack of a continuity of moral supervision."

Cited in the letter are examples of "the shocking effects that come from total absence of restraint." In commenting upon them, Dr. Gesell writes: "These ominous experiments make us search our souls and wonder what the future has in store for us, for they remind us so inescapably of the Doctors of Infamy (Henry Schuman, N.Y.) who performed terminal experiments on men and women without the use of anesthesia. They become all the more ominous when it is taken into consideration that they were performed on creatures as sentient as man and in a free and happy country, and not under duress of a harsh government barbarized by global warfare."

Following are some of the questions raised: "How much infliction of pain and discomfort on experimental animals are the people prepared to condone? What are the limitations, in animal experimentation, of the principle that the end justifies the means? Is it wise to endanger the spiritual values of society by cheap popularization of medical science in pictorial magazines, thereby creating a callousness towards animal experimentation? Is it a desirable objective to weaken and confuse the humane societies of this country even though such procedure insures abundant flow of animals to experimental laboratories?"

Dr. Gesell outlined the aims of the Animal Welfare Institute, which is concerned with questions such as these, and deplored the action of the Executive Committee of the Federation in refusing exhibit space to the Institute at the Federation's annual meeting. Federation correspondence with the Institute was quoted indicating that requests for exhibit space would be considered only if the Institute gave "vigorous support" to the type of legislation exemplified by the Hatch-Metcalf bill. Dr. Gesell included in the circular the copy of a letter he had sent on January 22, 1952 to Dr. A. J. Carlson, President of the National Society for Medical Research. It read in part: "Nor can I be frightened by problems of procurement of experimental animals. There is much more to be feared in the harmful effects of ease of procurement upon quality of research and cheapened regard for life. I can only hope that you will try to put yourself in the place of one of millions of experimental animals that we force to suffer for our comforts. You have so often come to the aid of the human underdog. With the help of your fine fighting spirit something really magnificent could be accomplished to the credit of medicine and to the betterment of life."
No legitimate excuse exists for inflicting unnecessary distress on experimental animals through lack of decent accommodation. An admirably succinct statement was made in regard to experimental dogs in Care of the Dog Used in Medical Research, a government leaflet now out of print: "It costs considerable money to take proper care of dogs, and an adequate part of the research budget should be assigned to this requirement of the research program. It is a shortsighted and wasteful policy to attempt research work with dogs if proper standards of animal care are not maintained." This statement may be applied to other laboratory animals as well. However, money is by no means the whole answer to the problem. Many persons are under the mistaken impression that all large and well-known universities, manufacturing concerns, and hospitals provide, as a matter of course, in an adequate manner for the animals which they use.

Because of the great amount of unnecessary suffering observed by representatives of the Institute in leading laboratories, it is a pleasure to give attention to those where a real effort has been made to keep the animals as comfortable as possible. Some laboratories connected with hospitals and medical schools have been commended in a previous report. In the field of pharmaceutical production, Merck & Co. deserve credit for the quarters provided for dogs in the Merck Institute for Therapeutic Research in New Jersey. A one-story brick building provides outside runways for dogs connecting directly with comfortable radiant-heated kennels equipped with wooden resting boards. Each enclosure houses from two to six dogs or puppies, mostly beagles raised on the premises. The company follows the desirable practice of raising all of the dogs which it uses for chronic experimentation. Whenever it is necessary in the course of the work to confine a dog to a metabolism cage, he is returned after his working period to the comfortable kennel-runways for a resting period. Care is exercised to keep compatible animals together. Additions to the animal quarters are now under construction by Merck & Co. and are expected further to improve housing for the various species of animals used. It is to be hoped that pharmaceutical and other laboratories which are in more urgent need of such improvements will follow this example.

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**NAME**  

**ADDRESS**  

**CITY**, **STATE**
An American biologist expressed the view of the Animal Welfare Institute when he recently wrote: "That scientists should not be hampered and animals completely protected: this is one of those consummations devoutly to be hoped for."

Since Great Britain is the nation in which the longest consecutive attention and the most intensive study have been given to the complex problems involved in such an objective, it was felt that first-hand information should be secured on British practices as they affect both scientists and animals. The President of the Institute therefore has just returned from a month's stay in England; following is a summary of pertinent information obtained through a series of conversations with distinguished British biologists and leaders of animal welfare work, supplemented by observations made in British laboratories. The Institute wishes to express its appreciation to all concerned for the very great courtesy extended to its representative.

OME OBSERVATIONS ON ANIMAL EXPERIMENTATION IN GREAT BRITAIN

The manner in which British biologists have dealt with the controversial and complex problems which arise in connection with animal experimentation would be worthy of admiration at any time. In the twentieth century the examples they set deserves the very highest recognition. It was encouraging to learn, in conversations with eminent scientists, of the beneficial results which have accrued to them from the Act regulating experiments with animals. These have been well summarized in The Lancet, in publications of the Research Defense Society, and elsewhere.

In order to understand how this legislation extends practical protection to biologists as well as to animals, it is necessary to realize that it was petitioned for and drafted with the assistance of men of science who were not only leaders in their day but whose status, like that of the Act itself, has worn exceptionally well in a changing world. Among them were Charles Darwin, Thomas Huxley, and Edward Jenner. In 1871 the British Association for the Advancement of Science adopted a series of animal protective resolutions subsequently embodied in the Cruelty to Animals Act which became law in 1876, after long and careful study by a Royal Commission. The Commissioners listened patiently to a variety of evidence, including representations by those who wished to abolish all experiments with animals; and also at least one individual who was totally unmoved by animal suffering, believing it to be inconsequential and unworthy of the serious consideration of men of science. In the end, Parliament effectively endorsed the position of the humane scientists who believed that animals should be carefully protected from cruelty and negligence, and that properly controlled animal experimentation should continue.

The annual reports from the Home Office, and a leaflet published by the Research Defense Society which outlines the provisions of the Act for the use of biologists, may be easily obtained by those wishing to study its provisions in detail. Suffice it to say here that much animal suffering is prevented by the careful design of experiments with a view to the use of the least painful procedures. Because of the conscientious care exercised by British biologists in this regard, it is unusual for the Home Office to refuse or to delay the return of certificates for any given experiment. However, the Act itself is by no means the only reason laboratory animals in Great Britain generally fare better than their counterparts in the United States.

An attitude of consideration and of serious responsibility seriously undertaken characterizes the British biologist in respect to the animals which he uses. There may be exceptions to this general rule, but none were encountered by the writer. A positive interest in the treatment and condition of laboratory animals is demonstrated by the thoughtful and well-informed comments, conspicuously lacking in callousness, which spring naturally to the lips of leading research men, and it is confirmed in a practical fashion by visits to their animal quarters.

Both old and new structures were visited. Sites for the latter were outside of metropolitan areas, thus obviating the difficulties of securing adequate space. However, in many cases the buildings using the older animal quarters sacrifice the animals' comfort in attempts to house an unreasonably large colony within a limited space. Indeed, the old often rivalled the new in individual points of housing or care. All, without exception, were kept in a sanitary condition, and no animals con-
spiciously suffering from the contagious diseases to which laboratory animals are subject were seen. This is a purely negative observation by a layman who has been confronted with numerous examples of the acute stages of non-experimentally induced illness in American animal houses.

It appears that such problems are dealt with more promptly in Great Britain and that the major reasons for this and for other desirable conditions are: 1) A more direct interest in and contact with experimental animals on the part of biologists, 2) The fact that an inspector for the Home Office finding poor conditions may suspend or revoke licenses (each person and each laboratory using living animals is licensed), 3) More pride in their work on the part of animal technicians whose general status and caliber is higher than it is in the average American laboratory. This last mentioned situation is being usefully advanced through the work of the Animal Technicians Association, which had its origin at the annual congress of the Laboratory Animals Bureau in 1951. These two organizations, designed to improve efficiency in the animal room, provide a further means of raising and maintaining standards in the management and procurement of well-bred laboratory animals. They will be more fully described in a forthcoming Information Report together with features of particular interest in the design of animal houses observed in England.

Extensive study has been devoted to the planning of these accommodations, and, in view of the growing interest in the United States in the problems of maintenance of high standards in laboratory facilities, it seems wise to mention here -- in the undesirable sense of making everything alike and eliminating individual ideas -- has been by no means a corollary of the reasonable requirements of the Home Office inspectors. Diverse as quarters for the larger animals were, none of them were of the restrictive dimensions which only permit an animal to lie down, stand up, and turn around, and none were bare of some form of resting board or bedding. In most cases, specific provision for exercise was made in addition to enclosure of a decent size. Dogs and cats observed generally reacted normally to visitors and were in good physical condition.

To summarize: Britain's legislation, traditions, organizational work, and the good will of its biologists combine to create a truly civilized approach to the difficult problems involved in animal experimentation. Its leadership is not of a static or complacent nature, and there is every evidence that it will continue to develop.

Two assertions which accurately reflect the attitude of those who make them, but do not accurately report facts, have gained some currency both in American medical research societies and anti-vivisection societies. Neither will bear thorough investigation. Those who assert that British research has been "hampered" or "stunted" by its humane approach would do well to make a study of the basic discoveries made in British laboratories. For brevity's sake only two will be cited: the electrocardiograph and the antibiotics. Both had their origin in a single London hospital, St. Mary's, where the first electrocardiogram was made by A.D. Waller and where penicillin was discovered by Sir Alexander Fleming. The vast amounts of research undertaken as a result of these discoveries and the incalculably wide application made of them in daily medical practice should be carefully considered before aspersions are cast on British research methods.

As for the anti-vivisectionists who assert that British biologists have succeeded in protecting themselves without protecting experimental animals, a similarly careful and honest study is recommended to them.

LETTER FROM ENGLAND

In achieving good standards of care for laboratory animals, the publication by the Universities Federation for Animal Welfare of "The UFAW Handbook of the Care and Management of Laboratory Animals", edited by A.N. Worden, has been of great value.

UFAW, founded by its present Director, Major Charles W. Hume, while he was honorary Secretary of the British Science Guild, is an animal welfare society unique in that its active membership is entirely composed of persons with University training, many of whom are engaged in the biological sciences. Its work covers a variety of fields, including humane problems relating to animals used for food, fur and experimentation. To all of these it applies a scientific approach without, however, neglecting those important ethical considerations which do not lend themselves readily to scientific analysis. It is active in work on technological developments designed to make trapping, slaughter, and pest-control less distressing to the unfortunate animals involved, and it has issued numerous publications whose sound content is considerably enhanced by the high scientific, literary, and artistic quality of their presentation.

A letter received from UFAW's Director is reprinted below:

"Dear Mrs. Stevens:

26th June 1952

"You asked me to write you some account of the position of the vivisection controversy in this country. I do so entirely in my personal capacity, what I write, therefore, implicates myself and nobody else."
A quarter of a century ago, when UPAW was first founded as ULAWS, both the anti-vivisectionists over here and their opponents were a good deal more excitable than they are at the present time. There had been a great deal of public attention directed by the anti-vivisectionists in Battersea Park; I never quite understood what it was all about, but there was a lot of rioting. Then, just a week before we held our first meeting, the R.S.P.C.A. caught a dog-dealer taking two stolen dogs into a laboratory, and one of the anti-vivisection societies followed up by prosecuting a scientist for receiving. Both sides jumped to the conclusion that ULAWS had been formed with the object of helping their opponents; an anti-vivisection lady wrote to ask "what the poor animals had done to deserve my enmity, and wasn't I ashamed to call myself British", on the other hand, the Principal of one of the London colleges wrote to the Principals of the other colleges asking them to ban our meetings.

"It is curious that we then, like you today, had to take a rational stand between two groups of hysterical belligerents, and that the cause of all the excitement in each case was the procurement of dogs. I look back with gratitude to the help we got at this time from Prof. E. H. Starling and Prof. Julian Huxley, who stood by us in the public press. However, our policy then and until recently was to leave the whole question of vivisection severely alone, for the good reason that we had no means of obtaining a sufficiently representative sample of the facts.

To-day even the anti-vivisectionists are less violent than they used to be, and the Research Defense Society, instead of blackguarding its opponents and merely trying to make every point tell on the same side of the case, publishes summaries of the history of various researches which are really informative and help a layman to understand the nature and functions of research.

I think there is some confusion in American minds as to what the British Act for the protection of laboratory animals (the Cruelty to Animals Act, 1876) actually lays down. It has nothing whatever to do with the procurement of dogs, for instance; the law which prohibits the police from handing over stray dogs from public pounds is contained in a totally different Act, namely the Dogs Act of 1906, the object of which was to regulate the licensing and control of dogs in order to prevent dogs from being a nuisance.

What the Act of 1876 does is to confer on the Home Secretary the duty of ensuring that experiments on animals shall be conducted by properly qualified persons and without any avoidable infliction of pain. It is not suitable for export because its virtue depends on the administrative tradition which has been built up on it in this country it works pretty well. Opinions may differ on matters of detail, but it certainly affords considerable protection to the animals concerned, and on the other hand the suggestion that it prevents useful research from being done is untrue. Anybody who realizes that Sir Joseph Barcroft, Sir Charles Sherrington, and Prof. E. H. Starling (not to mention living British scientists) willingly conformed to the requirements of the British law because, being fully civilized men, they would not in any case have wished to commit cruelty, will realize how dishonest is any attempt to denigrate British biological science in the way I have mentioned.

"By the way, Starling once told me that in his opinion a good deal of foreign physiology had been vitiated by failure to eliminate pain, the effects of which were apt to be confounded with those of factors under investigation. A few years ago I met one of his research pupils, Joseph Barcroft, and he said, 'Well, soon after the war, when I was visiting a French laboratory, the cruelty I saw nearly made me vomit and I had to go out.'

"May I give an instance of something which happened in the United States and would not have been permitted in this country? I contrast two researches, both using broadly similar techniques, which were carried out in the United States by two groups of research workers, one humane and the other completely callous. Both researches related to the cause of death in electrical accidents. In 1936 the humane group (Electrical Engineering, vol. 55, p. 498, 1936) did their classical work on this subject, using animals which were fully anaesthetized. (When all the facts had been ascertained they did carry out tests on five sheep without anaesthetics, to make sure that there had been no confounding, but any suffering inflicted must have been very brief because the lethal current-strength had by that time been ascertained.) This final test showed that the anaesthesia had not interfered with the effects of the electrical shock. Contrast this humane research with one done two years previously with very similar technique except for the anaesthesia (Electrical Engineering, vol. 55, p. 390, 1934). In this case rats were used and the whole experiment was done without any safe anaesthetic pain could have been avoided. There was a total and utterly unnecessary disregard for humane considerations, and such reckless and pointless cruelty would not have been allowed in Britain.

"Generally speaking it may be said that the traditions which have been built up in this country tend to make British research workers humane, though naturally their temperaments vary like those of any other class. People who would like to do cruel experiments if they could are apt to be very touchy about the whole subject, but they are not the only ones; some researchers who are quite humane have been worked up into a nervous condition by the unfair attacks of anti-vivisectionists. I used to think that anti-vivisectionists do good as well as harm, but I now believe that their propaganda is entirely harmful to the cause of animal protection. Besides making slovenly thinkers jump to the conclusion that all animal-protectionists are neurotics, it induces among some scientists which made it difficult to obtain a calm discussion of the perplexing questions which our subject presents.
lently blamed by some on the ground that it had put weapons into the hands of the anti-vivisectionists. A similar objection was raised to a draft Model Act which I got out, intending it to serve as a basis for discussion. Naturally there were criticisms in detail, which I expected and welcomed, but I encountered also a general objection to the effect that I was stirring up the dust and, by admitting that many experiments must involve some suffering, was supplying ammunition to the anti-vivisectionists.

"Now it is quite clear to me that obscurantism of any kind is morally wrong, and that you cannot rightly defend science by means of it. Obscurantism, the plea that if you mention certain facts you will wake the anti-vivisectionist baby, is a form of untruthfulness, whereas the whole purpose of science is to find out truth, and you insult it when you resort to untruthfulness in its defence. What I have been trying to do (and what UFAW has been trying to do, though I am not authorized to speak for it in this letter) is to secure a calm and reasoned discussion of the very difficult ethical problems which biological research presents. Even humane people find it impossible to agree as to exactly where the line is to be drawn between the claims of science on one hand and the claims of laboratory animals on the other, but the fact that a question is difficult is no reason for avoiding it. On the contrary, only by the fullest and calmest discussion, with all cards on the table, can a sound conclusion be reached.

"This free discussion among informed people is what we set ourselves to bring about. The anti-vivisectionists can be safely ignored - they cut no ice here - but even if they couldn't, nothing could justify scientists in dealing with the vivisection problem by any means which barred out the frankest and most objective discussion of all relevant matters. Propaganda, name-calling, imputation of motives, misrepresentation of policies and actions - all such things are discreditable in any educated person. In a scientist they are so discreditable that they ought to cost him his job. Happily, however, there are plenty of scientists who are heart and soul in sympathy with us in these matters.

With kind regards,
Yours sincerely,
(Signed) C. W. Hume"

ANIMAL CARE PANEL MEETING DECEMBER 3 & 4 IN CHICAGO

A communication from Bennett J. Cohen, D.V.M., Secretary of the Animal Care Panel requests that the third annual meeting of the Panel in Chicago December 3-4, 1952, be announced to the readers of the Institute's Information Report. The meeting will be held at the University of Illinois, Chicago Professional Colleges, and the program can be obtained after September by writing directly to Dr. Cohen at Northwestern University Medical School, 303 East Chicago Avenue, Chicago 11, Illinois.

ANNIVERSARY

On July 10, 1952, the Animal Welfare Institute completed its first year of existence. The directors wish to take this opportunity to thank the individuals, experimental laboratories, and humane societies who have given so much encouragement and assistance to furthering the aims for which it was founded: "To promote the welfare of all animals. To reduce the total of pain and fear inflicted on animals by man."

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The Animal Welfare Institute has been impressed during the past year with the growing awareness on the part of men engaged in the practice of medicine and the related biological sciences of the need for greater efforts to prevent unnecessary suffering to laboratory animals. However, persons who have visited substantial numbers of laboratories and animal rooms in this country will recognize that the need for improvement is very much greater than current efforts to effect such improvement. Included in this Information Report are statements by individual biologists and by scientific groups together with reference to work in progress which indicate a few of the ways by which solutions to the difficult problems of laboratory animal welfare may be approached. The Institute continues to welcome further reports and suggestions.

CAN SCIENTIFIC SOCIETIES AND JOURNALS EXERCISE EFFECTIVE HUMANE CONTROL OVER ANIMAL EXPERIMENTATION?

An interesting letter from Dr. Owen S. Gibbs of the Gibbs Medical Research Laboratory, Memphis, Tennessee, was recently received at the offices of the Institute.Believing that readers of the Information Report will find his ideas stimulating, whether or not they are in full agreement with his views, permission to quote a part of his letter was requested and was kindly granted by Dr. Gibbs.

"I am utterly opposed," he says, "to any government interference to experimentation excepting only to that which may endanger the lives or properties of others."

But he is seriously concerned with the problem of animal suffering in laboratories. He writes: "The real question is not what someone else should do about some of these serious matters, but why do they occur in recognized laboratories at all? Still more why do other scientists condone, aid and abet and further by publishing experiments that are obviously most undesirable. Nor is there any mechanism whereby members of scientific societies who publish such selfish, thoughtless, or downright cruel papers are reprimanded or otherwise dealt with. Yet the rest of us, decently trained, are everlastingly in trouble because of them."

Dr. Gibbs has a definite suggestion to make towards the solution of these problems. He believes that scientists should "take certain very simple and necessary steps to prevent disorder in our own house."

"We have the necessary power," he writes. "The set-up in the U.S.A. is such that no one can get a decent job without being in some representative society. Certainly no one can grow in science without publication. What then prevents organized scientific societies from refusing admittance to persons unqualified to accept the necessary responsibilities, including self-restraint, of becoming a member of organized science? The offering of a paper in which carelessness to animals is evident, and there are such (I have a choice one here on my desk involving a test for some triviality by using strychnine convulsions on an unanaesthetised animal) should provoke inquiry from the scientific body concerned. No such paper should be approved for publication -- indeed why are they? -- moreover the laboratory from which such a paper is offered should be promptly investigated by the society involved."

Comment from readers concerning Dr. Gibbs' suggested plan would be welcomed. The Institute is interested in all constructive proposals which might serve to reduce or to eliminate preventable suffering to laboratory animals.

A MEDICAL SOCIETY RECOMMENDATION

A recommendation on the proper planning of experiments and the adequate care and housing of experimental animals was made by the Committee on Legislation of the Queens County (New York) Medical Society following the passage of the Hatch-Metcalf Act. Although the Animal Welfare Institute considers the procurement provisions of this Act to be unfair and improper, it strongly approves the recommendation quoted below and hopes that other medical societies will also make statements in regard to the prevention of cruelty to animals and that they will follow them up with definite action.
"May we of the reference committee further suggest that it is the duty of the profession as a whole to assure proper enforcement of safeguards against abuse of animals obtained through this law. This includes careful supervision of experiments to see that they are conducted in a humane manner, the setting up of regulations for the provision of proper animal cages and care, and the elimination of wasteful, purposeless, and obviously fruitless experiments to which a larger supply of animals may give rise."

THE PRIVILEGE OF USING ANIMALS FOR EXPERIMENTATION

Last year the California legislature passed an act known as the Animal Care Act. The California Medical Association acted wisely in recommending that this Act be passed without attaching to it any compulsory procurement provisions which, in states where the forced surrender of unclaimed dogs and cats has been made mandatory, have had such detrimental effects on animal welfare organizations which operate shelters.

The intelligent attitude expressed by authorities charged with the administration of the Animal Care Act gives hope that this legislation will serve a useful and humane purpose. In a letter dated June 5, 1952 addressed to all agencies keeping or using laboratory animals for educational, research, diagnostic, or testing purposes, Dr. M.H. Merrill, Chief of the Division of Laboratories of the California Department of Public Health, stated:

"It is to be hoped that the Department may eventually serve in a consulting capacity for the purpose of improving practices of animal management, including disease control and humane care. One of the objectives of this program is to protect the privilege of using animals for the scientific advancement of education, research, diagnosis and treatment of human and animal diseases, and improvement and standardization of biologic products, pharmaceuticals and drugs. The best way to insure this privilege is to achieve a high standard of humane care and management."

MENTAL AND PHYSICAL WELL-BEING OF LABORATORY ANIMALS

The validity of experimental findings rests to a considerable degree with the mental and physical health of the experimental animal. For this reason the treatment of such animals in a manner conducive to normal health and well-being is vital to a sound research program. New facts are constantly being brought to light which have an important bearing on the management of different species of animals under laboratory conditions.

Of particular interest to those investigators who use dogs in their work are the observations of Dr. J. P. Scott, of the staff of the Division of Behavior Studies of Jackson Memorial Laboratories at Bar Harbor, Maine, who since 1946 has been making an intensive study of genetics and social behavior of dogs. He has found, among others, two things which appear to be essential to the well-being of the dog used in laboratory work. These are: adequate regular exercise and companionship, not necessarily of humans, but of other dogs. Such a fact requires careful consideration in the planning of quarters for these animals, for scientific as well as for humane reasons.

In visiting laboratories, representatives of the Animal Welfare Institute have found that, in the matter of size of enclosure as it relates to size of animal, as well as opportunity for exercise and companionship, dogs, cats and monkeys are likely to fare worse than the smaller animals such as mice, rats, guinea pigs and hamsters. Indeed, an unfortunate custom seems to have been built up in many laboratories of confining the larger species of active animals in a very restrictive manner. This custom, to which many otherwise humane biologists have become habituated, arose in the days when animal experimentation was so meagerly supported that it was extremely difficult to obtain funds for decent animal quarters. It is now being perpetuated despite the fact that funds for medical research today are ten times as great as they were even as recently as 1941. Those who are responsible for decisions on how these funds are to be spent, and directors of institutions planning new quarters, need to keep abreast of scientific developments in the field of animal housing and care.

A bibliography was prepared last year by the Kettering Laboratories of the University of Cincinnati which is now being enlarged and brought up to date. This reference source, together with the two standard works ("The U.P.A.W. Handbook on the Care and Management of Laboratory Animals", edited by Alastair N. Worden and "The Care and Breeding of Laboratory Animals" edited by E.J. Farris), provides a fund of useful information which deserves wider distribution.

It is evident that many thoughtful, conscientious men who work with experimental animals are giving serious attention to the welfare of the animals who serve them. However, unnecessary distress continues to be inflicted on large numbers of experimental animals for reasons which have no connection with the success of experiments. It is common to see the larger animals confined to cages too small to permit them to stretch out fully, deprived of the opportunity for normal exercise or com-
panionship over periods ranging from several months to several years, and removed from cages only for experimental or teaching use.

Dr. Albert Schweitzer has written: "The thinking man must oppose all cruel customs no matter how deeply rooted in tradition and surrounded by a halo. True manhood is too precious a spiritual good for us to surrender any part of it to thoughtlessness. Very little of the great cruelty shown by men can really be attributed to cruel instinct. Most of it comes from thoughtlessness or inherited habit. The roots of cruelty, therefore, are not so much strong as widespread. But the time must come when inhumanity protected by custom and thoughtlessness will succumb before humanity championed by thought."

The work of men of science will undoubtedly play an important role in eliminating those thoughtless customs, having no valid scientific basis, which, largely through inertia, have perpetuated themselves in present day animal experimentation. No halo of tradition should be permitted to disguise the fact that any of the higher animals which is arbitrarily and without compelling reason deprived of the opportunity for exercise, companionship and a comfortable place to rest is being subjected to thoughtless cruelty. In view of the sacrifices necessarily imposed upon them and the contributions which they may make, every species of experimental animal deserves, at the very least, to be given a comfortable environment.

Not only these animals, but also every citizen who contributes directly or indirectly to scientific research involving animals, have the right to a genuine guarantee that no unnecessary pain or distress is inflicted on them regardless of whether or not such infliction has become accepted as routine.

THE LABORATORY ANIMALS BUREAU AND THE ANIMAL TECHNICIANS ASSOCIATION

Within the last few years, two noteworthy scientific organizations have been formed in Great Britain: the Laboratory Animals Bureau and the Animal Technicians Association. Formed by scientists for the purpose of achieving more accurate results through the use of better-bred, healthier, and better cared-for animals, the work of these organizations has benefitted laboratory animals to a substantial degree by improving conditions in laboratories and breeding establishments. Much suffering and waste of animal life have been prevented.

The Animal Technicians Association, founded in 1950 at the annual meeting of the Laboratory Animals Bureau, is made up of hundreds of the men and women whose duty it is to care for experimental animals. It has done a great deal to raise the status of this important work and to improve its quality. To qualify for membership, applicants must pass a detailed examination. The Association offers a short course for students preliminary to their examination. Thus British laboratories are able to avail themselves of the services of a group of animal technicians who know their business and take a pride in their work. A journal is published quarterly for the membership and other persons interested in animal management.

The Laboratory Animals Bureau publishes information concerning the care and procurement of animals for experimental purposes. It investigates conditions in breeding establishments and the quality of stock which they are producing. Breeders who are maintaining proper conditions and producing a high grade of stock are placed on an accredited list which is available to all laboratories. This is the accreditation scheme which has produced such practical results within a very few years. The mutual cooperation of laboratories acting through the agency of the Laboratory Animals Bureau encourages purchase from reliable suppliers of animals and brings pressure on unreliable breeders and dealers to raise their standards or leave the business due to a lack of demand for their services.

In addition to newsletters and memoranda, the Bureau publishes a series of well-prepared technical notes on the management of laboratory animals. These are written by persons selected for their experience and special knowledge of each subject. Titles include: Vitamin Requirements of Different Species of Laboratory Animals, Hays and Straws for Laboratory Animals, Bedding for Laboratory Animals, Care and Management of Baboons, Compressed Diets, Internal Parasites of Laboratory Animals, Sterilisation of Cages, and others. Further technical notes are in preparation.

Work of the nature being undertaken in Great Britain by the two organizations briefly described above would be most advantageous to American biologists and American experimental animals.

THE WATER REQUIREMENT OF LABORATORY ANIMALS

An excellent paper on water requirements was published by H. M. Bruce in the Journal of the Animal Technicians Association, Vol. 1, No. 3. Those who desire to read it in full and to examine the accompanying graphs which chart the experimental findings relative to this important subject may do so by reference to the Journal. Reprinted below with the kind permission of Miss Bruce are excerpts from the paper.
Is drinking water really necessary for most laboratory animals? To give water to drink is a relatively modern improvement in the technique of animal husbandry. It is a curious fact that, traditionally, drinking water was only given to rats. It was a common superstition that rabbits and guinea-pigs "didn't drink" and that, in any case, the provision of drinking water to these animals caused outbreaks of diarrhoea. It was assumed that the greenfood, which always formed part of their daily ration, would satisfy their needs for water, and even today some professional breeders hold this view. Mice were given a wet mash or bread soaked in milk and water, often with a little greenfood, and no water was given apart from that used to prepare the wet food.

From this generally accepted practice it could be assumed that rats have a higher requirement for water than any of the other animals. Is such an assumption justified, and is the traditional opinion correct? These are the two questions to be considered.

The contention that giving water to rabbits and guinea-pigs causes diarrhoea can be explained by the fact that the water was offered to them in open pots. It became readily fouled and was a source of contamination from which an infection such as coccidiosis was easily spread. We all know now, that both these animals drink from water bottles without any harmful effects. Further, the provision of water to drink, apart from food, has had a beneficial effect on the well-being of the animal whenever a measure of the growth has been made.

The two smallest animals, the mice, head the list with a daily requirement of about a quarter of their body weight. Cotton rats are next drinking about one-fifth to one-sixth of their body weight per day: rabbits about one-seventh; guinea-pigs rather less probably because they received some greenfood as well as the dry diet, and right down at the bottom of the list are hamsters and laboratory rats which require rather less than one-tenth of their body weight per day. Clearly the laboratory rat has not got a higher need for water than other animals.

<table>
<thead>
<tr>
<th>Species</th>
<th>Approximate adult body weight (g.)</th>
<th>Average daily water intake (g.)</th>
<th>Requirement of drinking water per kilogram of body weight (g.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deer Mouse</td>
<td>20</td>
<td>5</td>
<td>250</td>
</tr>
<tr>
<td>Mouse</td>
<td>25</td>
<td>6</td>
<td>240</td>
</tr>
<tr>
<td>Cotton Rat (young adults)</td>
<td>130</td>
<td>23</td>
<td>177</td>
</tr>
<tr>
<td>Rabbit</td>
<td>2400</td>
<td>328</td>
<td>137</td>
</tr>
<tr>
<td>Guinea-Pig (30g. greenfood/day)</td>
<td>800</td>
<td>84</td>
<td>105</td>
</tr>
<tr>
<td>Hamster</td>
<td>90</td>
<td>8</td>
<td>89</td>
</tr>
<tr>
<td>Albino Rat</td>
<td>300</td>
<td>24</td>
<td>80</td>
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</tbody>
</table>

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